ENDO INDONESIA

LKPP
Lembaga Kebijakan
Pengadaan Barang/Jasa Pemerintah

ecatalogue
Belanja Cepat Cara Tepat

PRODUCT CATALOG
PT. ENDO Indonesia

Medicals Distributor and Manufacturer

PT. ENDO INDONESIA

ENDO INDONESIA was founded in 2006 as a company engaged in importation and distribution of Medical Devices. Today, among many others, our product portfolio consists of Electromedical Devices, Instruments, Disposables, Orthopaedic Implants, and accessories.

Our Vision

"Improving health care of Indonesian society by providing good quality products at affordable prices."

Our Mission

"Consistent development and continuously increasing employee's well-being while maintaining integrity in daily routines."

Our Value

Improving Healthcare
Providing high quality products at affordable prices

Qualified Personnels
Experienced staffs in their respective fields

Networking
Through doctors, hospitals, distributors, resellers

Fast Delivery
Most products are ready in stock

OUR PRINCIPALS

ETERNITY

ZERONE

inventis
Audiology Equipment

mindray

BFIX™

SonoScape

Payto

MIR
MEDICAL INTERNATIONAL RESEARCH

AMP all

SBM
Science & Bio Materials

METsis

LEMKE.

detrox

TONTARRA
MEDIZINTECHNIK GMBH

WASTON
MEDICAL 华森

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Disposables

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Disposables

Medical Recording Chart Paper

OUR PRINCIPALS

AYGÜN
SURGICAL INSTRUMENTS CO., INC.

CRenTec
IMPLANT SPECIALIST

Romsons

AGS

TROPIAN TECH

Accumax

SEESHEEN
see the endo-sheen

APEX MediTech

WOM

blue endo
international

Bi protech
Bio sensors & Bio products

TECRES
Advancing High Technology

NELIS

Medipia

MARQUARDT
Medizintechnik

DURICO

EDICAL SWAN ITALIA s.a.s

ELECTROMEDICS

AED
Anesthesia Machine
Audiometer
Biphasic Defibrillator
Dermatome
ECG
ECG Bulb Electrode
ECG Limb
Electrosurgical Unit
Fetal Doppler
Fetal Monitor
Hematology Analyzer
Hemodialisys Machine
High Speed Motor System
ICU Ventilator
Infusion Pump
Micropipette
Neonatal Ventilator
Patient Cable Compatible
Patient Monitor
Pulse Oximeter
Semi Auto Chemistry Analyzer
Skin Graft Mesher
Spirometer
Suction Pump
Surgical Motor Handpiece
Syringe Pump
Treadmill Stress Test
USG
Video Colposcope

Life Point Pro AED
Automated External Defibrillator

Life Point bPLUS AED
Automated External Defibrillator

Specification

- Operating mode : Automatic
- ECC analysis period : typically < 10 saniye
- Energy steps :
  adult 150J - 150J - 200J / child 50J - 50J - 50J
- Motion detector
- Maximum discharging : typically 200 shocks (at 20 °C with full battery)
- ECG bandwidth : 2 - 25 Hz
- Self test schedule : weekly, monthly, each start
- Dimensions : 9.5 x 27 x 24 cm
- Class (93/42/EEC) : II B
- Storage Conditions : between -20°C and 60°C
- Data transfer : metsis AED software (USB/SD Card)
- Charging time at max joule : typically < 10 saniye
- Wave form : truncated biphasic wave form
- Pace maker detection
- Impedence measurement : 25 - 100 ohm
- Derivation : DII
- Battery type : LiMn02 (15V 3000mA)
- Self test scope : battery, internal electronics, software
- Weight (battery include) : 1730 gr
- Operating conditions : 0°C - 50°C ve % 10 - % 95 RH
- Data documentation : ECG signal, event, voice record
- Minimum computer requirement :
  Windows XP - Windows Vista - Windows 7 Pentium or higher VGA Monitor or higher CD-ROM Driver USB Port 2 Gb Free Disk Space

Specification

- Operating mode : Automatic
- ECC analysis period : typically < 10 sec
- Energy steps :
  adult 150J - 200J - 200J / child 50J - 50J - 50J
- Motion detector
- Maximum discharging : typically 200 shocks (at ºC with full battery)
- ECG bandwidth : 2 - 25 Hz
- Self test schedule : each start, daily, monthly, each 6 monts
- Dimensions : 11 x 23 x 27 cm
- Class (93/42/EEC) : II B
- Storage Conditions : between -20°C and 60°C
- Data transfer : metsis AED software (mini USB)
- Charging time at max joule : typically < 10 sec
- Wave form : truncated biphasic wave form
- Pace maker detection
- Impedence measurement : 25 - 175 ohm
- Derivation : DII
- Battery type : LiMn02 (12V 4500mA)
- Self test scope : battery, hardware, software, capacitor disposable pad (configurable)
- Weight (battery include) : 2950 gr
- Operating conditions : 0°C - 50°C and %10 - %95 RH
- Data documentation : ECG signal, event, voice record
- Minimum PC requirement :
  Windows XP - Vista - 7 Pentium or higher VGA Monitor or higher CD-ROM Driver USB Port 2 Free Disk

ELECTROMEDICS

ENDO INDONESIA

Anesthesia Machine
ENDO Anesthesia Machine AM3

Physical Specification

- Dimension : L600 * W740 * H1368 mm
- Weight : 120 kg
- Screen : 12 inch TFT touch screen
- Casters : 10cm diameter, with individual locking brakes at front casters

Electronic Specification

- Power supply : AC100~240V+-10%, 50/60Hz+-1%
- Battery backup : 4 hours
- Power consumption : <= 75 VA
- Top Light

Vaporizer

- Dual positions
- Mounting : tool-free installation selectatec compatible with interlock
- Agent type : Sevoflurane, Halothane, Isoflurane, and Enflurane
- Filling type : Pur-fill, Easy-fill, and Quick-fill

Features

- CE marked, meet EU clinical requirements
- Contemporary and ergonomic designed for ease of use
- Pull handle
- DIN rail at both side of machine allows for flexibility and ease of mounting patient monitor and other expansion medical devices
- Optional integrated auxiliary O2 flowmeter and suction control
- AGSS (Anesthesia Gas Scavenging System) is optional
- Electronic displayed flowmeter
- Applicable to infant, pediatric and adult
- Driven gas can be oxygen or air. Save running cost of oxygen

Integrated CO2 Absorber System

- Highly integrated design - fewer parts and connections reduces potential for leaks and misconnects
- Ease of disassembly (no tools required)
- Ease for cleaning, autoclavable in 134 C to avoid cross-infection (except for O2 sensor and gauge), latex free
- One step bag / vent switch turns the ventilator on / off
- Automatic CO2 absorber by pass
- ACGO

Alarms

- 3 level visible audible alarm
- High and low limitation for : pressure, munite volume, breathing rate, FiO2, tidal volume, SpO2 (optional), pulse (optional), EtCO2 (optional), apnea time, sustained airway pressure, alarm mute, AC off, battery low and exhausted, alarm log, alarm silence

ENDO INDONESIA

Anesthesia Machine
ENDO Anesthesia Machine ANM2

Features

- CE marked, meet EU clinical requirements.
- Contemporary and ergonomic designed for ease of use.
- Pull handle
- DIN rail at both side of machine allows for flexibility and ease of mounting patient monitor and other expansion medical devices
- AGSS (Anesthesia Gas Scavenging System) is optional
- Applicable to pediatric and adult

Integrated CO2 Absorber System

- Compact design for closed, semi-closed and semi-opened circuit
- Ease to disassemble and assemble all components
- Convenient to clean and maintain
- Integrated Adjustable Pressure Limited (APL) Valve

Ventilator

- 8.4 inch TFT screen for easy review
- Navigation wheel + key pad for simple operation
- "Choose-set-confirm" to realize function and avoid mis-operation
- One key presses to total Standby mode; end case
- Easy of use, full range ventilator with mechanical ventilation modes, spontaneous ventilation modes and electronic, support a variety of patients
- World leading brands of flow sensors, differential pressure sensors, pressure regulating valves and proportional valves to ensure accurate ventilation
- Smart alarm notification direct user to specific problems and affected parameters
- Pressure and volume waveforms on a breath by breath basis
- Audio and visual alarms with three levels
- One key presses to total Standby mode: end case

Physical Specification

- Dimension : L880 * W800 * H1580 mm
- Weight : 120 kg
- Screen : 8.4"TFT screen
- Casters : 10 cm diameter, with individual locking brakes at front casters

Electronic Specification

- Power supply : AC100~124V+-10%, 50/60Hz+-1%
- Battery backup : 1.5 hours
- Power consumption : <= 75VA
- Top light, Backlight for flowmeter

Vaporizer

- Dual positions
- Mounting : Tool free installation selectatec compatible with interlock
- Agent type : Sevoflurane, Halothane, Isoflurane and Enflurane
- Filling type : Pour-fill, Easy-fill and Quick-fill

ELECTROMEDICS

ETERNITY

Anesthesia Machine
Eternity AM831

Vaporizer

- One or Dual positions
- Mounting : Fixed or tool-free installation Selectatec maniford interlocks and isolates vaporizers
- Agent type : Sevoflurane, Halothane, isoflurane and Enflurane
- Filling type: Pour-fill, Easy-fill, Quick-fill or Key-fill

Physical Specification

- Dimension : 1350mm (H)*560mm (W) *620mm (D)
- Weight : 85 kg
- Display : 4.2 inch LCD screen
- Casters: Four anti-static casters with diameter 100mm, the front two are with brakes

Ventilator

- Type & Drive mode : Integrated Electronically-controlled pneumatically-driven ventilator
- Patient: Pediatric and adult
- Ventilation mode : IPPV, IPPB, SIGH, MANUAL / Spontaneous
- Tidal Volume : 50~1500ml
- Frequency : 0~100bpm
- I:E ratio : 1:10~10:1
- Pmax : 8Kpa, Pmin : 0~2Kpa

Electronic Specification

- Power input : 100~240V, 50/60 HZ
- Power Consumption : <= 50VA
- Top light
- Backlight at flowmeter

Monitoring & Alarm

- Tidal volume : 0~2000ml
- Pressure : -2~10Kpa
- Frequency : 0~120bpm
- Waveform : P-T
- Alarm Upper airway pressure limit
- Alarm Lower airway pressure limit

ETERNITY

Anesthesia Machine
Eternity AM832

Features

- More accurate, Safer and More Convenient
- CE marked, meet EU clinical requirements
- ISO quality guarantee
- Suitable for adult and pediatric
- Pin-Index for N2O/O2 Cylinder
- Integrated high temperature sterilization and CO2 absorber system
- Newly-developed reliable gas system

Physical Specification

- Dimension : 1350mm (H)*560mm (W) *620mm (D)
- Weight : 85 kg
- Display : 5.6 inch LCD screen
- Casters : Four anti-static casters with diameter 100mm, the front two are with brakes

Vaporizer

- Mounting : Fixed or tool-free installation Selectatec maniford interlocks and isolates vaporizers
- Agent type : Sevoflurane, Halothane, isoflurane and Enflurane
- Filling type : Pour-fill, Easy-fill, Quick-fill or Key-fill

Electronic Specification

- Power input : 100~240V, 50/60 HZ
- Power Consumption : <= 50VA
- Top light
- Backlight at flowmeter

Ventilator

- Type & Drive mode : Integrated Electronically controlled pneumatically driven ventilator
- Patient : Pediatric and adult
- Ventilation mode : IPPV, IPPB, SIGH, MANUAL or Spontaneous
- Tidal Volume : 50~1500ml
- Frequency : 0~100bpm
- I : E ratio : 1:10~10:1
- Pmax : 8Kpa, Pmin : 0~2Kpa

Monitoring & Alarm

- Tidal volume : 0~2000ml
- Pressure : -2~10Kpa
- Frequency : 0~120bpm
- Waveform : P-T
- Alarm Upper airway pressure limit
- Alarm Lower airway pressure limit

Audiometer
Bell Plus

The Display

- The key feature of the Bell audiometer is its large, bright graphic coloir display, on which you can view the complete audiogram during the examination.

Portable System

- Bell is the ideal choice of audiometer for users who need a portable instrument. Despite its practical keyboar and generous display. Bell is extremely compact and lightweight and easy to carry in its dedicated case.

Noah & Daisy Integration

- Simply connect Bell to a USB port on your computer (no driver needed), and you can transfer exam results into Daisy or Noah database. And with the live view feature, you can have a wide view of the examination in progress on the computer display.

"Basic" Model : The Screener

- The Basic model is designed for use in occupational medicine and allows users to perform manual and automatic air conduction audiometry examinations at frequencies from 125 Hz up to 12.5 kHz (with a Sennheiser HDA-280 headset) with masking.

"Plus" Model : The Basic Diagnostics

- The Plus model can perform bone conduction audiometric examinations in addition to air conduction exams.

Technical Data

- Intensity AC : -10 to 120 dB HL, BC : -10 to 80 dB HL
- Frequency range : 125 - 8000 Hz (12.5 kHz available with HDA-280 headsets)
- Input : tone, warble tone
- Masking : WN (Plus), NBN
- Output : AC L+R, BC (Plus), insert masking
- Talk over : built-in or external microphone
- Display : colour display, 95 x 54 mm, 482 x 272 px
- Test Battery : pure tone audiometry, Autothreshold
- Data storage : internal memory for 100 patients
- PC interface : USB
- Compatible SW : inventis Daisy or Noah with dedicated module
- Dimensions : 32 x 32 x 9 cm / 12.6 x 12.6 x 3.5 in (LxWxH)
- Weight : 1.8 kg / 4.0 lbs
- Classification : Class IIa (MDD 93 / 42)

inventis
Audiology Equipment

Audiometer
Harp Plus

The Display

- Harp features a large, bright graphic colour display, on which you can view the complete audiogram during the examination.

Portable System

- Despite its top-level features, Harp is ultra-compact and easily transportable. It even comes with a dedicated carrying case (optional).

The Models

- Harp is available in two configurations to suit different user needs : Basic and Plus.

The Tests

- Besides standard audiometry exams

  Harp also performs Hughson - Westlake automated audiometry, speech audiometry and ABLB exams. The "Plus" model also performs SISI, Stenger (pure tone and speech), DLI and Tone Decay tests and includes a 2 channels Master Hearing Aid.

Embedded Speech Material

- No more CD Player headaches! Harp Plus features an integrated 2 GB flash memory for storing your speech material. Dedicated buttons allow you to access word lists with ease. The screen also displays the word currently being pronounced.

Technical Data

- Intensity AC : -10 to 120 dB HL,BC : -10 to 80 dB HL
- Frequency range : 125 - 8000 Hz
- Input : tone, warble tone, external source (tape, CD) 1-2, mic, flash memory (only in Plus model)
- Masking : NBN, WN, SN
- Output : AC L+R, BC, FF L+R, insert masking
- Talk over : built-in or external microphone
- Monitor : built-in speaker or ext. headset or speaker
- Display : colour graphical display, 95 x 54 mm, 480 x 272 px
- Test Battery : speech audiometry, Autothreshold, ABLB. Only in Plus model : SISI, DLI, tone decay, stenger, Master Hearing Aid
- Data storage : internal memory for 100 patients
- PC interface : USB
- Compatible SW : inventis Daisy or Noah with dedicated module
- Dimensions : 32 x 32 x 9 cm / 12.6 x 12.6 x 3.5 in (LxWxH)
- Weight : 1.8 kg / 4.0 lbs
- Classification : Class IIa (MDD 93 / 42)

Noah & Daisy Integration

- Simply connect Harp to a USB port on your computer (no driver needed), and you can transfer exam results into Daisy or Noah database. And with the live view feature, you can have a wide view of the examination in progress on the computer display.

Audiometer
Piano Plus VRA

The Audiometer

- Piano is the top-level audiometer in our portfolio, Besides the pediatric audiometry. Piano Plus VRA features a complete test battery, including the High Frequency audiometry. Big color display with touch screen, internal memory for the speech material, great flexibility, extreme simplicity, all this makes Piano a super high-end audiometer, perfect for the most demanding users.

Traditional VRA

- You can turn Piano into a traditional VRA System by adding up to three toy cabinets, connected directly to the audiometer. Toy cabinets are powered and controlled directly from Piano.

Video VRA

- Piano Plus VRA lets you built a video-VRA system with unlimited possibilities for customizing the images and videos used as reinforces, and enables you to create an advanced VRA system that can capture a baby`s attention for a longer time. All you need to do is connect Piano Plus VRA to a standard computer and install the Daisy VRA module. Up to three displays can be controlled to provide reinforces.

Technical Data

- Channel : two separate and identical channel
- Intensity : AC : -10 to 120 dB HL. BC : -10 to 80 dB HL AC HF : -20 to 90 dB HL
- Frequency range : 125-8000 Hz, 8-20 kHz
- Frequency resolution : multi-frequency with programmable steps
- Input : tone, warble tone, external source 1 and 2, mic, internal flash memory
- Masking : NBN, WN, SN
- Output : AC L+R, insert L+R, BC, FF, L+R, insert masking, HF L+R
- Talk Over : built-in or external microphone
- Monitor : built-in speaker or ext. earphone or speaker
- Display : colour display with touch screen, 150 x 90mm, 800 x 480 px
- Test battery : Autothreshold, ABLB, tone decay, SISI, DLI, MLB, Stenger, Master Hearing Aid Multo Frequency, High Frequency, Bekesy, MLD, Pediatric audiometry (VRA and CPA tests)
- Printer : optional integrated thermal paper
- PC interface : USB
- Compatible SW : inventis Daisy or Noah with dedicated module
- Dimensions : 32 x 32 x 15cm / 12.6 x 12.6 x 5.9 in (LxWxH)
- Weight : 2 kg / 4.4 lbs
- Classification : Class IIa (MDD 93/42)

Biphasic Defibrillator
Life Point Plus

Defibrillator

- Defibrillator is a device used to perform defibrillation for the purpose of turning abnormal ECG rhythm into normal rhythm. When heart enters into ventricular fibrillation, the process of returning it to its normal sinus rhythm by giving proper amount of external electric current is called defibrillation, and device used in giving such electric current is called defibrillator. Should electrical energy is given in the form of shocks, it creates stimulation namely, myocardium is depolarized and systole occurs. To give shock to heart by means of defibrillator, heart should be in ventricular fibrillation or ventricular tachycardia rhythm without pulse.

Specification

- Wave form : Biphasic
- Energy selection :
  2-3-5-7-10-20-30-50-100-150-200-250-270
- ECG filters : monitor I, monitor II, strong surgery diagnostic
- Monitor resolution : 800 x 480
- Monitoring speed : 25-50 mm/sec (ETCO2 6,25 - 12,5 mm/sec)
- Printer speed : 25 - 50 mm/sec
- Max. discharging : 200 (with full battery)
- Working conditions : 0/40 °C and %30-95 Rh
- Dimensions : 330 x 314 x 175 mm
- Main supply voltage : AC 220V 50-60 Hz
- Operating mode : manual / AED / synchronous
- ECG derivations : DI DII DIII AvL AvF V1..V6
- Heart rate alarm limits : 0 - 300 bpm
- Monitor type : color TFT LCD
- Monitor size : 7 inch
- Printer type : thermal printer
- Paper size : 50mm x 30m
- ECG monitoring time : 4 hours (with full battery)
- Storing conditions : -20 / +55 C
- Weight : 5 kg include battery
- Optional : SpO2, NIBP, EtCO2, Paddle Trolley, Ambulance Bracket Pace Maker

ECG 1 Channel
ENDO ECG-1

Features

- Folding LCD, waveforms display, parameters configurable
- High-resolution thermal printer
- Built-in rechargeable lithium battery, AC/DC power supply
- Well designed membrane keyboard
- Input/Output port
- Complete digital filtering, avoiding baseline drift, AC, EMG interference
- Automatic baseline adjustment to optimize printing position
- Auto/Manual operation selectable
- Lead-Off detection and alert

Technical Specifications

- Lead : Standard 12 leads
- Acquisition mode : Single
- Sensitivity : 2.5, 5, 10, 20, mm/mV
- Input impedance: > 50 MOhm
- Filter:
  EMG Filter 35 Hz (-3 dB)
  AC/DFT Filter 50 Hz / 60 Hz (-20 dB)
- Recording mode : Auto / Manual
- Rhythm lead : Any lead selectable
- Safety standard : IEC I/CF
- Power supply :
  AC 100 V - 115 V / 220 V - 240 V, 50/60 Hz
- Rechargeable Li-ion battery : voltage 14.8 V
- More than 3 hours continuous operation with battery supply
- Thermal paper : 50 mm x 30 m
- Paper speed : 25 mm/s, 50 mm/s (± 3%)
- Dimension : 300 x 260 x 75 mm
- Weight : 2,3 kg with battery included
- Display : 192 x 64 pixels LCD
- Selectable display language : GB, IT, FR, ES, PL, RU, TR, UA
- Interface : RS 232

ECG 3 Channel
ENDO ECG-3

User Friendly Design

- Foldable LCD screen, vivid waveform display
- Built-in rechargeable Li-ion battery, AC/DC power supply

Streamlined Workflow

- Support barcode scanner to simplify patient information input
- One-button operation
- Auto / manual / rhytm / off work modes
- Automatic baseline adjustment
- Lead-off detection and alarm

Accurate Clinical Performances

- 12 lead simulations acquisition with optimal 24-bit A/D converter.
- Anti noise technology with comprehensive filters and the high CMRR over 121dB (optional)
- Automatic ECG measurements and interpretation tested with CSE / AHA / MIT databases
- Complete digital filters, resisting baseline drift, AC and EMG interference.
- Extended printing once arrhythmia is detected to further your rhythm analysis.

Flexible Printing Solutions

- Built-in high resolution thermal paper
- Grid printing on normal thermal paper
- 12 lead grid printing on normal A4 paper through external printer

Data Management

- Internal storage up to 500 ECGs and can be enlarged by USB flash disk
- LAN / RS232 / USB connection to PC data transmission to PC via series port / LAN / USB
- Report formats : PDF and optional SCP / FDA-XML / DICOM data export
- PC based ECG data management software (optional)

ENDO INDONESIA

ECG 12 Channel
ENDO ECG-12

High resolution touch screen with grid display

Gender and Age group shortcuts

Extensive communication interfaces

One touch operation

User Friendly Design

- 7" high resolution color touch screen
- Alphanumeric keyboard

Streamlined Workflow

- One touch operation
- Support barcode scanner to simplify workflow

Accurate Clinical Performances

- Weak signal detection with the advanced 24 bit A/D converter technology
- Anti noise technology with comprehensive filters and high CMRR over 121dB
- 120s real-time ECG waveform freezing and review to assist diagnosis
- Automatic measurements and interpretation tested with CSE / AHA / MIT databases
- Extend printing once arrhythmia is detected for further rhythm analysis

Flexible Printing Solutions

- Built-in high resolution thermal recorder
- Support external USB printer

Data Management

- Internal storage up to 500 ECGs and can be enlarged by USB flash disk and SD Card
- Smart ECG viewer software for data management on PC (optional)
- Data transmission to PC via series port / LAN / internal Wi-Fi
- Smart ECG viewer software for data management on PC (oprional)
- Report formats : PDF and optional SCP / FDA-XML / DICOM data export

ECG PC ECG
ENDO PC ECG-1

User Friendly Design

- **Separated leadwires**
  Separated ECG leadwires makes it easy to plug or unplug any single lea, which helps save your service cost
- **Color coded leads**
  Color coded leads conduct clinicians to quickly find the right lead wires
- **ECG signal quality indicator**
  Quickly identify the poor or missing ECG signals by visual color coded indicators
- **One touch button**
  One touch button on the sampling box enables to start or stop ECG acquisition without going to PC side.

Professional Performances

- The sampling rate is as high as 16.000 Hz. Combining with ENDO`s advanced 24 bit A/D converter, it enhances accurate ECG waveforms acquisition.
- The high CMRR over 140dB and comprehensive filters ensures clear waveforms for viewing and reporting
- The wide bandwidth 0.01-300 Hz enables pediatric ECG diagnosis more accurate according to AHA 2007

Features

- Intuitive interfaces
- Long time ECG sampling
- Manual diagnosis
- Leads reversal
- ECG reports comparison
- The editable ECG report
- Unlimited protocols for stress test
- The reliable SEMIP algorithm
- Proof for diagnosis
- Automatic arrhythmia detection
- Event mark
- Advanced filter technology
- Complete evaluation methods for stress test

Powerful Functionality

- **Resting ECG**
  ENDO PC-ECG-1 is able to acquire as long as 30 min ECG waveforms both of standard 12 leads and 15/16 leads, and also allows you to store full disclosure data.
- **Stress ECG**
  ENDO PC-ECG-1 stress function provides standard as well as unlimited user defined stress protocols which enable your stress tests more flexible.
- **Data Management**
  ENDO PC-ECG-1 is able to archive reports from standalone ECG machines and provides clinicians on-screen ECG measurements to conduct a peper-less workflow.

ZERONE

Electrosurgical Unit (ESU)
Zeus - 400 Upgraded Version

Features

- 10 storage are available by using user storage function.
- 2 (two) monopolar handpiece can be connected to the device.
- Bipolar cut function is available.
- A display window allows you to easily check output value, indicated as digits.
- Unit provides various functions that are required to perform an operation as functional cut mode (Pure cut, Blend1, Blend2, Blend3)
- Coagulation Mode (Spray coagulation, Contact coagulation)
- Bipolar coagulation mode by hand or foot
- Bipolar cut (only available in ZEUS upgraded version)
- Each working condition can be checked by sound and indication lamp.
- Hand bipolar (Auto bipolar) can be checked only by contacting forceps.
- Unit output strong and stable power by Micro processor.
- Input power frequency is automatically detected.
- A fuse which is built in a power circuit board prevents over current from flowing through the equipment.
- When the plate attached to the patient is disconnected, red alarm light begins flickering.
- REM (Return Electrode Monitoring) function monitors the size of contacting area between a patient and the pad.
- If size is inappropriate, it automatically blocks the high-frequency current to minimize the danger of burning incident.
- To protect a patient, the case is fully grounded so that a leakage current can flow into the earth.

Application

- General Surgery
- Urology
- Dermatology
- Orthopedics
- Vascular Surgery
- Oral Surgery
- Gynecology
- Plastic Surgery
- ORL/ENT
- Endoscopy
- Pediatric Surgery

Specifications

- Main Frequency : 400, 500KHz
- Power Source : AC120V or AC230V, 50Hz / 60Hz
- Protection class : Class 1, Type CF
- Dimension(WxDxH mm) 330x455x150
- Weight : 13.0Kg

ZERONE

Electrosurgical Unit (ESU)
Zeus Vision

Features

- Color Graphic User Interface: Wide TFT LCD mount, clean and sharper image quality, unlike the existing electricity and the innovative new UI configuration operation.
- Best Safety with Feedback System: REM (Return Electrode Monitoring) function monitors the size of contact area between a patient and the pad. If the size is inappropriate, it automatically blocks the high-frequency current to minimize the danger of burning incidents.
- All Touch Screen System & Key: Touch screen system through the implementation easier and faster with a parameter setting, external key management can be the same as a touch screen.
- Diversity of Feature Bipolar Bipolar Cut, Bipolar Blend, Bipolar Forced to add features to implement more up-grade the optimal system.
- 10 storage are available by using user storage function.
- 2 (two) monopolar handpiece can be connected to the device.
- Bipolar cut function is available.
- A display window allows you to easily check output value, indicated as digits.
- Each working condition can be checked by sound and indication lamp.
- Hand bipolar (Auto bipolar) can be checked only by contacting forceps.
- Unit output strong and stable power by Micro processor.
- Input power frequency is automatically detected.
- A fuse which is built in a power circuit board prevents over current from flowing through the equipment.
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Application

- General Surgery
- Urology
- Dermatology
- Orthopedics
- Vascular Surgery
- Oral Surgery
- Gynecology
- Plastic Surgery
- ORL/ENT
- Endoscopy
- Pediatric Surgery

Specifications

- Main Frequency : 400, 500KHz
- Power Source : AC120V or AC230V, 50Hz / 60Hz
- Protection class : Class 1, Type CF
- Dimension(WxDxH mm) 388x410x160
- Weight : 12.5Kg

ENDO INDONESIA

Fetal Doppler
ENDO FD-1

Description

- SonoTrax fetal doppler series ultrasonic pocket dopplers superior, sensitivity, high-fidelity sound, recording option and optional rechargeable battery ensure the doppler family to meet the routine examination requirements of obstetricians and midwives.

Features

- Easy-to-use fetal doppler
- Fetal doppler with compact design
- Interchangeable fetal doppler probe
- Built-in audio recorder
- Large backlight LCD display
- Accurate FHR detection with clear sound
- Support 2MHz, 3MHz, 4MHz, 8MHz waterproof probes
- Automatic and manual FHR counting
- Long time continuously use (4 hours) Automatic power-off

Specifications

- Display : 45 x 25 mm LCD display
- Heart rate range : 50~210 bpm
- Resolution : 1 bpm
- Recording time : 240 s
- Audio output power : 1A
- Auto power-off : 1 minute with no signal or operation
- Size : 34 (D) x 89 (W) x 141 (H) mm
- Weight : about 300 g (include the battery)

Fetal Monitor
ENDO FM-1

Convenient to Carry or Transport

- Compact portable and lightweight
- Long life Lithium Ion battery for outpatient service

Easy to Read and Operate

- 5.6" foldable screen
- Large numeric and waveform display
- Simple workflow with silicone buttons for operations

Advance FHR Detection Technology

- Signals Overlap Verification to differentiate twins FHR
- FHR signal quality indicator helps optimize the probe position

Flexible Printing Options

- Built-in thermal printer
- Print on 150/152 mm width recording paper
- 1/2/3 cm/min real-time printing speed
- 15 mm/sec fast printing speed for history traces

Powerful Data Management

- 12 hours built-in memory for seamless monitoring
- MFM-CNS network for remote monitoring
- Insight software for data management on PC
- USB port to enlarge storage capacity

Multi Display Modes

- Switching among three display modes, user may choose the most suitable one for clinical use.

Single Workflow

- 1 Knob Operation
  Using the knob only, you may carry out every configuration to customize the machine according to clinical needs.
- 1 Button Operation
  Start button could be configured to integrate patient info and printing. This could help the doctor to simplify the workflow and work with 1 button only.

1 MHz Waterproof FHR Probe

- The use of 1MHz probe enlarges the penetration and deepens the range of detection, which is significant and positive in fetal monitoring, especially for big pregnant women. Furthermore, it is also proved that the lower the detection frequency of the probe, the better protection to the tissues of fetus.

mindray

Hematology Analyzer
BC-2800

Features

- Fully automated, compact, flexible and cost effective
- 3-part differentiation of WBC, 19 parameters + 3 histograms
- Throughput: 30 samples per hour
- Up to 10000 sample results (including histograms) can be stored
- Cyanide free HGB analysis method
- 3 counting modes: All parameters, WBC/HGB, RBC/PLT
- Built-in thermal recorder, optional external printer
- Large Color LCD display
- High performance to price ratio
- High accuracy and reliability
- Throughput of 30 tests per hour fits small laboratory needs
- Compact size to save space
- Microvolume of sample and reagents, automatic maintenance all add up to economy

Technical Specifications

- Parameters : WBC, Lymph#, Mid#, Gran#, Lymph%, Mid%, Gran%, RBC, HGB,HCT, MCV, MCHC, RDW-CV, RDW-SD, PLT, MPV, PDW, PCT andHistogram for WBC, RBC, PLT
- Principles : electrical impedance method for counting and cyanide free method for hemoglobin
- Sample Volume : prediluted 20 µL, whole blood 13 µL
- Aperture Diameter : 80 µm
- Throughput : 30 samples per hour
- Display : color LCD display
- Resolution: 640 x 480
- Carryover : WBC, RBC, HGB≤0.5%, PLT≤1%
- Input / Output : RS232 x 2, 1 parallel printer(optional), 1 bar code scanner (optional), 1 keyboard interface
- Printout : thermal recorder, 50mm width paper, multitude of printout formats, printer optional
- Temperature: 15°C~30°C
- Humidity: 30%~85%
- Power requirement : AC100-240V, 50/60Hz
- Dimension : 322(W) x 437(H) x 386(D)
- Weight : 17.9 Kg

Hemodialisys Machine
ENDO HD-1

Standard Function

- Individual UF pump discharge and drainage are precisely and continuously measured, make sure UF goal is reached properly.
- Conductivity monitoring for B solution and dialysate Abnormal conductivity and insufficient dialysate can be detected before and in treatment by continuous monitoring of conductivity
- Heparin Bolus. Maximum speed up to 7.5 ml/min
- One key start and one key stop. When press stop key, machine automatically run into most safe condition, then press start, machine will start those pre-stopped settings so that save operator`s time.
- Machine automatically shut down after disinfection, so that reduce nurse work load
- Quick-self check when machine power on. Machine will self-check each part whether they are properly connected and parts are malfunction prior to treatment.

Operator Friendly Interface

- 12.1 inch wide color touch LCD screen. All monitoring parameters gathered on same interface, more easily to check and adjust.
- Blood way diagram is showed in treatment view for better understanding running condition of each blood way components
- Heat and chemical disinfection

Features

- 12.1 inch large color LCD touch scree, thumb-size silicon gel button, and unique knob to tune blood pump flow rate, very easy for operation
- Intelligent self diagnosis and alarm system in the course of treatment, the machine has self diagnosis and self detection function. Alarm cause is literature and acousto-optic prompted, convenient to remind the clinical staff to correct and deal with alarm timely.
- Large capacity system log storage function: including treatment information log, alarm information log, treatment status information log and clean status log.
- Multi-lingual and open system, compatible to different brand of dialysis consumables and concentrate formulation for dialysate. Thick and heavy concentrate A.B tray, pressure tolerant.
- 360 degree rotatable castors, front two castors lockable, convenient to move and lock. Combined with concentrate A.B tray, can realize mobile treatment.
- Modular design makes maintenance more easily. Module includes RO water inlet, fluid A.B confection, balance chamber, blood pump and heparin pump.
- 90 degree horizontal and 360 degree vertical rotatable heavy dialyzer holder.

ETERNITY

ICU Ventilator
SH - 300

Great Visibility

- SH-300 is equipped with a large 10.4" full-color display. The high resolution display provides for a flexible graphics menu combining respiratory curves, loops, and numerical data of physiological parameters.

Assistant Functions

- Inspiratory Hold
  Convenience for taking X-ray picture of the patient during ventilation, availability for clinician to assess patient's static pulmonary mechanics.
- Expiratory Hold
  Accessibility for measuring intrinsic PEEP
- 100% FiO2
  More effective support for suction
- Manifold parameter selections
  The manifold parameter selections are operated by means of a single ComWheel
- Manual Inspiration
  Availability for clinician to make prompt response to patient's inspiration need

Expiratory Valve

- With heating function, the expiratory valve protects the device from condensed water, accuracy of the flow sensor is ensure.

Humidifier

- Warm and humidify airflow with protection function, nine steps to control temperature.

Available Modes

- VCV Mode
- SIMV Mode
- PSV Mode
- PSV Breaths
- APRV Mode

Compressor

- 10.4" TFT color screen
- Easy setting by navigator wheel knob and touch key
- Wide choice of ventilation modes including CPAP, APRV, BIPAP
- Flow and pressure trigger
- Static compliance and resistance monitor
- PEEP, P-V loop, V-F loop
- Three-level visual and audible alarm, with concise words describing problems
- Advanced built-in electronic air-oxygen mixing device
- Durable and accurate built-in flow sensor
- Integrated expiration valve, easy to be sterilized
- Backup apnea ventilation
- Auto nebulizer
- Built-in battery
- CE certified

AMP all

Infusion Pump
Volumetric Infusion Pump IP-7700

Features

- Numerical keypad : easy and fast way to setup.
- Various displays : FND displays numerical data clearly and Color LCD displays detail information.
- User friendly : simple setup process makes user feels comfortable and variety display gives complete information.

Optionals

- Dosage mode (Body weight mode)
  Automatically calculate and set the proper flow rate when the dose rate, body weight, drug mass and solution volume are entered.
- Drop sensor : External.
- Nurse call : Each unit can be connected with nurse call system (DC 24V, 0.5A).
- Profile function : Program infusion condition (flow rate, delivery volume, delivery time) differently for each hour, up to 24hours.
- Central system : Connect with main PC for monitoring.

Standard Features

- Self-testing - Every time the unit is turned on, self testing is executed.
- K.V.O.(Keep Vein Open) - When the delivery volume has been reached, flow rate turns into K.V.O. rate (adjustable from 1ml/h to 10ml/h) automatically.
- Keypad lock function - Keypad can be locked with or without password.
- Infusion setup - Flow rate/ Delivery volume/ Infusing time.
- Retain memory - Last setting value will be saved.
- Remaining time display.
- Alarm repeat function.
- Open system - Up to 10 IV set brands can be calibrated in single unit.
- Buzzer level - 3steps.
- Occlusion level - 9 steps (4.5 ~ 14.5 psi).
- Purge rate - Adjustable (1 ~ 1000 mL/hr)
- Bolus rate - ON/OFF, Adjustable (1 ~ 1000 mL/hr, 1 ~ 9999mL)
- History call back - Call back last 10 infusion data.

Ventilator
Neonatal Ventilator NV8

Features

- Double CPUs: double protection
- Electronic flow sensor : Flow sensor provided by Honeywell
- Proportional valve : Norgren valve, with stable performance
- Oxygen sensor : City sensor, long service life, high precision, quick response
- When setting key paramater like pressure and oxygen concentration, intelligently give out safety signs to avoid maloperation
- Built-in lithium battery, with over 4hrs working time, guarantee normal operation during power failure and transportation

Safe and reliable

- Proximal pressure monitoring : without being affected by mechanical dead space in the closed loop and compliance, accurately measure patient`s airway pressure, the most recognizable method in the industry.
- Optional ultra0silent air compressor, <50DB noise when working.

User Friendly Design

- Oxygen concentration one-button auto-calibration
  avoid incorrect operation due to human error, provide accurate and reliable oxygen concentration data.
- Self check function when start up
  ensure ventilation safety, reduce medicare providers waiting time and get ready to use machine.
- LED touch screen
  8" LED backlit LCD, touch screen, clear and bright from multiple angles, monitoring data highlighted, intuitive setting design reducing human error, enabling doctors focusing on neonates.

The World`s leading Ventilation

- NCPAP (Nasal continuous positive airway pressure) + apnea wakeup function
- NIPPV (Nasal intermittent positive pressure ventilation)
- SNIPPV (synchronized nasal intermittent positive pressure ventilation) + backup ventilation
- HFNC (High flow nasal cannula) + pressure monitoring function

Patient Monitor
ENDO PM-1

Features

- High resolution color TFT-LCD screen
- Pacemaker detection
- Defibrillation and electrosurgical interference protection
- Pitch tone (Pulse-tone modulation)
- Unique iSEAP algorithm which is specially optimized for arrhythmia patients
- Dual-mode anti-interference pulse oximetry
- Clinically validated NIBP
- Nurse call function
- VGA output (optional)
- Suitable for adult, pediatric, and neonatal patients.

Spacious Storage

- 500 NIBP Measurement Review, 96 hours Trend Review, 60 Alarm Review, 720s Frozen Waveform

Respironics CO2

- Plug and play module design
- Dehumidification tube instead of water trap
- Low sampling rate of 50ml/min suitable for all types of patients

3/5 lead ECG analysis

OxyCRG for neonate

Large Font

Trend Screen

ENDO G2 CO2

- Superior water trap design for accurate monitoring
- iCARB algorithm with intelligent CO_2 pseudo wave identification technology
- Multiple sampling accessories as options for adult, child, and neonate patients

Built-in Temporary Memory

- NIBP measurement review : 500
- Trend review : 96 h
- Alarm review : 60
- Frozen waveform : 720 s

Optional

- 2 IBP Respironics CO2, ENDO G2 CO2, Thermal Recorder, WLAN Accessory kit

ENDO INDONESIA

Handheld Pulse Oximeter
ENDO PO-1

Fingertip Pulse Oximeter
ENDO PO-2

Features

- LCD display with backlight control
- Dual work modes : monitoring & spot check
- Numeric display with plethysmogram display
- Trend review
- Pulse tone modulation (pitch tone)
- Adjustable audio and visual alarms
- Powerful data storage capacity (up to 300 hours)
- Patient care viewer software for PC data management
- 4 x AA batteries for up to 48 hours of work
- Rechargeable battery for up to 30 hours of work
- Optional battery charger stand
- Automatic power-off function for power saving

Features

- Small & lightweight design
- Dual color display
- SpO2, PR, bar graph, and plethysmogram display
- 4 direction display with 6 display modes
- Easy to use
- 10 level adjustable brightness
- Low power consumption, automatic power off design
- Low-battery indicator
- Standard 2 AAA batteries supply
- Single button operation : power on, pulse tone, display mode, screen brightness

Specifications

- Size : 160 (L) x 70 (W) x 37.6 (H) (mm)
- Weight : 165 (g) without battery

Measuring Parameter Specification

- Measurement range
  SpO2 : 0~100%
  PR : 30~254 bpm
- Accuracy tolerance
- Saturation
  Adult and Pediatric : +- 2 digits (70~100%)
  Neonate : +- 3 digits (70~100%)
- Pulse rate
  Adult and Pediatric +- 3 digits
  Neonate : +- 3 digits
- Resolution
  SpO2 : 1%
  Bpm : 1 bpm

Rayto

Semi Auto Chemistry Analyzer
RT-9700


```
                        Test Report
                                                    RT-9700
(General)                                    Print date: 03/01/2017
Sample No.:1        Name: Jack        Sex: male          Age:28

Dept.: xx                             Operator: Lina

    Test                Result                Normal Range

    ALT                37.56U/L               0.00-40.00
    AST                34.87U/L               0.00-37.00
    TP                 55.98g/L               46.00-87.00
   *ALB                58.52g/L               38.00-44.00
```

Features

- 7" color LCD, touch-screen & keypad
- Reagent open system supports flow cell and cuvette mode, close system on request
- Analytical modes include kinetic, fixed time, bicromatic end-point with or without reagent blank or sample blank, linear or non-linear calibration
- Real-time curve monitoring enhances the reliability of result
- Large memory, up to 75 test protocols can be programmed
- Powerful QC function: Westguard Multi-rule, Levey Jennings plot, 2 controls per test
- Auto power-on self-check
- Additional lamp saving
- Multiform result output including patient comprehensive report

Technical Specifications

- Photometric Range : 0.000-2.500 Abs
- Resolution : 0.001 Abs (displayed), 0.0001 Abs (calculated)
- Light Source : Tungsten halogen lamp, 6V/10W
- Wavelengths : 340, 405, 500, 546, 578, 620, 670nm, 1 more filter optional
- Aspirate Volume : 200~6000μL
- Carryover : < 1%
- Memory : 75 test protocols, maximum 10000 test result
- Interface : RS-232, USB, LAN
- Flow Cell : 30μL quartz flow cell
- Cuvette Mode : 12.5mm*12.5mm cuvette optional
- Temperature Control : 25℃, 30℃, 37℃ ±0.5℃ and ambient temperature
- Display : 7" color LCD (800*480 pixels)
- Input : Mouse and optional external keyboard
- Output : Built-in printer or external printer (optional)
- Net Weight : 6.5 Kg
- Dimensions L x W x H (mm) : 350 x 362 x 180
- Power Supply : a.c. 100V-240V, 50Hz/60Hz

MIR
MEDICAL INTERNATIONAL RESEARCH

Spirometer
Spirolab New

Features

- Each function can be activated by a simple touch on the intuitive bar menu, always present on the screen.
- 7 inch Touchscreen.
- All in one portable Desktop Spirometer, with Oximetry option.
- Wireless Real Time test on PC via Bluetooth.
- Database up to 10,000 Spirometry tests or 900 hours of Oximetry recording coupled with power and flexible search services.
- Fast and silent built-in printer with customizable printout format
- Long-life Rechargeable Battery

Spirometry Parameters

- FVC, FEV1, FEV1/FVC, FEV1/VC, PEF, FEF25, FEF50, FEF75, FEF25–75, FEF75–85, Lung Age, Extrap. Volume, FET, Time to PEF, FEV0.5, FEV0.5/FVC, FEV0.75, FEV0.75/FVC, FEV2, FEV2/FVC, FEV3, FEV3/FVC, FEV6, FEV1/FEV6, FEV1/PEF, FEV1/FEV0.5, FIVC, FIV1, FIV1/FIVC, PIF, FIF25, FIF50, FIF75, FEF50/FIF50, VC, IVC, IC, ERV, IRV, Rf, VE, VT, tI, tE, VT/tI, tE/tTOT, MVV (measured), MVV (calculated)

Spirometry Test

- FVC, VC, IVC, MVV, PRE / POST bronchodilator comparison with a wide range of selectable parameters.

MIR Exclusive Patient

- Paediatric incentive system directly on the screen, helpful to improve patient compliance during a Spirometry test.

Always Included

- Elegant and robust carrying case
- Winspiro PRO® PC software with free update

Oxymetry Parameters (optional)

- %SpO2 and Pulse Rate (Min, Max, Average), Test duration, Total SpO2 Events, T90% (SpO2 time ≤89%), T89% (SpO2 time ≤88%), T40 (Bradycardia duration with Pulse Rate <40 BPM), T120 (Tachycardia duration with Pulse Rate >120 BPM)

Spirometer
Spirobank II

Features

- Accurate, Complete and Easy to use Spirometer with Oximetry option
- 4 versions available : Smart, Basic, Advanced, and Advanced plus
- On screen results and curves preview for immediate data assessment
- Wireless Real Time test on PC via Bluetooth
- Memory up to 10.000 Spirometry tests or 900 hours of Oximetry recording
- Long-life Rechargeable Battery
- Always included : Winspiro PRO PC software with free update
- Available with both Disposable or Reusable turbine flowmeter

Smart One - Peak Flow
FEV1 and Peak Flow Meter

Features

- Simple and lightweight to carry on the go
  Smart One has been designed to satisfy the growing demand for wireless devices capable to connect to the new generation of Android and iOS Smart Phones and Tablets
- MIR Smart One App includes an exclusive Incentive for adults and children based on both exhaled
  Flow and Volume that is helpful in improving subject's compliance
- Ideal for monitoring respiratory illnesses and in the self management of Asthma,
  COPD, Lung Transplant care, Cystic Fibrosis and for use in Clinical Trials
- Disposable turbine flowmeter
  Unrivaled in breath measurement. High accuracy

Disposable Turbine

Features

- Comfortable Packaging
- Singulary Packed
- Really Disposable
- No Sterillisation, no calibration, no filter, no cross contamination, no vapour condensation, no ambient influence
- ATS Certification
- The Best Sensor

ENDO INDONESIA

Suction Pump
ENDO Suction Pump 7A-23B

Technical Data

- Power Voltage : AC220V ±22V, 50Hz ±1Hz
- Max negative pressure : ≥ 0.09MPa
- Noise : ≤ 65 dB (A)
- Power : ≤ 180VA
- Pumping Rate : ≥ 40L/min
- Reservoir capacity : 2500 mL/pc, 2 pieces, glass
- Vacuum Range : 20 kPa
- Working System : Continuous Operation
- Packing Dimension :
  35.0 x 30.5 x 79.5 cm, N.W: 19.5 KG

Suction Pump
ENDO Portable Phlegm Suction Pump 7E-C

Technical Data

- Power Supply : AC220V ±22V, 50Hz±1Hz
- Input Power : 90VA
- Max negative pressure value : ≥ 0.075MPa
- Pumping Rate : ≥ 15L/min
- Noise : ≤ 65dB (A)
- Creservoir Volume : 1000mL, 1 piece
- Working System : Short Running
- Packing Dimension :
  37.0 x 18.0 x 28.0 (mm), N.W:4.4 KG

AMP all

Syringe Pump
SP-8800

Features

- Numerical keypad - Easy and fast way to setup
- Simple, fast and convenient syringe installation
- Color LCD - With color LCD, complete information is displayed in more detail.

Standard Features

- Self-testing - Every time the unit is turns on, self testing is proceeded.
- Auto-syringe detection - Detect syringe size automatically.
- Shortcut key - Syringe brand set, Occlusion set, Buzzer level set.
- K.V.O.(Keep Vein Open) - When the delivery volume has been reached, flow rate turns into K.V.O. rate (adjustable from 1ml/h to 10ml/h) automatically.
- Keypad lock function - Keypad can be locked with or without password.
- Infusion Setup - Flow rate/ Delivery volume/ Infusing time.
- Retain Memory - Last setting value will be retained.
- Remaining Time Display.
- Alarm Repeat Function.
- Open system - Up to 10 syringe brands can be calibrated in single unit.
- Buzzer level - 3 steps.
- Occlusion level - 9 steps (3.8 ~ 19.3 psi).
- Purge rate - Adjustable (0.1 ~ 1200 mL/hr).
- Bolus rate - ON/OFF, Adjustable (0.1 ~ 1200 mL/hr, 0.1 ~ 1000mL).
- Anti bolus - Reduce significantly bolus after occlusion release. (ON/OFF).
- History call back - Call back last 10 infusion data.

Optionals

- Dosage mode (Body weight mode) - Automatically calculate and set the proper flow rate when the dose rate, body weight, drug mass and solution volume are entered.
- Unit setup for Dosage mode - mL/hr, mg/kg/hr, mg/kg/min, µg/kg/hr, µg/kg/min
- Nurse call - Each unit can be connceted with nurse call system (DC 24V, 0.5A).
- Profile function - Program infusion condition (flow rate, delivery volume, delivery time) differently for each hour, up to 24hours.
- Drug labelling
- Central system - Connect with main PC for monitioring.

ENDO INDONESIA

Treadmill Stress Test
ENDO Exercise ECG Test

Features

- Compatible with Windows Vista operation system
- Automatic baseline correction for stable ECG trace
- 3 / 6 / 12 leads real-time waveforms and ST segment or trend graphs display
- ST average complex analysis , trend analysis and full disclosure waveform analysis
- Standard arrhythmia detection
- Classical and customized exercise Protocols
- Control treadmill, bicycle and exercise blood pressure devices support
- Pre-configured set of report formats
- Powerful memory allowing ease to access to original test data

ECG Sampling Box Performance

- Leads mode : 12 standard leads / cabrera leads
- Acquisition mode : simultaneous 12 leads acquisition
- Sampling rate : 10.000/ sec / channel (sampling), 500/sec / channel (analysis)
- A/D resolution : 18 bits
- Time constant : >= 3.2 s
- Frequency response : 0.05 Hz ~ 150 Hz (-3dB)
- Gain : 2.5mm/mV, 5mm/mV, 10mm/mV, 20mm/mV
- Input impedance : >= 20M (10 Hz)
- Input circuit current : <= 0.05 uA
- Input voltage range : <+-5mVpp
- Calibration voltage : 1mV +-2%
- DC offset voltage : +-500mV
- Noise : <= 15uVp-p
- Filter
  AC filter : on / off DFT Filter : weak / strong
  Lowpass filter : 25Hz / 35Hz / 45Hz / 75Hz / 100Hz / 150Hz
- CMRR : >=105dB

ENDO INDONESIA

Portable BW USG
ENDO EI-2

Median Sagittal Section, B Mode

Early Pregnancy, B Mode

Kidney, B Mode

Subscapularis Tendon, B Mode

Thyroid, B Mode

Gallbladder, B Mode

Aorta Artery, PW Mode

Thumb Artery, PW Mode

Carotid, PW Mode

Specifications

- Applications : Abdomen, OBGYN, Vascular, Small parts (breast, testicles, thyroid), Musculoskeletal Conventional & Superficial, Pediatric, Basic Cardiac
- Imaging technologies : i-Image, SRA, Compound imaging, THI
- Display Modes : B, B/B, 48, M, B/M, PW
- Gray Scale : 256 Levels
- Scanning Depth : 240mm Max (depend on the probe types)
- Probe Frequency : 2.5 MHz - 11.0 MHz (Depend on the probe)
- Cine Loop : 256 frames
- Zoom : 4 steps
- Software Packages : Dedicated measurement package General, OBGYN, URO, Cardiac, vascular, small parts
- Archives Management : Patient information management, images record, exam report.
- Power Supply : AC 100V-240V, 50Hz- 60Hz
- Standard Configuration : 1 probe connectors, 3 USB ports, VGA port, Video port, LAN port, Full Screen Display Mode, i-Image, Chroma, SRA, Compound imaging, THI, 8G memory card, PW Mode, Built-in Battery
- Option : 2 probe connectors, DICOM 3.0, Water-proof keyboard cover, Canrying Case (BG-100), Cart TR 9000, Support PC Printer, Video Printer

Advanced Imaging Technologies

- Ergonomics
  Rotatable LED (0-30') : tailer to different viewing angles
  Ultra-compact & Ultra-light
  Easy to carry
  Keyboard : For easy and quick access
  Dedicated cart TR 9000
  Streamlined workflow
- Economic
  The latest platform & more advanced chip-set:brings you better image quality and features at less cost in a more compact box
  Support PC printer, reduce investment & day to day paper cost
  8G memory card
  320G harddisk (option)
  Vehicular Charging
- ECHO
  Advanced technologies : i-image (Intelligent image optimization), THI (Tissue Harmonic Image), SRA (Speckle Reduction Algorithm), Compound imaging
  Full digital beam-former
  Trapezoid
  Automatic PW trace
  Chroma
  Full screen display mode
  AIO (Automatic image optimization)
- ECO-friendly
  Less radiation
  Less power consumption
  Longer usage life:LED
  Longer battery standby time: >2 hours

ELECTROMEDICS

ENDO INDONESIA

USG Color Doppler
ENDO EI-3

Better 4D

- Light probe : Releases doctors from scanning fatigue
- Smart function : The latest technology compound, i-image, SRA, etc. Provide super image
- Quite Probe : Vibration-free & Noise-free probe allows better care for mother and fetus
- Fast speed : 4D volume rate reveals fetal movement in real time

Multi Beam Former Technology

- Enchance signal processing speed
- Enchance time resolution
- Improve picture frame rate
- Improve spatial resolution

Image Processing Technology

- THI
- Speckle Reduction Algorithm (SRA)
- Compound technology
- i-Image : image optimization software

Measurement & Report Packages

- OB & GYN
- Vascular
- Urology
- Small parts
- Basic cardiac

Probes

- 3.5MHz Convex probe
- 7.5MHz Linearprobe
- 6.0MHz Transvaginal probe
- 4.0MHz 4D Volume Probe
- 7.0MHz Transvaginal probe(180°)
- 3.0MHz Micro-convex probe(adult Cardiac)
- 5.0MHz Pedriatic probe
- Wideband, Multi-Frequency

Widely Clinical Applications

- Abdominal
- Obstetrics
- Gynecology
- Vascular and Small parts
- Pediatric
- Urology
- Musculoskeletal

Imaging Modes

- B, 2B, 4B, B/M, M
- CFM
- PW Mode
- Power Doppler/Directional PD
- Duplex
- Trapezoidal
- Real-time 4D (option)
- Chroma B/PW

Standart Configuration

- Main unit, 19" LCD, 4 Probe Connectors, Hard disk (320 GB), DVD-RW, 6 USB Ports

Video Colposcope
ENDO C3A

Description

- With its bright LED cold lighting system, high resolution camera and electronic green filter, C3A video colposcope realizes full-screen display of precise cervical examination, offering crucial and accurate information for clinical decision making to the gynecologist.

R - way

- Saline application - 'R for Red' To observe the area with rich blood circulation, this reflects in red.
- 5% acetic acid - 'W for White To reveal increased nuclear activity, this reflects in white.
- Green filter - 'A for Abnormal' To better observe abnormal vascular features, this defines as A.
- Lugol's iodine solution - 'Y for Yellow' To observe fields of no iodine uptake, this reflects in yellow.

Features

- LED cold lighting system reproduces an original view of tissue
- Advanced and fast auto-focusing system ensures clear image
- Remote capture control and user-friendly keyboard layout for easy operation
- Electronic green filter enhances vascular image display without compromise of illumination
- Acetic acid and iodine reaction test timer to capture the right and precise image
- Real-time display of magnification
- Powerful image display and data management software
- Capture the right and precise image
- Analyze colposcopic findings
- Export report in PDF format

ELECTROMEDICS

AYGÜN ®
SURGICAL INSTRUMENTS CO., INC.

Surgical Instrument
Skin Graft Mesher

Features

- Single cutter cuts skin graft into geometrical shaped mesh & enlarge skin surface
- Graft expansion predetermined by graft carrying plates, eliminating need to change cutter during operation
- Continuous feed design prevents graft carrying plate from being loaded incorrectly and allow multiple plates to be used without interruption
- Graft thickness adjustment feature allow expansion on thin and thick grafts
- Easy availability of replacement parts

Surgical Instrument
Dermatome

Features

- User friendly, battery powered high torque motor design.
- No need to connect electric supply or compressed air.
- Removable special batteries make steam sterilization possible.
- Ergonomic and weight balanced design make it easy to handle
- 8 flaps give the ability to adjust cutting width from 9.75 mm to 78 mm
- Easy blade change mechanism designed to insert the blade only one side thus uncorrect blade insertion is avoided
- Cutting speed can be adjusted by only one finger
  Safe lock mechanism prevents from unwanted operation of the motor

AYGÜN® SURGICAL INSTRUMENTS CO., INC.

High Speed Motor System

Features

- Adjustable speed range up to 90.000 RPM
- Comfortable operation possibility thanks to ergo dynamic positioning of the center of gravity
- Under load motor start-up technology preventing the failures related to burr obstruction during craniotomy
- Opportunity of pediatric-adult craniotomy and laminectomy with single attachment
- The design allowing to minimize the costs of service on Dura protector feet deformations
- Color-protecting technology against discoloration of attachments connected to all sterilization techniques such as autoclave, EO, etc...
- Burr, attachment, motor change in a few seconds thanks to easy/connect technology for starting-up the system fast and easily.
- Motor and motor cable wears and socket failures are minimized thanks to special locking system.
- Low cost of consumable irrigation pump

HSM Power Console

- Operating Voltage : 200–240V
- Frequency : 50–60Hz
- Power : ~260W
- Maximum Current / 220V : 1A
- Maximum Motor Speed (Feed able) : 90.000rev/min.
- Maximum water (irrigation) pump mass flow rate : 100ml/min
- Device main feed circuit breaker : T 2.0A
- Weight : ~5000 gr
- Dimensions : 340x106x255 mm
- Standard related with ARC protection : IEC 601-1-2,IEC 601-1
- HSM Foot Pedal with Irrigation and F/R Button HSM Motor Handpiece : 90.000 rpm
- HSM Motor Stand, Autoclavable
- HSM Irrigation System Tubing Set

Craniotome

- HSM Craniotome : Modular dura guide for paediatric, adult and laminectomy applications. Keyless connection of hand piece, craniatome-burr, dura guide and motors. Clear identification of burrs and dura guide by ring system (1 - 3 rings)
- HSM Craniotome Pediatric Guide
- HSM Craniotome Adult Guide
- HSM Craniotome Laminectomy Guide
- Burr for Pediatric Guide : 20 mm
- Buur for Adult Guide : 20 mm
- Buur for Laminectomy Guide : 20 mm
- Motor Cable : 4 m
- HSM Perforator Motor : Ø 6/9 mm
- Reusable : Ø 9/12 mm
- HSM Attachment : Ø5.5 mm, 115 mm
- Burs Rosen : Ø 5,0 mm
- Burs Rosen : Ø 7,0 mm
- Burs Diamond : Ø 5,0 mm
- Burs Diamond : Ø 7,0 mm
- HSM Attachment : Ø 5.5 mm, 140 mm
- Spray Noozle for M14-110 and M14-210
- Burs Acorn : Ø 9.5 mm

AYGÜN®
SURGICAL INSTRUMENTS CO., INC.

Surgical Motor Handpiece, Praxis

Orthopedic Set, Drill Set

- Type M103-1005 : Battery Drill Set
- M103-200 Handpiece : Swiss made powerful cannulated brushless DC motor technology. Dual trigger system for speed control and direction control. Steam sterilisable at 2 bar 134o C. Cannulated Ø 4 mm; 43 x 141 x 154 mm / 940 g
- M103-210 Rechargeable Li-ion battery : Battery capacity: 3.1 Ah; Voltage: 21.6 Volts; Led battery charge status indicator. Generates a "beep tone" when starts working; Not autoclaveable; 84 x 63 x 47 mm / 355 g
- M103-211 Autoclaveable battery case : Steam sterilisable at 2 bar 134o C; 102 x 82 x 72 mm / 235 g
- M103-212 Autoclaveable sterile funnel for aseptic battery loading : Steam sterilisable at 2 bar 134o C; 78 x 59 x 35 mm / 60 g
- M103-226 Charger unit for 1 battery : Main voltage 100-240 Volts, 50-60 Hz; Charging monitored by LCD screen; Charging current 1.4 A; Charging voltage 21.6 Volts; Protections: Short circuit / Overload / Over voltage; Generates an audible tone when charging is started or finished; Battery not included 137 x 128 x 110 mm / 700 g
- M103-309 Drill attachment with keyed chuck : Ø4 mm Cannulated; Ø 1.0 mm - 6.35 mm; 900 rpm / 7 Nm; 30 x 104 mm / 310 g
- M7-502 Drill bit : Ø 2.5 mm; Length 100 mm
- M7-504 Drill bit : Ø 3.0 mm; Length 100 mm
- M7-250 Chuck key for M103-309 K3-1731 Basket with silicone fixations : 405 x 253 x 113 mm

Orthopedic Set, Basic Set

- Type M103-1001 : Battery Orthopedic Set
- M103-200 Handpiece : Swiss made powerful cannulated brushless DC motor technology. Dual trigger system for speed control and direction control. Steam sterilisable at 2 bar 134o C. Cannulated Ø 4 mm; 43 x 141 x 154 mm / 940 g
- M103-210 Rechargeable Li-ion battery : Battery capacity : 3.1 Ah. Voltage: 21.6 Volts. Led battery charge status indicator. Generates a "beep tone" when starts working. Not autoclaveable 84 x 63 x 47 mm / 355 g
- M103-211 Autoclaveable battery case : Steam sterilisable at 2 bar 134o C. 102 x 82 x 72 mm / 235 g
- M103-212 Autoclaveable sterile funnel for aseptic battery loading : Steam sterilisable at 2 bar 134o C; 78 x 59 x 35 mm / 60 g
- M103-226 Charger unit for 1 battery : Main voltage 100-240 Volts, 50-60 Hz; Charging monitored by LCD screen; Charging current 1.4 A; Charging voltage 21.6 Volts. Protections: Short circuit / Overload / Over voltage. Generates an audible tone when charging is started or finished. Battery not included 137 x 128 x 110 mm / 700 g
- M103-309 Drill attachment with keyed chuck : Ø4 mm Cannulated; Ø 1.0 mm - 6.35 mm; 900 rpm / 7 Nm; 30 x 104 mm / 310 g
- M7-502 Drill bit : Ø 2.5 mm; Length 100 mm
- M7-504 Drill bit : Ø 3.0 mm; Length 100 mm
- M7-250 Chuck key for M103-309
- M103-300B Sagittal saw system : (Without saw blades, battery and battery case). 16.000 cpm / 4o 50' 180 x 160 / 1110 g
- M103-1117 Sagittal saw blade :
  Material Thickness: 0.6 mm.
  Cutting Thickness: 0.8 mm
- M103-1146 Sagittal saw blade :
  Material Thickness: 1.27 mm
- M103-320 Acetabular reamer attachment :
  150 rpm / 40 Nm. 30 x 120 mm / 380 g

AYGUN® SURGICAL INSTRUMENTS CO., INC.

Surgical Motor Handpiece, Praxis

Orthopedic Set, Large Set

- Type M103-1003 : Battery Orthopedic Set
- M103-200 Handpiece : Swiss made powerful cannulated brushless DC motor technology. Dual trigger system for speed control and direction control. Steam sterilisable at 2 bar 134o C. Cannulated Ø 4 mm; 43 x 141 x 154 mm / 940 g
- M103-210 Rechargeable Li-ion battery (3 pcs) :
  Battery capacity: 3.1 Ah. Voltage: 21.6 Volts. Led battery charge status indicator. Generates a "beep tone" when starts working. Not autoclaveable. 84 x 63 x 47 mm / 355 g
- M103-211 Autoclaveable battery case (3 pcs) : Steam sterilisable at 2 bar 134o C. 102 x 82 x 72 mm / 235 g
- M103-212 Autoclaveable sterile funnel for aseptic battery loading :
  Steam sterilisable at 2 bar 134o C (3 pcs): 78 x 59 x 35 mm / 60 g
- M103-309 Drill attachment with keyed chuck :
  Ø4 mm Cannulated; Ø 1.0 mm - 6.35 mm; 900 rpm / 7 Nm; 30 x 104 mm / 310 g
- M7-502 Drill bit : Ø 2.5 mm; Length 100 mm
- M7-504 Drill bit : Ø 3.0 mm; Length 100 mm
- M7-250 Chuck key for M103-309
- M103-300B Sagittal saw system : (Without saw blades, battery and battery case) 16.000 cpm / 4o 50' 180 x 160 / 1110 g
- M103-1117 Sagittal saw blade : Material Thickness: 0.6 mm; Cutting Thickness: 0.8 mm
- M103-1146 Sagittal saw blade :
  Material Thickness: 1.27 mm
- M103-320 Acetabular reamer attachment :
  150 rpm / 40 Nm
  30 x 120 mm / 380 g
- M103-330 Reamer attachment for wire and pin :
  Cannulated Ø 4 mm; 300 rpm / 21 Nm
  30 x 104 mm / 310 g

Reciprocating Saw Set

- Type M103-1013 : Battery Reciprocating Saw Set
- M103-235B Reciprocating saw system :
  Without saw blades, battery and battery case)
  16.000 cpm / 4 mm; 210 X 150 mm / 1060 g
- M103-210 Rechargeable Li-ion battery :
  Battery capacity: 3.1 Ah; Voltage: 21.6 Volts
  Led battery charge status indicator. Generates a "beep tone" when starts working. Not autoclaveable
  84 x 63 x 47 mm / 355 g
- M103-211 Autoclaveable battery case : Steam sterilisable at 2 bar 134o C. 102 x 82 x 72 mm / 235 g
- M103-212 Autoclaveable sterile funnel for aseptic battery loading : Steam sterilisable at 2 bar 134o C
  78 x 59 x 35 mm / 60 g
- M103-226 Charger unit for 1 battery :
  Main voltage 100-240 Volts, 50-60 Hz. Charging monitored by LCD screen. Charging current 1.4 A. Charging voltage 21.6 Volts. Protections: Short circuit / Overload / Over voltage. Generates an audible tone when charging is started or finished. Battery not included 137 x 128 x 110 mm / 700 g
- M103-239 Reciprocating Saw blade :
  Usable length: 75 mm. Width: 13 mm
  K3-1731-S3 Basket with silicone fixations :
  405 x 253 x 113 mm

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SURGICAL INSTRUMENTS CO., INC.

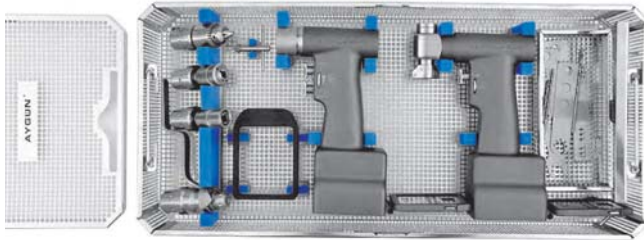## Surgical Motor Handpiece, Praxis

Sagittal Saw Set

- Type M103-1007 : Battery Sagittal Saw Set
- M103-300B Sagittal saw system :
  (Without saw blades, battery and battery case)
  16.000 cpm / 4o 50'; 180 x 160 / 1110 g
- M103-210 Rechargeable Li-ion battery :
  Battery capacity: 3.1 Ah; Voltage: 21.6 Volts
  Led battery charge status indicator. Generates a "beep tone" when starts working. Not autoclaveable
  84 x 63 x 47 mm / 355 g
- M103-211 Autoclaveable battery case : Steam sterilisable at 2 bar 134o C. 102 x 82 x 72 mm / 235 g
- M103-212 Autoclaveable sterile funnel for aseptic battery loading : Steam sterilisable at 2 bar 134o C
  78 x 59 x 35 mm / 60 g
- M103-226 Charger unit for 1 battery :
  Main voltage 100-240 Volts, 50-60 Hz
  Charging monitored by LCD screen; Charging current 1.4 A; Charging voltage 21.6 Volts; Protections: Short circuit / Overload / Over voltage
  Generates an audible tone when charging is started or finished. Battery not included.
  137 x 128 x 110 mm / 700 g
- M103-1117 Sagittal saw blade :
  Material Thickness: 0.6 mm;
  Cutting Thickness: 0.8 mm
- M103-1146 Sagittal saw blade :
- Material Thickness: 1.27 mm
- K3-1731-S1 Basket with silicone fixations :
  405 x 253 x 113 mm

Sternal Saw Set

- Type M103-1009 : Battery Sternal Saw Set
- M103-240B Sternum saw system :
  (Without saw blade, guide, battery and battery case)
  16.000 cpm / 4 mm; 210 x 154 mm / 1280 g
- M103-210 Rechargeable Li-ion battery :
  Battery capacity: 3.1 Ah. Voltage: 21.6 Volts
  Led battery charge status indicator. Generates a "beep tone" when starts working. Not autoclaveable
  84 x 63 x 47 mm / 355 g
- M103-211 Autoclaveable battery case : Steam sterilisable at 2 bar 134o C. 102 x 82 x 72 mm / 235 g
- M103-212 Autoclaveable sterile funnel for aseptic battery loading : Steam sterilisable at 2 bar 134o C
  78 x 59 x 35 mm / 60 g
- M103-226 Charger unit for 1 battery :
  Main voltage 100-240 Volts, 50-60 Hz
  Charging monitored by LCD screen. Charging current 1.4 A. Charging voltage 21.6 Volts.
  Protections: Short circuit / Overload / Over voltage
  Generates an audible tone when charging is started or finished. Battery not included
  137 x 128 x 110 mm / 700 g
- M103-715 Adult saw guide
- M103-710 Adult saw blade :
  Length 58 mm. Useble Length 35 mm.
  Blade Thickness 0.8 mm. Cutting Thickness 1.2 mm
- K3-1731-S2 Basket with silicone fixations :
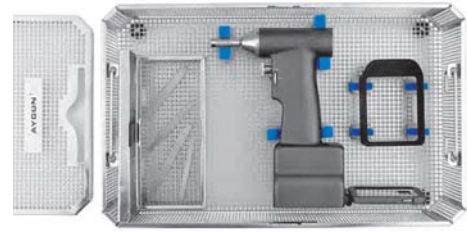 405 x 253 x 113 mm

Surgical Motor Handpiece, Karinca

Orthopedic Set

- M206-200 Karinca Drill-Reamer Handpiece :
  Hexa - Function System. Dual trigger system for speed control and direction control.
  Steam sterilisable. Cannulated Ø 4 mm; 77 x 140 x 210 mm / 785 g
- M206-210 Power box (2 pcs) : Swiss made powerful DC motor technology. Battery capacity: 2.5 Ah. Voltage: 14.8 Volts. Integrated oled screen audible alert motification. Not autoclaveable
  75 x 61 x 160 mm / 4565 g
- M206-212 Autoclaveable sterile funnel for aseptic battery loading : Steam sterilisable
  30 x 74 x 104 mm / 55 g
- M206-227 Charger unit for 2 battery :
  Main voltage 100-240 Volts, 50-60 Hz
  Charging current 2 A (X2).
  Charging voltage 16.8 Volts
  Protections: Short circuit / Overload / Over voltage
  Charging indicator led. Battery not included
  230 x 250 x 130 mm / 2000 g
- M206-309 Drill attachment with keyed chuck :
  Ø4 mm Cannulated. Ø 1.0 mm - 6.35 mm.
  1200 rpm / 5 Nm; 29 x 87 mm / 205 g
- M7-502 Drill bit : Ø 2.5 mm. Length 100 mm
- M7-504 Drill bit : Ø 3.0 mm. Length 100 mm
- M7-250 Chuck key for M206-309
  High-Low speed options. Steam sterilisable
  10.000 - 12.000 cpm / 4o 50'
  77 x 153 x 218mm / 850 g
- M103-1117 Sagittal saw blade :
  Material Thickness: 0.6 mm
  Cutting Thickness: 0.8 mm
- M103-1146 Sagittal saw blade :
  Material Thickness: 1.27 mm
- M206-352 Quick - action chuck (K-wire Driver) :
  Cannulated Ø 0.7 mm - 2.5mm
  1200 rpm / 5 Nm; 29 x 77 mm / 300 g
- K3-2723 Basket with silicone fixations :
  540 x 253 x 113 mm

Reciprocating Saw Set

- Type M206-1013 : Battery Reciprocating Saw Set
- M206-235 Karinca Reciprocating saw Handpiece :
  (Without saw blades and power box)
  High - Low speed options. Steam sterilisable
  11.000 -14.000 cpm / 4 mm
  77 X 180 x 210 mm / 860 g
- M206-210 Power box : Swiss made powerful DC motor technology
  Battery capacity: 2.5 Ah. Voltage: 14.8 Volts
  Integrated oled screen audible alert motification
  Not autoclaveable. 75 x 61 x 160 mm / 4565 g
- M206-212 Autoclaveable sterile funnel for aseptic battery loading : Steam sterilisable
  30 x 74 x 104 mm / 55 g
- M206-226 Charger unit for 1 battery :
  Main voltage 100-240 Volts, 50-60 Hz
  Charging current 2 A. Charging voltage 16.8 Volts
  Protections : Short circuit / Overload / Over voltage
  Charging indicator led. Battery not included
  130 x 250 x 130 mm / 900 g
- M103-239 Reciprocating Saw blade :
  Usable length: 75 mm. Width: 13 mm
- K3-2731-S3 Basket with silicone fixations :
  405 x 253 x 113 mm

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SURGICAL INSTRUMENTS CO., INC.

Surgical Motor Handpiece, Karinca

Sagittal Saw Set

- Type M206-1007 : Battery Sagittal Saw Set
- M206-300 Karinca Sagittal saw Handpiece :
  (Without saw blades and power box)
  High - Low speed options
  Steam sterilisable 10.000 - 12.000 cpm / 4o 50'
  77 X 153 x 218 mm / 850 g
- M206-210 Power box :
  Swiss made powerful DC motor technology
  Battery capacity: 2.5 Ah. Voltage: 14.8 Volts
  Integrated oled screen audible alert motification
  Not autoclaveable. 75 x 61 x 160 mm / 4565 g
- M206-212 Autoclaveable sterile funnel for aseptic battery loading :
  Steam sterilisable 30 x 74 x 104 mm / 55 g
- M206-226 Charger unit for 1 battery :
  Main voltage 100-240 Volts, 50-60 Hz
  Charging current 2 A. Charging voltage 16.8 Volts
  Protections: Short circuit / Overload / Over voltage
  Charging indicator led Battery not included
  130 x 250 x 130 mm / 900 g
- M103-1117 Sagittal saw blade :
  Material Thickness: 0.6 mm
  Cutting Thickness: 0.8 mm
- M103-1146 Sagittal saw blade :
  Material Thickness: 1.27 mm
- K3-2731-S2 Basket with silicone fixations :
  405 x 253 x 113 mm

Sternal Saw Set

- Type M206-1009 : Battery Sternal Saw Set
- M206-240 Karinca Sternum saw Handpiece :
  (Without saw blade, guide, battery and battery case)
  High - Low speed options. Steam sterilisable
  11.000 -14.000 cpm / 4 mm
  77 X 180 x 210 mm / 930 g
- M206-210 Power box : Swiss made powerful DC motor technology. Battery capacity: 2.5 Ah
  Voltage: 14.8 Volts
  Integrated oled screen audible alert motification
  Not autoclaveable 75 x 61 x 160 mm / 4565 g
- M206-212 Autoclaveable sterile funnel for aseptic battery loading : Steam sterilisable
  30 x 74 x 104 mm / 55 g
- M206-226 Charger unit for 1 battery :
  Main voltage 100-240 Volts, 50-60 Hz
  Charging current 2 A. Charging voltage 16.8 Volts
  Protections: Short circuit / Overload / Over voltage
  Charging indicator led. Battery not included
  130 x 250 x 130 mm / 900 g
- M103-715 Adult saw guide
- M103-710 Adult saw blade : Length 58 mm
  Useble Length 35 mm. Blade Thickness 0.8 mm
  Cutting Thickness 1.2 mm
- K3-2731-S4 Basket with silicone fixations :
  405 x 253 x 113 mm

Accumax

Micropipette
Accumax Smart

Features

- Light & smooth plunger action
- Locking mechanism preventing accidental volume changes during pipetting
- PTFE sealing is used to create precise air tightness to provide long term consistent performance
- Slim design allows pipette to operate even with narrow tubes used in laboratory
- Early accessible recalibration mechanism without any chance of accidental change in calibration
- Ergonomic design
- Suitable for left and right handed users with a relaxed grip and a good balance
- Soft touch tip ejection
- High performance, light weight and easy in operating
- Volume display is always visible while pipetting
- In house cleaning, repair and calibration possible without any special tools
- New tip cone design for smooth fitting with most of manufacturers' tips
- Color coding for easy identification
- Fully autoclavable without disassembly for maximum convenience as well as protection from contamination
- Enhanced UV resistance
- Shelf mounting stand for efficient handling and storage
- Manifold rotates 360 degree to allow pipetting from any convenient angle
- The tip ejector is designed with convenient shape to reduce tip loading and ejection forces
- Includes all basic features of Smart single channel pipette

ENDO PRO MICROPIPETTE

Micropipette
Accumax Pro / ENDO Pro

Features

- Smooth pipetting
- Best in-hand grip for comfort
- Reduced thumb stress
- Highly accurate and precise
- Minimum size with maximum accuracy.
- Calibration through EN ISO 8655
- Two stop plunger
- Fully Autoclavable
- Beautiful color coded for easy volume identification
- Low price

Accumax

Micropipette
Accumax Stand

ELECTROMEDICS

ENDO INDONESIA

ECG Bulb Electrode & ECG Limb Clamp Electrode

Technical Features

- Reusable praecordial electrode for ECG
- Metallic Part Diameter : 15mm / 20mm / 24mm / 30mm
- Ball Diameter : 25mm / 33mm
- Electrode Material Coating : Silver / Silverchloride
- Ball Material : Plastic (Medical Grade PVC)
- Connection : Universal screw (4 mm) and clip

- Reusable peripheral clamp electrodes for ECG
- Electrode Material Coating : Argento Clorurato (Ag/AgCl) / SSC
- Connection : Universal screw (4 mm) and clip
- Compliance to Standards : Directive 93/42/EEC. Class 1 device

Patient Cable Compatible
ENDO ECG Cable

Compatible

- Burdick : EK-10 and Elite, E350, E350i, E550, E560
- Cardioline : AR-600, AR-1200, AR-2100
- Fukuda Denshi : FX101, FX102F, FX328U, FCP2201
- GE-Marquette : MAC 500, MAC 1100, MAC 1200
- Mortara : ELI-200, ELI-50, Kenz : 103, 106
- Nihon Kohden : ECG-1150, 1250, 1350, 1550, 2350, 2550 Cardiofax 6151, 6851, 6353, 8110 Cardiofax Q ECG-9110K, 9130K
- Philips / HP : M1770A, M1771A, M1772A Pagewriter 100 / 200 / 200i
- Quinton : Eclipse™ 4, 8, 400, 800, 850, 850i Eclipse LE ll and ATRIA PLUS
- Schiller : AT-1, AT-2, AT-2 Plus, AT-4 Resistor 10K Long Screw AT-3, AT-6, CS-6, AT-5, AT-10, AT-60

ENDOSCOPY

Arthroscopy Instrument
CO2 Insufflator
Disinfectant
Disposable Flexible Instrument
Disposable Trocar
Electrosurgical Unit, Pulsar
Endoscope Washer
Endoscopy Camera Unit
ENT Instrument
Enzymatic
Flexible Video Endoscope
Hysteroscopy Instrument
Laparoscope
Lithotriptor
Morcellator
Multi-Indication Pump
Portable Endoscopy Camera
Shaver
Single Port Laparoscopy
Urology Instrument
Video Endoscopy System

SonoScape

Flexible Endoscopy
Video Endoscopy System HD-500

Features

- Integrated Patient Database Management
- Multi Spectral Imaging
- Water Jet Function
- Built-in Workstation - Smart Work Flow and Easy Operation

Full Function Trolley

- Fully height adjustable design to accommodate different clinical settings
- 24 inch LCD display with articulating arm for viewing from any angle
- Main power button for easy activation of the whole system
- Transformer guarantees stable power current

HD-500 Image Processor

- (CHb) Concentration Hemoglobin Imaging

  By quantitatively measuring the mucosal hemoglobin volume, CHb is useful for endoscopists to differentiate vein patterns and diagnosing the intramucosal digestive carcinoma, diffuse-type carcinoma or the intestinal-type carcinoma.

- Structure and Edge Enhancement

  Structure enhancement can provide a better image for the doctor during observations by enhancing the outline of large mucosal while the edge enhancement improves the contrast resolution of smaller tissue structures.

- Multi-buttons for Remote Control

  Four buttons on the control section of the endoscope handle can be customized to preset functions making the operation easier and more convenient for gastroenterologists during a diagnostic exam.

- Smart short-cut buttons

  Short-cut buttons on the keyboard, control panel and the endoscopes delivers a faster operation and makes the examination more efficient.

- Flexible Image and Video Management Solutions

  Still image capture, video recording and replay functions endows the HD-500 system with flexible image and video management solutions.

- Large Storage Capacity

  Installed with a 500GB hard drive, the HD-500 system is convenient for storing patient files and large video files.

- Flexible Switching Working Mode

  Keyboard operation allows access to the report editing mode or to the patient file management mode facilitating a smooth examination.

- Intelligent Built-in Workstations

  The intelligent internal workstation can help doctors easily edit reports, record videos and manage patient files.

SonoScape

Flexible Endoscopy
Video Endoscopy System HD-350

Report edit and print

Timely video record and review

Patient file management

Features

- CMOS, with the CMOS image sensor, HD-350 gives high quality images with low noise levels, which leads to improved clarity and optimized vision in not only routine procedures but also in complex interventions.
- Smart workflow, to increase efficiency, patient data management is accessible with the press of a button. The smart workflow of the built-in workstation of HD-350 helps doctors to edit reports, record videos and manage patient files with ease
- Clean and clear, the waterjet function of the scopes help to maintain a clear endoscopic view by washing away blood or mucous.

Advanced Technologies

- High-definition video and imaging
- Image noise reduction and image enhancement
- CHb enhancement
- Automatic equalization of brightness
- Hot plugging of endoscope
- Capacitor touch control
- Intelligent medical record management
- Endoscope identification

HD-350 Video Processor

- HD video outputs : DVI, SDI, VGA
  Standard video outputs : S-Video, CVBS
- HD video recording : Built-in workstation, timely record and review
- Dimension (L x W x H / weight)
  455mm x 370mm x 124mm / 9.5 kg

HD-35E Light Source

- Main lamp : 50W LED
- Transparency function : 7 seconds maximum brightness flicker
- Lifetime indicator
- Hot plugging : Endoscope switch without powering off
- Dimension (L x W x H / weight)
  460mm x 370mm x 154mm / 15 kg

Endoscope Washer
ENDO CLEAN 1000

Automatic Endoscope Reprocessor

Technical Data

- Applicable scopes : flexible endoscopes
- Visual leakage detection : bubble detection during immersion
- Number of reprocessor endoscope : for 1 scope
- Washing method exterior surfaces multi channel jetting system rotated in a 360 degree arc
- Washing method channel interiors and accessories fluid flushing cleaning
- Disinfection method exterior surfaces and accessories disinfectant solution immersion
- Disinfection method channel interiors disinfectant solution flushing and filling
- Washing time 10 sec ~ 3 min
- Detergent time : 5 sec
- Disinfection time : 1 min ~ 1 hr
- Alcohol flushing time : 5 sec
- Tank capacity : disinfectant 15L detergent 1L and alcohol 1L
- Dimension (mm) : 550(W) x 585(D) x 950(H)
- Weight : 75 kg
- Power : 220-240VAC 50/60Hz

Features

- Maintaining concentration of sterilization liquid for certain period by minimizing dilution rate
- A function to prevent draining of sterilization liquid
- Easy to determine sterilization liquid replacement cycle with counter display of sterilization liquid
- Using parts with strong chemical resistance against Peracetic Acid and PAA
- Automatic alcohol injection at inside channel
- Providing effective sterilization capability with washing liquid and alcohol added
- Strong multiple 3 channel 360 degree rotationg nozzle type
- Program mode selection type which is easy to be operated
- Equipped with strong air gun
- Providing Olympus, Pentax, Fujinon leak jack adaptor
- It`s also possible to set time freely taking average 7 to 15 minutes
- Sterilization is available for all types of endoscope and 1 set endoscope is possible for sterilization
- Material for Basin is chemical-resistance indicating excellent durability while it has another benefit making it possible to install endoscope without a mounting device
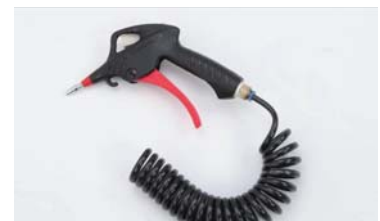
ENDOSCOPY

Disinfectant
ENDO CLEAN 2000

Automatic Endoscope Washer & Disinfector

Technical Data

- Applicable scopes : flexible endoscopes
- Visual leakage detection : bubble detection during immersion
- Number of reprocessor endoscope : for 2 scope
- Washing method exterior surfaces multi channel jetting system rotated in a 360 degree arc
- Washing method channel interiors and accessories fluid flushing cleaning
- Disinfection method exterior surfaces and accessories disinfectant solution immersion
- Disinfetion method channel interiors disinfectant solution flushing
- Air shower method exterior surfaces multi channel jetting system rotated in a 360 degree arc
- Air shower method channel interiors air force
- Washing (1,2,3) time : 10sec ~ 3min. Max (0 sec - skip)
- Detergent time : 5sec max (0 sec - skip)
- Disinfection time : 1min ~ 1hr max
- Alcohol flushing time : 5sec max (0 sec - skip)
- Air (1,2,3) force time : 10sec ~ 30sec max (0 sec - skip)
- Air shower time : 10sec ~ 30sec max (0sec - skip)
- Water filtration and disinfectant filtration : built in (pre filter)
- Tank capacity : disinfectant 18L, detergent 1L, Alcohol 1L
- Dimension (mm) : 630(W) x 700(D) x 980(H)
- Weight : 90 kg
- Power : 220-240VAC 50/60Hz

Features

- Setting alarm to notify cycle use of sterilization liquid depending on its characteristics
- User-centric various program configuration
- A function to wash sterilization tank
- Setting alarm for automatic door opening
- Use of chemical-resistance substances againts peracetic acid and PAA
- Automatic alcohol injection into internal channel
- Strong multiple 3 channel 360 degree rotating nozzle type
- Dual scope processing
- Rapid drying basin and surface of endoscope by strong air shower
- Equipped with strong air gun
- Equipped with filter
- Blocking foreign substance entering endoscope by equipping filter
- Preventing inundating of basin with dual full sensor
- Providing Olympus, Pentax, Fujinon leak jack adaptor
- Free time setting and program configuration makes it possible to operate the system under best conditions
- Number of endoscopes which is possible for sterilization is 2 sets while sterilization is available for all kinds of endoscope and special endoscopes
- This provides best endoscope reprocessing service with its water supply filter and disinfection filter equipped

![detrox logo]

Endoscope Washer
Detrox Detro Wash

Hygiene and Disinfection Products for Professionals

Features

- Disinfection compability system, suitable for use with liquid disinfectants for all endoscope devices.
- Suitable for single use and ready to use disinfectant.
- Double tank and double scope system
- Large sink system, the sink is produces at a diameter which prevents over twisting of endoscopes and at a width which provides containment of double endoscopes.
- Multiple scope system, performs the disinfection of endoscopes of all trade marks.
- Automatic / manual washing system
- Sink disinfection system
- LCD Display and touch keypad
- Easy to use, there are shortcut keys on the user login screen for the most commonly used keys.
- Water filter system
- Tracking disinfectant usage days and number of usage.
- Protecting circuit, there is current leakage protection system to protect human life against possible current leakages.
- Easy carrying system. when the device needs to be moved from one place to another, it is wheeled for easy transportation and at the same time it has a locked wheel system for being fixed in place.
- Level indicators and distinctive filling covers
- Power system : AC 220/230V, 50/60 Hz Max. 200W 1A
- Leakage test : max preassure 0.35 bar
- Weight : net 80 kg, packed 140 kg

Disinfectant
Detrox Detro OPA

Usage Areas

- Used for high level disinfection of surgical instruments, flexible and rigid endoscopes. It is compatible with medical devices/equipment made of polystirene, stainless steel, PVC, acrylic material, polycarbon, ceramic, ABS, silicone, HDPE, rubber, and glass.

Product Properties

- High level disinfectant.
- Suitable for manual use and for endoscope washing and disinfection machines.
- The solution has no mutagenic, embryotoxic, teratogenic or reproductive effect on humans.

Composition

- %0.55 orthophytalaldehyde, anticorrosive materials

Usage

- Detro OPA is filled into a clean and closed container
- Precleaned and rinsed instruments are immersed thoroughly so that all the surfaces and cavities are covered by the solution
- The container is closed
- The contact time is completed
- Then the instruments are rinsed with sterile or distiled water
- The solution in the container can be used during 14 days, the activity should be controlled daily by test strips, the solution should be renewed when the strips doesn`t give the active colour existing on the strip tubes
- Pls immerese the tools in the solution after the cleaning is done thoroughly
- Red and orange colors that can be seen on the instruments indicate that the instruments are not cleaned well (protein detection system)

detrox

Disinfectant
Detrox Detro Forte

Usage Areas

- Used for high level disinfection of surgical instruments, flexible and rigid endoscopes. It is compatible with medical devices/equipment made of polystirene, stainless steel, PVC, acrylic material, polycarbon, ceramic, ABS, silicone, HDPE, rubber, and glass.

Product Properties

- High level disinfectant.
- Suitable for manual use and for endoscope washing and disinfection machines.

Composition

- %2 glutaraldehyde, anticorrosive materials, auxiliary substances

Microbiological Activity

- Bactericidal (incl. Tbc), fungicidal, virucidal in 5 minutes
- Sporicidal in 15 minutes

Usage

- Detro Forte is filled into a clean and closed container
- Precleaned and rinsed instruments are immersed thoroughly so that all the surfaces and cavities are covered by the solution
- The container is closed
- The contact time is completed
- Then the instruments are rinsed with sterile or distiled water
- The solution in the container can be used during 28 days, the activity should be controlled daily by test strips, the solution should be renewed when the strips doesn`t give the active colour existing on the strip tubes

Enzymatic
Detrox Detro Enzym

Usage Areas

- Provides pre-cleaning for medical devices and endoscopes and all kinds of surgical instruments
- Cleans the organic contaminations like blood, oil, protein, starch on surfaces
- It is compatible with materials like glass, rubber, wood, ceramic, silicone, plastic, and stainless steel

Product Properties

- Concentrated product
- Reduces microbial load of instruments by cleaning organic soil
- Reduces corrosion risk of instruments by cleaning inorganic soil
- Suitable for manual and ultrasonic use and endoscope washing machines
- Effectives in 5 minutes manually and in ultrasonic devices
- Contains corrosion inhibitor

Composition

- Enzymes (amilase, protease, lipase, cellulase), glycol, noniyonic surfactant, quaternary ammonium compounds, anticorrosive materials.

Usage

- The product is used by diluting at % 0.5 concentration.
- Effective in 5 minutes in ultrasonic or manual usage
- Solution life is 24 hours
- At the end of cleaning the instruments are rinsed thoroughly

AGS

Hemoclip

Indication

- The hemoclip with conveyer is a newly developed hemostasis device by AGS, applying in the mechanical hemostasis of non-variceal bleeding in the stomach and intestine. The unique design of repeated opening and closing makes the hemoclip qualified to open and close repeatedly for many times, enables the operator to perform several times pre-clamping og the target tissues. The hemoclip woll not be reeased until the operators confirm that the pre-clamping is precise and effective, ensuring the effectiveness of the clamping.
- The non-reposition hemoclip is used in conjunction with endoscope, applying in the mechanical hemostasis of non-variceal bleeding and wound suturing in digestive tract.

Sphincterotome (Rotatable)

Application Scope

- The swing sphincterotome is mainly intended for resection and coagulation to the duodenal papilla sphincter in the ERCP procedures. It is usually used in conjuction with the guide wire devices.

Features

- The success rate of intubation can be improved significantly through swinging tip and make a proper direction.
- Leading processing technology; ensuring limited cutting and avoiding excessive deformation.
- The unique design of applying power from outside of handle can effectively avoid wire winded and repeatedly plugging in.

AGS

Nasal Biliary Drainage Catheter

Application Scope

- Nasal biliary drainage catheter is used for endoscopic gall - stone operation or bile drainage after cholecystectomy.

Features

- Superior radiopaque
- Conform to ergonomics
- Good fluidity

Sphincterotome

Indication

- The sphincterotome knife is mainly intended for resection and coagulation to the duodenal papilla sphincter in the ERCP procedures. It is usually used in conjunction with the guide wire devices.

Sclerotherapy Needle

Indication

- Clinically, disposable endoscopy injection needle is a medical device that pass the endoscope channel into the alimentary canal or gastrointestinal tract to perform injection to the gastrointestinal mucosa, injects sclerosing or hemostatic drugs to the selected area by using endoscope to control the present haemorrhage or potential haemorrhage spot in the digestive system, and operates the injection of physiological saline after endoscopic mucosal biopsy and polypectomy.

AGS

Stone Extraction Basket (Security Wire)

Application Scope

- Disposable stone extraction basket (security wire) is used for the endoscopic removal of billiary stones and foreign bodies.

Features

- Super smooth sheath tube; protecting working channel; simple operation
- Strong basket; excellent shape keeping
- The unique design of tip will effectively help to solve stone incarceration

Stone Extraction Basket

Indication

- Disposable stone extraction basket is used for the endoscopic removal of billiary stones and foreign bodies.

Polypectomy Snare

Indication

- The polypectomy snare is a monopolar electrosurgical device used with an electrosurgical unit for endoscopic polypectomy

Cold Polypectomy Snare

Application Scope

- Cold polypectomy snare is used with endoscope to remove the foreign bodies in digestive tract.

![LKPP e-catalogue - Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah - Belanja Cepat Cara Tepat]

AGS

Grasping Forceps

Indication

- The disposable grasping forceps is used in conjuction with the soft endoscopes, entering into the human body cavity such as respiratory tract, esophagus, stomach, intestine and so forth through the endoscope channel, to grasp tissues, stones and foreign matters as well as to take the stents out.

Biopsy Forceps

Indication

- The disposable biopsy forceps works with flexible endoscopes, passing through the endoscope channel into the human body cavity to take the living tissues for pathology analysis

Guide Wire

Indication

- The guide wire is intended for ERCP diagnosis or therapy when there seems to be various diseases of the digestive system in the pancreatic and biliary duct.

Stone Retrieval Balloon (Platoid)

Indication

- The stone retrieval balloon (platoid) is used in conjunction with flexible endoscope to extract the stones on bile duct, which can also provide lumen for inserting guide wire and injecting contrast agent.

Features

- Low resistance; low friction; comfortable handfeel
- Excellent shape keeping; prevent side leakage when retrieving stones.
- Optimizing tip shaping design; achieving great intubation features; increasing stone retrieval success rate

LEMKE.

Laparoscopy
Full HD Camera

Full HD Camera

- The Full HD - Camera head features an ergonomic design and is ideally suited for all indications (laparoscopy, arthroscopy, hysteroscopy, urology). The image format has an aspect ratio of 16:9. The threaded connector for video lenses corresponds to the C-mount standard. The Full HD - Camera cable is replaceable.

LED Light Source

- The LED-Light Source has a universal fiber optic cable holder connectible to the Storz, Olympus, ACMI, and Wolf light cable adapters. The intensity of the Light Source is adjustable. The light intensity is 1,400 lumens. After an operating time of 10,000 hours, Lemke guarantees a minimum light output of at least 90 %.

HD Capturing

- An SD storage card with a USB port is available when selecting the capture option to record camera and video images. HD photos and videos are saved with a resolution of 720 pixels. The amount of memory needed and the speed of saving the data are reduced with an optimal image quality

ENDO INDONESIA

Portable Endoscopy Camera System

Product Parameter

- Camera : 1/3" CCD waterproof camera
- Scanning standard : DVI output 600 lines
- Output : video
- Light source : LED lamp
- Light source color temperature : 6000K
- Storage : SD card dynamic / static storage
- Display screen : 15" TFT color screen

Easy and Practical Operation

- Simple panel adjustment can get a nice image effects
- White balance support manual or automatic adjustment

Applies to All Clinical Departments

- General Surgery, Gynecology, ENT
- Gastroenterology, Urology
- Respiratory medicine
- Orthopaedics, Thoracic surgery
- All department using the endoscope

LEMKE.

Laparoscopy
CO2 Insufflator

Laparoscopy
Multi-Indication Pump

Features

- Safe technology that adapts to the patient

  Reliable base unit, Highest safety, Mature technology

- Easy to use, universal, efficient

  A highly reliable device for demand of daily hospital routines. Easy to use by the staff and comprehensive safety components to protect patients.

  The maximum flow capacity is 30 liters per minute. The start settings for flow and pressure are customized individually. The Insufflator has a reliable venting system that safely reduces excess pressure in patients. A replaceable gas filter protects the device from gas supply contamination.

- A connector for almost all standard insufflation tubes. Disposable and autoclavable tube sets available.

Laparoscopy

- All functions required of the Pump can be adjusted via the touch screen with easy to use controls. Unambiguousness ensures maximum safety during surgery

Arthroscopy

- The clearly arranged and intuitive graphical user interface makes it possible to see all key parameters at a glance. The wash function optimizes the visual conditions in the joint. Flow and pressure are adjustable. Highly stringent safety standards prevent overpressure within the joint.

Hysteroscopy

- Pressure and flow are controlled intuitively via setting keys. A scale to measure the deficit is an available option. The display prominently depicts the status of the fluid deficit.

Urology

- Security is the alpha and omega in the field of minimally invasive surgery. The display design optimally supports handling of the Pump. Important data immediately catch the eye and action prompts facilitate proper operation of the Pump, thereby increasing safety considerably. A deficit measurement is an available option.

Patient Safety

- The Pump can be used with up to four indications. Each indication can be unlocked individually as well as combined with one another. The automatic instrument recognition optimally adjusts the Pump to the instrument to be used. A transponder in the tube ensures the highest level of patient safety and maximizes pump output. The device is also equipped with a vacuum pump for suction, a 5.7" touch screen display, and an optional foot switch.

Electrosurgical Unit (ESU)
Pulsar MB350

*Mini Bipolar
Hystero Resectoscope*

Pulsar MB350

- Pulsar MB350 provided with all the performance needed for the monopolar or bipolar use in open or laparoscopic surgery
- Pulsar MB350 also allows the users to memorize up to 33 programs for all surgical needs and 6 specific programs for the use in saline with mini resectoscopes and bipolar instruments 5 Fr.

Technical Data

- Electronic generator : Complying with IEC 60601-1 and IEC 601-2-2 Standards. (Class I - Type CF).
- EC Approval : CE 0051 - Certificate 1665/MDD.
- Monopolar and Bipolar working frequency : 440kHz +- 10%.
- Output circuit : "Floating out", insulated from earth at the high and low frequencies, protected against the use of the defibrillator.
- Foot-switch : Twin water-proof foot-switch (IPN8).
- Monopolar use: By 1 or 2 pencils / instruments with hand or foot switched activation.
- Bipolar use : By 1 instrument with foot switched activation.
- Auto-check system : By twin microprocessor with auto-check at the switching on, continuous control during the functioning and block of the power delivery with information of users by Error codes in case of problems or faults.
- Neutral electrode control : For the use of "Double section" or "Single section" electrodes with acoustic and visual alarm signal.
- Mains and Absorption : 230 V ~ 50 Hz - 828 VA.
- Fusibili di rete : T 2x 5 A.
- Dimensions and weight : 38x35x17cm – 15Kg

Morcellator
Abdominal Hysterectomy

Features

- Controlled force
  The special full load of 1.5 Nm allowes a controlled, powerful cutting of tissue with a very low drive
- Safe application
  The activating ring with integrated „Cut / No-Cut" function increases the safety and protects the blade during nonapplication.
- Pressure resistant
  The special Valve Module enables the use of blueendo Tenaculum Forceps and maintains pressure constantly even during the change of instruments.
- Sharp cut with big lumen
  The Cutting Modules feature an excellent cutting quality. The big diameters enable a very time-saving, efficient morcellation.
- Simple handling
  Change of Cutting Modules / diameters during the operation through the patented click system „Quick Connect".
  A system which makes sense - On- / Off- Button
  For simple handling optionally on the Grip
- Simple processing
  The used materials of the Grip Module and the Trocar Systems enable a standard processing at 134°C. Module or the Foot Pedal.
  Ergonomic Design
- Grip Module lies well in the hand and its weight is balanced.
- Variable adjustable
  Controlled speed of Cutting Modules with constant, powerful efficiency

WOM

Lithotriptor
Freddy U100Plus Laser Lithotripsy

Features

- FREDDY (Frequency-Doubled Dual Pulse Nd:YAG)
- Highest levels of efficiency and safety
- The energy of the FREDDY lithotriptor is transferred to the stone via a highly flexible quartz glass fiber and effects fragmentation with shockwaves generated directly on the application site
- Non-thermal method of this method neither coagulates nor perforates tissue even in case of accidental direct fiber contact

Technical Data

- Laser wave lengths: 532 nm and 1064 nm, dual pulse
- Laser pulse energy: 120 mJ and 160 mJ
- Laser pulse duration: 1.2 µs (at 1064 nm)
- Laser pulse rate: 1, 3, 5, 10, 15, 20 Hz single and double pulses
- Power requirements: 100-240 V~ / 50-60 Hz 610 VA (6 A @ 110 V)
- Dimension (W x H x D): 250 x 850 x 600 mm
- Weight: approx. 45 kg/99 lbs.

SEESHEEN
see the endo-sheen

Flexible Video Endoscopes

UR-332

275°

CN-355

CMOS Chip on Tip

- Durable, no fiber design, more flexibility, and less maintanence.
- The slimmest outer diameter reaches 2.8mm
- Portable design for anytime and anywhere
- Compact, light source display and processor all in one
- Attach water proof cap to achieve IPX7 for fully immersing disinfection

Flexible Video Ureterorenoscope and Cystonephroscope
RIRS & PCNL, flexible endoscopy solutions

- Better vision and durability than traditional fiber scopes.
- Video chip in tip technology
- 275° bending to reach lower calyx
- Left and right 120° insertion rotation
- Photograph and video recording
- Video signal output ability to medical grade display

Urology
Occurrences, RIRS (Retrograde Intra Renal Surgery)

- RIRS is an effective surgery which is using flexible uretero-renoscope to enter kidney retrogradely. Seesheen UR-332 flexible uretero-renoscope combines chip on tip technology which gives better vision and durability than the fiber scopes

Occurrences, PCNL (Percutaneous Nephrolithotomy)

- Compared with rigid cysto-scope, Seesheen CN-355 offers soft and flexible cystoscopy for examination and therapy, it also can be used for PCNL when the rigid scopes meet blind area during the operation

ENDOSCOPY

SEESHEEN
see the endo-sheen

Flexible Bronchoscopy Solutions

- Slimmest 3.2mm outer diameter
- Chip on tip video technology
- Left & right 120° insertion rotation
- Photograph and video recording
- Portable design offers more convenience for routine examination and therapy

Pulmonary
Occurrences, make bronchoscopy become more accessible

- Nowadays, bronchoscopy is becoming a crucial tool of lung disease interventional therapy. Seesheen flexible video bronchoscopes including 3 types which offer more accessible bronchoscopy therapy solutions.
  - Interventional laser / cryo-therapy
  - Remove of mucus / foreign bodies
  - Placing airway stent / bronchial dilatation
  - Lavage such as BAL / WLL
  - Dose purpose for instance fistula blocking or EBTB

Flexible Video Intubation Laryngoscope
Complete tracheal flexible intubation solutions

- Slim, standard and therapy type for optimized usability
- Chip in tip video technology
- Portable design is applicable to intubation in anywhere
- Photograph and video recording
- Standard configure 3inch attachable display

Anesthesiology
Occurrences, safe and fast intubation

- Seesheen intubation scope standard attaches removable 3 inch display which offers open vision and brilliant user experience. The product line offers ideal and completed intubation solutions by the features of versatile, efficient, and scatheless. They can be used for the situations:
  - Difficult airway intubation
  - Special patient postures
  - Awaking intubation
  - DLT / BB position checking
  - Nasotracheal intubation
  - Teaching and practice

SEESHEEN
see the endo-sheen

E.N.T.
Flexible Rhinolaryngoscopy Solutions

- Portable design for OPD daily using
- Wide 120° viewing angle
- Chip on tip video technology
- Integrated LED light source
- 130° up and down bending angles
- Less stimulus and more accurate for examinatin and therapy
- Photograph and video recording

E.N.T.
Occurrences, softer and safer

- Flexible rhinolaryngoscopy is currently ine of the most commonly used techniques for visualizing the nasal cavity, the sinuses, the pharynx and the larynx. Seesheen flexible video rhinolaryngoscope EV-349 which has 2.2mm working channel can be widely used for :
  - Polypectomy of nasal and vocal core
  - Adenoids removal
  - Rhinopharyngocele checking and removal
  - Accurate dosing
  - Checking bleeding points

Flexible Video Choledochoscope
LTCBDEC Choledochoscopy Solutions

- Video chip on tip technology
- Photograph and video recording
- Left & right 120° insertion rotation
- Video signal output ability to medical grade display

General Surgery
Occurrences, LTCBDEC
Laparoscopic Transcystic Common Bile Duct Exploration with Choledochoscope

- LTCBDEC, coordinate with laparoscope, Seesheen choledochoscope can be used for LTCBDEC which is an ideal solution for lithotripsy. CV-332 with 3.2mm outer diameter and 1.2mm instrument channel can support doctor to search and break stones in smaller biliary duct.

ENDOSCOPY

Lithotriptor
Pneumatic Lithotripsy, Lithosplit 4.1 Digital

Frequencies of impacts

- There are total thirteen choices. Twelve repeat frequency starting 1 per second up to 12 per second. In addition Mono mode is provided to control the trigger precisely.

Energy Control

- Easy to use Electronic control is provided to set a desired energy level from 1 to 10. This wide range of control allows a Surgeon to disintegrate stone of any hardness and size easily.

Lithosplit Super Hand Piece

- High precision LITHOSPLIT Hand Pieces use matched piston and cylinder to give a long and reliable service life. It is very easy to assemble. There are various choices of sterilisation. Its efficacy is proved for disintegrating hard and large stones

Lithosplit Probes

- Probes are available in various sizes to treat stones in bladder, urethra or kidney. 0.8mm and 1.0mm probes are used for URS. 1.5mm is designed for locations in bladder and kidney. A strong 2.0mm probe works very well on large and hard stones in kidney.

Lithotriptor
Suction Assembly for PCNL

1. Probe
2. Suction assembly
3. Suction connection
4. Silicone washer
5. Coupler
6. Assembled Handpiece

Lithotriptor
digiFLOW - ST2

Salient Features

- Fully automatic or manual operation
- User friendly system
- Uses in-built thermal technology printer
- The printer requires no maintenance, no ink refilling
- Prints crisp and clear high resolution printouts
- Test duration up to 2 minutes
- Infinite stand by time in auto mode
- Multiple tests can be conducted successively without emptying the jar every time
- Auto or manual start and stop
- Patient data with test results is stored in the memory and can be retrieved any time for printing before starting the next test.
- Maintenance free
- Printout contains graph and tabular text data
- Flow measurement range : 0~50 ml/sec
- Volume measurement range : 0~750 ml
- Removes artefact automatically
- Reusables urine collection jar
- High precision sensor for flow and volume
- Upgradation to Urodynamics possible
- Compact and portable system

Lithotriptor
digiFLOW - 4

Salient Features

- Fully automatic
- User friendly PC based system
- Uses PC`s USB port for communication with the hardware
- Prints crisp and clear colourful or greyscale printouts on any color deskjet or laser printer installed on the PC.
- Real-time coloured display
- Long test duration, up to 30 minutes
- Multiple tests can be conducted successively without emptying the jar every time
- Auto or manual start and auto stop
- Patient data with test results is stored in the PC and can be retrieved any time for reference or for reprinting
- Maintenance free
- Printout contains graph and tabular text data
- Flow measurement range : 0~50 ml/sec
- Volume measurement range : 0~2000 ml
- Facility to remove artefact manually
- Reusable urine container and funnel
- High precision sensor for flow and volume
- Selectable scaling (zooming) for both display as well as print
- Upgradation to Urodynamics possible
- Packed with full on line help

Laparoscopy Instruments
Optic

HD Telescope; Autoclavable Ø 10.0 mm; 340 mm; 0°

Laparoscopy Instruments
General Hand Instruments

Veress Needle; Ø 2.7 mm; FL 120 mm

Handle available with or without ratchet

Trocar Sleeve; Smooth Metal Tube Ø 11.0 mm; FL 100 mm

Dissecting Grasper; Maryland Dilip
Dissecting and grasping forceps (FL 330 mm)

Trocar Tip; Pyramidal Tip; Ø 11.0 mm; for FL 100 mm

Atraumatic Grasper; Babcock
Non Traumatic FL 330

Trocar Sleeve; Smooth Metal; Ø 5.5 mm; FL 95 mm

Atraumatic Grasper; Johan
Fenestrated; Blade 38 mm; FL 330 mm

Trocar Tip; Pyramidal Tip; Ø 5.5 mm; for FL 95 mm

Traumatic Grasper; Claw Forceps
Straight; Blade 22 mm; FL 330 mm

Reducer for Trocar Sleeves Ø 11.0 - 5.5 mm

Scissors; Metzenbaum
Standard Scissors Curved; Serrated;
Blade 14 mm; FL 330 mm

Laparoscopy Instruments
General Hand Instrument, Bipolar Grasper

T - Style Handle for Bipolar Coagulation Forceps; Inclusive Shaft Ø 5.0 mm; FL 340 mm

Outer Shaft Ø 5.0 mm; FL 340 mm

T - Style Turnable for Bipolar Coagulation Forceps; Inclusive Shaft Ø 5.0 mm; FL 340 mm

Bipolar Cable; Banana Plugs Cable with 2 x Ø 4 mm; 3 m

Adapter for Bipolar Cable with Flat Plug

Insert Bipolar Power T - Style; Grasping Forceps; Bipolar; Curved Insert for Ø 5.0 mm

Handle for Bipolar Coagulation Forceps; Inclusive Shaft Ø 5.0 mm; FL 340 mm

Maryland; Bipolar Insert; Curved; for Ø 5.0 mm

Tong Type; Bipolar Insert; Wide 3.0 mm for Ø 5.0 mm

TONTARRA
MEDIZINTECHNIK GMBH

Laparoscopy Instruments
General Hand Instruments, Suction Irrigation Tube Set

Monopolar L-Hook Electrode
Ø 3.5 mm; FL 330 mm
Ø 5.0 mm; FL 330 mm

Adapter for HF - Electrode
Suction Irrigation Pistol Handle Style; Premium Version;
tube connectors; with maximum suction flow Ø 5.2 mm

Monopolar Spatula Electrode
Ø 3.5 mm; FL 330 mm
Ø 5.0 mm; FL 330 mm

Monopolar Cable; Ø 4.0 mm ; 3 m

Needle Holder Curve Left
Ø 3.0 mm; FL 330 mm
Ø 5.0 mm; FL 330 mm

Suction Irrigation Tube
Ø 3.0 mm; FL 330 mm
Ø 5.0 mm; FL 330 mm

Laparoscopy Instruments
Digestive Hand Instruments, Stone Removal Forceps

Handle without rachet

Spoon Forceps;
Single action jaw
Ø 10.0 mm; FL 330 mm

Tube Shaft Insulated with Cup Nut
Ø 10.0 mm; FL 330 mm

with open eye   *with closed eye*

![TONTARRA MEDIZINTECHNIK GMBH]

Laparoscopy Instruments
Digestive Hand Instruments, Gall Bladder Extractor

Handle with rachet;
Violet HF Connector

Claw Forceps;
Single action jaw
Ø 10.0 mm; FL 330 mm

Tube Shaft Insulated with Cup Nut
Ø 10.0 mm; FL 330 mm

Laparoscopy Instruments
Digestive Hand Instruments, Stone Removal Forcep

Liver Fan Retractor; Bendable; 3 Fingers
Ø 5.0 mm; FL 340 mm

Clip Applicator; Rotatable; Detachable;
Ø 10.0 mm; FL 320 mm

Medium Large for Ethicon Clips
Ø 5.0 mm; FL 320 mm

Laparoscopy Instruments
Obgyn Hand Instruments

Aspiration Needle; Puncture-Injection-Needles
Ø 5.0 mm; Ø 1.4 mm needle; FL 330 mm

Uterine Manipulator with 6 Tips

Laparoscopy Instruments
Obgyn Hand Instruments, Ring Applicator & Trocar

Multifunctional Trocar Sleeve; Ø 7.0 mm;
Working Length 101 mm; Trocar Pyramidal Tip Ø 7.0 mm;
Length 101 mm; Ring Applicator for Tube Sterilization;
Ø 7.0 mm + 15 Ring

Myoma Screw

ENDOSCOPY

Laparoscope

rotate to be straight

rotate to be curved

a

schematic diagram

with electrode

rotate to be straight

rotate to be curve

360° rotate the shaft to be curved

b

Head 360° rotation
Can be detachable in 3 parts (handle, shaft, and inserts)

Needle-holding Forceps
V-Needle Holder Forceps Ø 5 x 330mm

JLG Finger

Disposable Instruments, Endobag

Urology Instruments

stone grasping forceps

endoscope 70° Ø 4 x 302mm

Stone Crushing Forceps

Stone Grasping Forceps

Evacuator (Ellik)

Adaptor with Tube

NELIS

Single Port Laparoscopy
Glove Port

Features

- Can be opened during operation
- Can be used in robotic surgery
- Each port can move independently
- Rolling the sheet helps to open incision easily
- Soft movement can make surgery easy
- Only 2-2.5cm incision makes small scar dependently
- Polyurethane wound retractor-not torn easily and softer than silicone
- Separation gas inlet and outlet
- High-elastic port cap
- Various size of port 3mm-15mm-reduction of collision between instruments
- Insertion can be seen through transparent port part

Characteristics

- Minimum Incision
  Allows minimal scar surgery as well as decreased post-operative pain, fast recovery and return to everyday activity.
- Polyurethane is sturdier and more elastic so our Glove Port is very resistant to tears.
- Convenient Removal
- Separate Inlet & Outlet
  CO_2 can easily be pumped in to remove smoke during operation.
- Port Caps High Elasticity
  A variety of instrument sizes can be inserted into the caps (3mm~12mm)

TROPIAN TECH

Disposable Trocar

Disposable Trocar

- TROPIAN is designed to enhance surgeons and assistants of health.
- The key features of this product including the filter.
- A distinctive aspect of our product is Triple filter system.
- During the laparoscopic operation, triple filter purify somke and burning smell in the operation room.
- We can provide a better operating room environment with TROPIAN. This is our ultimate goal.

Disposable Trocar Features

- Good Grip, ergonomic designed trocar palm.
- Stable position hold, ribbed Cannula can be firmly on the surgical part on the Abdominal wall.
- Responsible for the health of surgeons and assistants, equipped with filter for smoke evacuation (2 model, ZT-12F, ZT-22F)
- Fully sterilized with plasma sterilization equipment.
- Integrated Converter
  Tropian (ZT-30, ZT-40) is possible to use 5-12mm diameter instrument without change converter.

TONTARRA
MEDIZINTECHNIK GMBH

Hysteroscopy Instruments
Hysteroscopy Set

Outer Sheath; 16 Fr; Quick Lock System

*Telescope Ø 2.9 mm; 30°;
HD Autoclavable; 300 mm*

*Working Sheath with 1 Working Channel 5 Fr
Quick Lock System for Endoscope 2.9 mm*

*Scissor Ø 1.6 mm; Scissors; Pointed; Ø 1.6 mm;
5 Fr; 34 cm; Semi Rigid; Single Action*

*Grasper Ø 1.6 mm; Biopsy Grasping Forceps
Ø 1.6 mm; 5 Fr; 34 cm; Semi rigid; Oval;
Double Action*

Hysteroscopy Instruments
Resectoscopy Set

*Outer Sheath; 16 Fr; Quick Lock System
Inner Sheath Rotatable; 16 Fr; Quick Lock System*

*HF Electrodes; Ball Angled; Bipolar;
for 16 Fr System*

*HF Electrodes; Loop; Large 90°Angled;
for 16 Fr System; Bipolar*

*Telescope Ø 2.9 mm 0° ;
HD Autoclavable; 300 mm*

*Hybrid System (Monopolar or Bipolar)
Working Element Titanium; Bipolar;
Passive Cutting; Closed Handle; Quick Lock
System for 0° Telescope*

*Monopolar Cable for Electrode & Loops
Ø 4.0 mm; 3.0 m*

*Bipolar HF Connection Cable International
Model; 2 Pins 3 m*

Hysteroscopy Instruments
Paracervical Block

Paracervical - Block

- Applying injection of local anesthetics before hysteroscopic office procedures leads to significant pain reduction.
- For a successful performance of the uterine paracervical block
- Pain reduction made easy, safe, and reliable

Technical Specifications

- The portio has to be set by speculum
- The injection needs to be placed at the two points shown at the "x" marking (right and left lateral vaginal fornix), just below the transverse midline that divides the cervix.

ANESTHETIZED AREA

Portio · Cervix

X · X

Vaginal Fornix

Urology Instruments
Urology Hand Instruments; Optic Urology

HD - Telescope Urology; Autoclavable	
Ø 4.0 mm; FL 300 mm	0°
Ø 4.0 mm; FL 300 mm	30°
Ø 4.0 mm; FL 300 mm	70°
Ø 4.0 mm; FL 300 mm	12°

Urology Instruments
Urology Hand Instruments; Cystoscope - Urethroscope

Cystoscope Sheath with Obturator 2 Stopcocks	
White 25 Fr	Channel 1 x 10 / 2 x 8 Fr
Blue 23 Fr	Channel 1 x 9 / 2 x 7 Fr
Red 21 Fr	Channel 1 x 7 / 2 x 5 Fr
Green 19 Fr	Channel 1 x 6 / 2 x 5 Fr
Yellow 17 Fr	Channel 1 x 5 Fr

Catheter Deflecting Mechanism; 2 Instrument Channel for Channel 17-25 Fr

Telescope Bridge; 1 Instrument Channel for Sheath 17-25 Fr

Optical Biopsy Spoon Forceps; for Sheath 19-25 Fr for Telescope 12°

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Urology Instruments
Urology Hand Instruments; Resectoscope

*Hybrid System (Monopolar or Bipolar)
Working Element Passive Cutting; Closed Handle for Ø 4.0 mm
Telescope; HF-Connection Down*

*Loop Electrode Angled; 24 / 26 Fr;
Yellow for 30°Telescope*

Knife Electrode Angled; 24 / 26 Fr; Yellow

Ball Electrode; Ø 3.0 mm; 24 / 26 Fr; Yellow

*Resectoscope Sheath; Continuous Flow 26 Fr; 2 Stopcock;
Turnable Tube without Obturator; All Round Perforation*

Obturator for Resectoscopy; 24 / 26 Fr

Ellik Evacuator Glass

Sheath Connection for Ellik Evacuator

Urology Instruments
Urology Hand Instruments; Sachse Optical Urethrotome

*Urethrotome Sheath Visual 21 Fr; 2 Fixed Stopcocks;
Graduated Guide Wire Port 5 Fr*

Stricture Knife Straight; 21 Fr

Obturator for Urethrotome 21 Fr

Stricture Knife Round Shaped; 21 Fr

*Supplementary Sheath
for Urethrotome Lateral Open; 21 Fr*

Urology Instruments
Urology Hand Instruments; Lithotrite & Stone Crushing Forceps

Lithotripsy Sheath Central Valve 24 Fr

Telescope Bridge; 1 Instrument Channel

Obturator for Lithotripsy 24 Fr

Working Element for Punch Lithotripsy; Optical; 24 Fr

Stone Crushing Forceps; for Sheath 25 Fr

Urology Instruments
Urology Hand Instruments; Accessories

Insertion Mandrin

Urethral Bougie		Urethral Bougie	
8 Charr	27.5 cm	20 Charr	27.5 cm
10 Charr	27.5 cm	22 Charr	27.5 cm
12 Charr	27.5 cm	24 Charr	27.5 cm
14 Charr	27.5 cm	26 Charr	27.5 cm
16 Charr	27.5 cm	28 Charr	27.5 cm
18 Charr	27.5 cm	30 Charr	27.5 cm

*Stockmann;
Penis Clamp; 8 cm*

*Strauss; Penis Clamp
11 cm*

Urology Instruments
Urology Hand Instruments; Uretero - Renoscope

*Uretero - Renoscope; 12°, 1 Instrument Channel 5 Fr;
7.5 Distal; 430 mm*

*Flexible Stone Basket; Complete Instrument;
Handle & Basket; 5 Fr; 600 mm*

*Grasping Forcep; Flexible Alligator Jaw; Double Action;
5 Fr; 600 mm*

Urology Instruments
Urology Hand Instruments; Percutaneous Nephroscopes

*Nephroscope 15°; 1 Working Channel Ø 5.0 mm;
2 Fixed Stopcocks 26 Fr; 200 mm*

*Nephroscope Sheath without Obturator 1
Turnable Stopcock; 26 Fr; 175 mm*

*Dilatation Set for Nephroscope Content; 1 Guide Wire Rigid
+ Flexible 1 Each Dilatator Ø 9, 12, 15, 18, 20, 21, 24, 27, 30 Fr*

Obturator Nephroscope; 26 Fr

Instrument Bridge for Nephroscope

*Grasping Forceps;
Fenestrated Jaws*

*Grasping Forceps;
Serrated*

Grasping Forcep; 3 Expanding Jaws

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Urology Instruments
Cystoscope (Lockable)

manipulator with two channels

sheet with obturator F23, F18.5, F21, F16.5

0° Ø 4 x 302 mm
30° Ø 4 x 302 mm
70°Ø 4 x 302 mm

Endoscope Bridge   *Adaptor*   *Sealed Cap*

Bladder Trocar

*Sheet with Obturator
F23, F18.5, F21, F16.5*

Manipulator with Two Channels

Flexible Biopsy Forceps

Flexible Serrated Forceps

Flexible Foreign Body Forceps

Cleaning Pole

Flexible Scissors

Urology Instruments
Urethrotomy Set (Lockable)

Ø 4 x 302 mm

sheath with obturator 21Fr

supplementary sheath

working handle (passive)

Sheath with Obturator 21Fr

Working Handle (passive)

Supplementary Sheath

Lancet   *Half Round Knife*   *Hook Shape Knife*

ENT Instruments
ENT Telescopes, Sinuscopes

Ø 4.0 mm

Description	Size	
Sinuscope HD	Ø 4.0 mm; 0° ; FL 185 mm	0°
Sinuscope HD	Ø 4.0 mm; 30° ; FL 185 mm	30°
Sinuscope HD	Ø 4.0 mm; 70° ; FL 185 mm	45°
		70°

Ø 2.7 mm

Description	Size
Sinuscope HD	Ø 2.7 mm; 30° ; FL 187.5 mm
Sinuscope HD	Ø 2.7 mm; 30° ; FL 140.0 mm

Ø 2.7 mm

Description	Size
Sinuscope HD	Ø 2.7 mm; 30° ; FL 175 mm
Sinuscope HD	Ø 2.7 mm; 30° ; FL 110 mm

ENT Instruments
ENT Telescopes, Otoscope

Description	Size
Otoscope HD	Ø 1.9 mm; 0° ; FL 60 mm
Otoscope HD	Ø 1.9 mm; 30° ; FL 60 mm

ENT Instruments
ENT Telescopes, Flexible Rhino - Laryngoscope

Description
ENT-Ultraslim Flexible Rhino-Laryngoscope
▸ Ø 3.4 mm; FL 300 mm
▸ bending range 130° up and down
▸ direction of view 0°

ENT Viewer CMOS Video; Rhino - Laryngoscope
All in One HD MED-CAM System

![ENDO INDONESIA logo]

E.N.T Instruments
Endoscope

Otoscope

0°Ø 4 x 50 mm   0°Ø 2.7 x 100 mm
30°Ø 4 x 50 mm   30°Ø 2.7 x 100 mm

Sinoscope

0°Ø 4 x 175 mm   0°Ø 2.7 x 175 mm
30°Ø 4 x 175 mm   30°Ø 2.7 x 175 mm
70°Ø 4 x 175 mm

Laryngoscope

70°Ø 8 x 178 mm   70°Ø 6 x 178 mm
90°Ø 8 x 178 mm

E.N.T Instruments
ERK Ear Surgical Instruments Set

Middle Ear Forceps

Short Triticeons Forceps

Upward Forceps

Forceps

Fixed Stapes Forceps

Stapes Head Forceps

Suction for Ear Operating (Straight)

Suction for Ear Operating (Curved)

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E.N.T Instruments
Sinoscope Set

Optical Forceps Ø 4.3 mm

Trocar Needle

Nasal Sinuses Curette

with hole

without hole

Sickle Knife

Sharp Head

Blunt Head

Maxillary Rongeur Pistol Shape

Suction Tube Ø 3 x 125 mm

Suction Tube
Ø 4 x 155 mm
Ø 3 x 155 mm
Ø 2.5 x 155 mm

Elevator

Nasal Tissue, Straight Type

Nasal Tissue, Left Curved

Nasal Tissue, Right Curved

Front Biting

Back Bitiong

Arthroscopy Instruments
Arthroscopy Hand Instrument, Sheath with Fixed Stopcocks

Outer : Ø 6.5 mm; FL 140 mm

For direction of view; Ø 4.0 mm; FL 175 mm	Number of fixed stopcocks
0° / 30° / 45° / 70°	2

Arthroscopy Instruments
Arthroscopy Hand Instrument, Trocar

Colour Code : Yellow

Pyramidal	
Conical Blunt	
Conical	

Arthroscopy Instruments
Arthroscopy Hand Instrument, Telescope Arthroscopy

HD - Telescope Arthroscopy; Autoclavable	
Ø 4.0 mm; 175 mm	30°

Arthroscopy Instruments
Arthroscopy Hand Instrument, Stella Punches

Wide Punch Low Profile : Straight

Description	Sheath Version	Tip Profile	Bite Wide	Jaw Wide
Straight; Small		1.90 mm	2.50 mm	4.10 mm
Straight; Medium		1.90 mm	3.20 mm	5.00 mm
Straight; Large		1.90 mm	4.50 mm	6.10 mm
Curved Left 12°; Medium		1.90 mm	3.20 mm	5.00 mm
Curved Right 12°; Medium		1.90 mm	3.20 mm	5.00 mm
Curved Up 15°; Medium		1.90 mm	3.20 mm	5.00 mm

Arthroscopy Instruments
Arthroscopy Hand Instrument,
Stella Punches

Wide Punch Low Profile :
Up Biter

Description	Sheath Version	Tip Profile	Bite Wide	Jaw Wide
Upbiter Straight; Small		1.90 mm	2.50 mm	4.10 mm
Upbiter Straight; Medium		1.90 mm	3.20 mm	5.00 mm
Upbiter Straight; Large		1.90 mm	4.50 mm	6.10 mm
Upbiter Curved Left 12° ; Medium		1.90 mm	3.20 mm	5.00 mm
Upbiter Curved Right 12 °; Medium		1.90 mm	3.20 mm	5.00 mm
Upbiter Curved Up 15° ; Medium		1.90 mm	3.20 mm	5.00 mm

Wide Punch Standard Profile :
Up Biter

Description	Sheath Version	Tip Profile	Bite Wide	Jaw Wide
Upbiter Straight; Small		2.50 mm	2.50 mm	4.10 mm
Upbiter Straight; Medium		2.50 mm	3.20 mm	5.00 mm
Upbiter Straight; Large		2.50 mm	4.50 mm	6.10 mm
Upbiter Curved Left 12° ; Medium		2.50 mm	3.20 mm	5.00 mm
Upbiter Curved Right 12 °; Medium		2.50 mm	3.20 mm	5.00 mm
Upbiter Curved Up 15° ; Medium		2.50 mm	3.20 mm	5.00 mm

Rongeur

Description	Sheath Version	Tip Profile	Jaw Wide
Straight		3.00 mm	3.20 mm

Arthroscopy Instruments
**Arthroscopy Hand Instrument,
Stella Punches**

Basket Punch : Scoop Style

Description	Sheath Version	Tip Profile	Bite Wide	Jaw Wide
Straight; Small		2.10 mm	1.60 mm	3.30 mm
Straight; Medium		2.30 mm	1.80 mm	3.60 mm
Straight; Large		2.90 mm	2.00 mm	3.80 mm
Curved Left 12° ; Small		2.10 mm	1.60 mm	3.30 mm
Curved Right 12° ; Small		2.10 mm	1.60 mm	3.30 mm
Curved Up 15° ; Small		2.10 mm	1.60 mm	3.30 mm
Curved Down 15° ; Small		2.10 mm	1.60 mm	3.30 mm
Straight; Medium		2.30 mm	1.60 mm	3.30 mm

Oval Punch : Straight

Description	Sheath Version	Tip Profile	Bite Wide	Jaw Wide
Straight		1.65 mm	4.40 mm	6.60 mm
Curved Left 12°		1.65 mm	4.40 mm	6.60 mm
Curved Right 12°		1.65 mm	4.40 mm	6.60 mm
Curved Up 15°		1.65 mm	4.40 mm	6.60 mm

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Arthroscopy Instruments
**Arthroscopy Hand Instrument,
Stella Graspers**

FL 130 mm

Grasper Alligator; Maximum; Locking Handle

Description	Sheath Version	Tip Profile	Jaw Wide
Straight		3.20 mm	3.50 mm
Curved Up 15°		3.20 mm	3.50 mm

Meniscus Grasping Forceps

Description	Spez
Meniscus Grasping Forceps; Straight; 1 x 2 teeth	
Meniscus Grasping Forceps; Curved Left 30 ; 1 x 2 teeth	
Meniscus Grasping Forceps; Curved Right 30 ; 1 x 2 teeth	

Arthroscopy Instruments
Arthroscopy Hand Instrument, Stella

FL 120 mm

Instruments with rotating function standard handle

Standard Handle : Basket Punch 90°

Description	Sheath Version	Bite Wide
90°Jaw Left		2.20 mm
90°Jaw Right		2.20 mm
90°Jaw Left		3.40 mm
90°Jaw Right		3.40 mm

FL 110 mm

Instruments with triangular handles

Description	Spez
Meniscus Hook Probe; Pointed; Handle	
Meniscus Hook Probe; Graduated; Handle	
Meniscus Hook Probe; Graduated; Handle	
Bayonet Knife; Handle	

Arthroscopy Instruments
Arthroscopy Hand Instrument, Stella

Description	Size	Spez
Ring Curette; 30° Curved; Handle	7.00 mm	

Description	Size	Spez
Spoon; 30°; Curved; Handle	3.00 mm	
Banana Knife; Smooth; Handle		
Banana Knife; Serrated; Handle		
Hook Knife; Handle;	3.00 mm	
Knife 45°; Retrograde; Toothed; Handle		
Sickle Knife; Handle		
Rosette Knife; Handle	3.00 mm	
Cartilage File; Fine; Handle		
Cartilage File; Rough; Handle		

Arthroscopic Knife Electrodes; Monopolar
Ø 4.0 mm; 45° angled; Umax : 4 KVp

Description	Size	Spez
Knife electrode 45° with handle; reusable; autoclavable 134°	4.0 mm	FL 170 mm

Arthroscopic Ball Electrodes; Monopolar
Ø 4.0 mm; Umax : 4 KVp

Description	Size	Spez
Ball electrode with handle; reusable; autoclavable 134°	Ø 3.0 mm	FL 170 mm

ENDOSCOPY

AYGÜN®
SURGICAL INSTRUMENTS CO., INC.

Shaver for Arthroscopy

Micro System

- Graphical LCD on the power console shows adjusted motor speed, rotation direction, irrigation pump flow rate, pedal motor connection failure indicator.
- Barled display shows speed demand
- Foot pedal for speed, direction and irrigation control
- Autoclavable swiss made powerful brushless DC motor
- Adjustable speed range up to 40.000 RPM
- Under load motor start-up technology preventing the failures related to motor obstruction during operation
- Low cost of consumable irrigation pump

Power Console

- Operating speed : 40.000 rpm (Adjustable Maximum Speed)
- Operating voltage : 200-240 V
- Power : 260 W
- Irrigation flow rate : 100 ml/min (Adjustable Maximum Flow Rate)
- Frequency : 50-60 Hz
- Dimension : 350 x 280 x 110 mm
- Weight : 5.060 kg

Shaver Hand Piece

- Variable suction control, connecting to disposable and resuable tips (the tips are ordered separately)

Foot Pedal with irrigation and F/R buttons

- Cable length : 4 m
- Dimension : 200 x 155 x 150 mm
- Weight : 1.560 kg

Motor Cable

- Autoclavable
- Cable length : 4 m
- Weight : 490 g

Swiss Made Powerful Brushless DC Motor Technology

- Autoclavable
- Operating speed : 40.000 rpm (Adjustable Maximum Speed)
- Power : 150 W
- Dimension : 130 x 22 mm
- Weight : 0.160 kg

ORTHOPAEDICS

ACL / PCL Reconstruction
Arthroplasty, Hip
Arthroplasty, Knee
Arthroplasty, Revision Knee
Bone Substitute
External Fixator
Interlocking Nails
Preformed Spacers
Spinal System Implant
Trauma Implant, Stainless Steel
Trauma Implant, Titanium

Trauma Implant
Titanium, Mini Fragment

Mini T-Plate Ø 1.5 mm

Article No.	Holes
02.11121.003	3/9
02.11121.004	4/9

Mini T-Plate Ø 2.0 mm

Article No.	Holes
02.11151.003	3/9
02.11151.004	4/9

Mini T-Plate Ø 2.0 mm

Article No.	Holes
02.11111.002	2/2

T-Plate Ø 2.7 mm

Article No.	Holes
03.11131.003	2/3

Mini L-Plate 90° Ø 2.0 mm

Article No.	Holes
02.11090.002	2/2 (Right)
02.11090.102	2/2 (Left)

L-Plate 90° Ø 2.7 mm

Article No.	Holes
03.11090.003	2/2 (Right)
03.11090.103	2/2 (Left)

Mini L-Plate 110° Ø 2.0 mm

Article No.	Holes
02.11110.002	2/2 (Right)
02.11110.102	2/2 (Left)

L-Plate 110° Ø 2.7 mm

Article No.	Holes
03.11110.003	2/3 (Right)
03.11110.103	2/3 (Left)

Mini Plate Ø 1.5 mm, Straight

Article No.	Holes
02.11041.020	20

Trauma Implant
Titanium, Mini Fragment

Mini Plate Ø 2.0 mm, Straight

Article No.	Holes
02.11051.020	20

Mini Compression Plate Ø 2.0 mm

Article No.	Holes
02.11515.004 - 02.11515.008 (interval : 1)	4 - 8

Mini Plate Ø 2.0 mm, Straight

Article No.	Holes
02.11510.003 - 02.11510.006 (interval : 1)	3 - 6

1/4 Tubular Plate

Article No.	Holes
03.11140.003 - 03.11140.008 (interval : 1)	3 - 8

Washer Ø 7.0 mm, for screw Ø 2.7 to 4.0 mm

Article No.	Outside Diameter
03.11090.003	2/2 (Right)
03.11090.103	2/2 (Left)

Cortical screw Ø 1.5 mm, Self Tapping

Article No.	Screw Length (mm)
02.03315.006 - 02.03315.012 (interval : 1)	6 - 12 mm
02.03315.014 - 02.03315.022 (interval : 2)	14 - 22 mm

Cortical Screw Ø 2.0 mm, Self Tapping

Article No.	Screw Length (mm)
02.03420.006 - 02.03420.022 (interval : 2)	6 - 22 mm

Cortical Screw Ø 2.7 mm, Self Tapping

Article No.	Screw Length (mm)
03.03527.006 - 03.03527.024 (interval : 2)	6 - 24 mm

Trauma Implant
Titanium, Small Fragment

Locking T-Plate Ø 3.5 mm

Article No.	Holes
03.15101.003	3/3
03.15101.004	4/4
03.15101.005	3/5

Locking T-Plate Oblique Ø 3.5 mm

Article No.	Holes
03.15102.003 - 03.15102.005 (interval : 1)	3 - 5

Locking Compression Plate Ø 3.5 mm, Undercut (Locking Plate, Straight)

Article No.	Holes
03.15114.004 - 03.15.114.012 (interval : 1)	4 - 10, 12

Locking Clavicle Plate

Article No.	Holes
14.15100.006 - 008 (interval : 2)	6 - 8 Minimum Bend (Right)
14.15100.106 -108 (interval : 2)	6 - 8 Minimum Bend (Left)
14.15101.006 - 008 (interval : 2)	6 - 8 Minimum Bend (Right)
14.15101.106 - 108 (interval : 2)	6 - 8 Minimum Bend (Left)
14.15102.006 - 008 (interval : 2)	6 - 8 Minimum Bend (Right)
14.15102.106 - 108 (interval : 2)	6 - 8 Minimum Bend (Left)

Locking 1/3 Tubular Plate Ø 3.5 mm

Article No.	Holes
03.15130.004 - 03.15130.012 (interval : 1)	4 - 10, 12

Locking Cloverleaf Plate Ø 3.5 mm

Article No.	Holes
03.15402.003 - 03.15402.004 (interval : 1)	3 - 4

Winsta - R Locking Distal Radius Plate, 3 Holes

Article No.	Holes
10.11915.102 - 10.11915.104 (interval : 2)	2 - 4 (Right)
10.11915.202 - 10.11915.204 (interval : 2)	2 - 4 (Left)

Locking Reconstruction Plate Ø 3.5 mm

Article No.	Holes
06.15103.004 - 06.15103.014 (interval : 1)	6 - 10, 12, 14

winsta - R Locking Distal Radius Plate, 5 Holes

Article No.	Holes
10.11915.502 - 504 (interval : 2)	2 - 4 (Right)
10.11915.602 - 604 (interval : 2)	2 - 4 (Left)

Trauma Implant
Titanium, Small Fragment

Washer Ø 7.0 mm, for screw Ø 2.7 to 4.0 mm

Article No.	Outside Diameter
03.91000.070	7.0 mm

Cortical Screw Ø 2.7 mm, Self Tapping

Article No.	Screw Length (mm)
0303527.006 - 060 (interval : 2)	6 - 60 mm

Cotical Screw Ø 3.5 mm, Self Tapping

Article No.	Screw Length (mm)
03.03612.010 - 050 (interval : 2)	10 - 50 mm
03.03612.055 - 080 (interval : 5)	55 - 80 mm

Cancellous Screw Ø 3.5 mm, Full Threaded, Self Tapping

Article No.	Screw Length (mm)
03.01635.010 - 050 (interval : 2)	10 - 50 mm
03.01635.055	55 mm

Cancellous Screw Ø 4.0 mm, Full Thread

Article No.	Screw Length (mm)
03.01640.010 - 050 (interval : 2)	10 - 50 mm
03.01640.055 - 060 (interval : 5)	55 - 60 mm

Cancellous Screw Ø 4.0 mm, Partial Thread

Article No.	Screw Length (mm)
03.01624.010 - 050 (interval : 2)	10 - 50 mm
03.01624.055 - 060 (interval : 5)	55 - 60 mm

Locking cortical Screw Ø 3.5 mm, Self Tapping

Article No.	Screw Length (mm)
03.05612.010 - 040 (interval : 2)	10 - 40 mm
03.05612.045 - 080 (interval : 5)	45 - 80 mm

Locking Cortical Screw Ø 2.7 mm, Self Tapping

Article No.	Screw Length (mm)
03.05527.010 - 040 (interval : 2)	10 - 40 mm
03.05527.045 - 060 (interval : 5)	45 - 60 mm

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Trauma Implant
Titanium, Large Fragment

Locking Compression Plate Ø 4.5 / 5.0 mm
Broad, undercut

Article No.	Holes
04.15170.006 - 018 (interval : 1)	6 - 18

Locking Compression Plate Ø 4.5 / 5.0 mm
Narrow, Undercut

Article No.	Holes
04.15135.002 - 016 (interval : 1)	2 -16

Locking T-Buttress Plate Ø 4.5 / 5.0 mm

Article No.	Holes
04.15172.004 - 006 (interval 1)	4 - 6
04.15172.008 - 010 (interval : 2)	8 - 10

Locking T-Plate Ø 4.5 / 5.0 mm

Article No.	Holes
04.15171.003 - 008 (interval : 1)	3 - 8
04.15171.010 - 012 (interval : 2)	10 - 12

Locking L-Buttress Plate Ø 4.5 / 5.0 mm

Article No.	Holes
04.15173.003 - 006 (interval : 1)	3 - 6 (Right)
04.15173.008	8 (Right)
04.15174.003 - 006 (interval : 1)	3 - 6 (Left)
04.15174.003	8 (Left)

Locking Proximal Tibial Plate Ø 4.5 / 5.0 mm, Lateral

Article No.	Holes
04.15310.005 - 013 (interval : 2)	5 - 13 (Right)
04.015311.005 - 013 (interval : 2)	5 - 13 (Left)

Locking Distal Femoral Plate Ø 4.5 / 5.0 mm

Article No.	Holes
04.15320.005 - 013 (interval : 2)	5 - 13 (Right)
04.15321.005 - 013 (interval : 2)	5 - 13 (Left)

Locking Cortical Screw Ø 5.0 mm, Self Tapping

Article No.	Screw Length (mm)
04.05755.016 - 060 (interval : 2)	16 - 60 mm
04.05755.065 - 100 (interval : 5)	65 - 100 mm

Trauma Implant
Titanium, Large Fragment

Cortical Screw Ø 4.5 mm, Self Tapping

Article No.	Screw Length (mm)
04.03745.014 - 070 (interval : 2)	14 - 70 mm
04.03745.075 - 100 (interval : 5)	75 -100 mm

Cancellous Bone Screw Ø 6.5 mm, Full Thread

Article No.	Screw Length (mm)
04.03700.020 - 100 (interval : 5)	2 - 100 mm

Cancellous Bone Screw Ø 6.5 mm, 16 mm Thread

Article No.	Screw Length (mm)
04.03716.025 - 100 (interval : 5)	25 - 100 mm

Cancellous Bone Screw Ø 6.5 mm, 32 mm Thread

Article No.	Screw Length (mm)
04.03732.040 - 100 (interval : 5)	40 - 100 mm

Locking Cancellous Bone Screw Ø 6.5 mm, Full Thread

Article No.	Screw Length (mm)
04.05800.020 - 100 (interval : 5)	20 - 100 mm

Trauma Implant
Titanium, Shoulder Fragment

Winsta - PH Humerus Locking Plate

Article No.	Holes
14.11133.003 - 007 (interval : 2)	3 - 7 (Right)
1411133.010 - 1012 (interval : 2)	10 - 12 (Right)
14.11133.103 - 107 (interval : 2)	3 - 7 (Left)
1411133.110 - 112 (interval : 2)	10 - 12 (Left)

Cortical Screw Ø 3.5 mm, Self Tapping

Article No.	Screw Length (mm)
03.03612.010 - 050 (interval : 2)	10 - 50 mm
03.03612.055 - 080 (interval : 5)	55 - 80 mm

Winsta - PH Locking Cortical Screw Ø 3.5 mm, Self Tapping

Article No.	Screw Length (mm)
14.03355.020 - 060 (interval : 2)	20 - 60 mm

Interlocking Nail
KTO Femoral Intramedullary Nail

Diameter (mm)	Length (mm)	Article No.
9,4	180 - 240 (interval : 20)	T82094180 - T82094240
	320 R/L - 440 R/L (interval : 20)	T82094320 - T82094440 R/L
10	180 - 240 (interval : 20)	T82010180 - T82010240
	320 R/L - 440 R/L (interval : 20)	T82010320 R/L - T82010440 R/L
11	180 - 240 (interval : 20)	T82011180 - T82011240
	320 R/L - 440 R/L (interval : 20)	T82011320 R/L - T8201140 R/L

Ø4.5 Full Threaded Locking Screws

Diameter (mm)	Length (mm)	Article No.
4,5	30 - 85 (interval : 5)	8524030 - 8524085

Main End Cap

Length (mm)	Article No.
0 - 20 (interval : 5)	8201001 - 8201005

Anti Rotation Screws

Diameter (mm)	Length (mm)	Article No.
6,5	60 - 115 (interval : 5)	8566460 - 85664115

Interlocking Nail
KTO Tibial Intramedullary Nail (Cannulated)

Diameter (mm)	Length (mm)	Article No.
8,4	255 - 375 (interval : 15)	T8684255 - T8684375
9,0	255 - 375 (interval : 15)	T8690255 - T8690375
10	255 - 375 (interval : 15)	T8610255 - T8610375

Ø5.0 Full Threaded Locking Screws

Diameter (mm)	Length (mm)	Article No.
5,0	40 - 80 (interval : 5)	8515040 - 8515080

Ø4.5 Full Threaded Locking Screws

Diameter (mm)	Length (mm)	Article No.
4,5	30 - 85 (interval : 5)	8524030 - 8524085

Normal End Cap

Article No.
8600001

Locking End Cap

Article No.
8600002

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Interlocking Nail
KTO Humerus Intramedullary Nail

Diameter (mm)	Length (mm)	Article No.
7,0	120 - 280 (interval : 40)	T8870120 - T8870280
7,5	120 - 280 (interval : 40)	T8875120 - T8875280
8,0	120 - 280 (interval : 40)	T8880120 - T8880280

Ø3.5 Full Threaded Locking Screws

Diameter (mm)	Length (mm)	Article No.
3,5	20 - 46 (interval : 2)	T8920020 - T8920046

KTO Humerus Rotation Blade

Length (mm)	Article No.
28 - 48 (interval : 2)	T89010028 - T8910048

Main End Cap

Length (mm)	Article No.
0 - 15 (interval : 5)	T8800001 - T8800015

Blade End Cap

Length (mm)	Article No.
0 - 15 (interval : 5)	T8900001 - T8900015

Interlocking Nail
KTO PFNA Gamma Nail

Diameter (mm)	Length (mm)	Article No.
9,4	180 - 240 (interval : 20)	T8794180 - T8794240
10	180 - 240 (interval : 20)	T8710180 - T8710240
11	180 - 240 (interval : 20)	T8711180 - T711240
12	180 - 240 (interval : 20)	T8712180 - T8712240

Full Threaded Locking Screws

Diameter (mm)	Length (mm)	Article No.
4,5	30 - 85 (interval : 5)	T8524030 - T8524085

KTO PFNA Blade Screw

Diameter (mm)	Length (mm)	Article No.
10,5	70 - 120 (interval : 5)	T8553070 - T8553120

Locking End Cap

Length (mm)	Article No.
0 - 15 (interval : 5)	T8570000 - T8570015

Normal End Cap

Length (mm)	Article No.
0 - 15 (interval : 5)	T8580000 - T8580015

![ENDO TRAUMA IMPLANTS]

Trauma Implant
Stainless Steel, Locking Fragment

Distal Radius Buttress Locking Plates Ø 2.7 mm

Article No.	Holes
4320004 - 4320005 (interval : 1)	4 - 5 (Right / Left)
4320007 - 4320009 (interval : 2)	7 - 9 (Right / Left)

Distal Radius Joint Locking Plates

Article No.	Holes
4360008 - 4360010 (interval : 2)	8 - 10 (Right / Left)

Clavicle Hook Locking Plates

Article No.	Holes
4390006 - 4390010 (interval : 1)	6 - 10 (Right / Left)

Distal Lateral Humerus Locking Plate

Article No.	Holes
T4270005 - T4270011 (interval : 2)	5 - 11 (Right / Left)

Distal Medial Humerus Locking Plates

Article No.	Holes
T4280004 - T4280005 (interval : 1)	4 - 5 (Right / Left)
T4280007 - T4280009 (interval : 2)	7 - 9 (Right / Left)

Humerus Compression Locking Plates

Article No.	Holes
4050006 - 4050008 (interval : 1)	6 - 8 (Right / Left)
4050010 - 4050012 (interval : 2)	10 - 12 (Right / Left)

Oblique T Radius Reconstruction Locking Plates

Article No.	Holes
4340006 - 4340009 (interval : 1)	6 - 9 (Right / Left)

Olecranon Hook Reconstruction Locking Plates

Article No.	Holes
4310004 - 4310005 (interval : 1)	4 - 5 (Right / Left)

One Third Tubular Locking Plates

Article No.	Holes
4100005 - 4100008 (interval : 1)	5 - 8
S4100010	10

Proximal Humerus Locking Plates III

Article No.	Holes
4230004 - 4230008 (interval : 1)	4 - 8 (Right / Left)
4230010 - 4230012 (interval : 2)	10 - 12 (Right / Left)

Trauma Implant
Stainless Steel, Locking Fragment

Reconstruction Locking Plates

Article No.	Holes
S4040005 - S4040010 (interval : 1)	5 - 10
S4040012	12

S Clavicle Locking Plates Ø 3.0 mm

Article No.	Holes
S4382006	6
4382007 - 4382010 (interval : 1)	7 - 10 (Right / Left)
4382012	12 (Right / Left)

Ulna Radius Locking Plates

Article No.	Holes
4090005 - 4090010 (interval : 1)	5 - 10

Mini T-Reconstruction Locking Plates

Article No.	Holes
4330006 - 4330009 (interval : 1)	6 - 9

L-Reconstruction Locking Plates (Lower Limb)

Article No.	Holes
4740007 - 4740010 (interval : 1)	7 - 10 (Right / Left)

Calcaneus Locking Plates II (Max)

Article No.	Holes
4402012	12 (Right / Left)

Distal Lateral Femoral Locking Plates

Article No.	Holes
4411005 - 4411015 (interval : 2)	5 - 15 (Right / Left)

Distal Lateral Tibia Reconstruction Locking Plates

Article No.	Holes
T4600005 - T4600013 (interval : 2)	5 - 13 (Right / Left)

Femur Locking Plates

Article No.	Holes
4083008 - 4083016 (interval : 2)	8 -16

KUS-Proximal Lateral Femoral Locking Plates

Article No.	Holes
4424004 - 4424006 (interval : 1)	4 - 6 (Right / Left)
4424008 - 4424014 (interval : 2)	8 - 14 (Right / Left)

Trauma Implant
Stainless Steel, Locking Fragment

Proximal Lateral Tibial Locking Plates IV

Article No.	Holes
4700005 - 4700013 (interval : 2)	5 - 13 (Right / Left)

T-Reconstruction Locking Plates (Lower Limb)

Article No.	Holes
4730007 - 4730010 (interval : 1)	7 - 10 (Right / Left)

Tibial Locking Plates

Article No.	Holes
4071006 - 4071008 (interval : 1)	6 - 8
4071010 - 4071016 (interval : 2)	10 - 16

Hexa Locking Screw Cortical Ø 2.7 mm

Article No.	Screw Length (mm)
DS7502708 - DS7502730 (interval : 2)	8 - 30 mm
DS7502735 - DS7502760 (interval : 5)	35 - 60 mm

Hexa Locking Cortical Screw Ø 3.5mm

Article No.	Screw Length (mm)
4833512 / DS7503512 - 4833534 / DS7503534 (interval : 2)	12 - 34 mm
DS7503536 - DS7503550	36 - 50 mm
DS7503555	55 mm

Hexa Locking Screw Cortical Ø 5.0 mm

Article No.	Screw Length (mm)
S4845016 / DS7505016 - S4845038 / DS7505038 (interval : 2)	16 - 38 mm
DS7505040 - DS7505050 (interval : 2)	40 - 50 mm
DS7505055 - DS7505090 (interval : 5)	55 - 90 mm

Torx Hollow Locking Screw Ø 6.5 mm

Article No.	Screw Length (mm)
S48765060 - S48765110 (interval : 5)	60 - 110 mm

ENDO
TRAUMA IMPLANTS

Trauma Implant
Stainless Steel, Non-Locking Fragment

Clavicle Hook Plates (Height : 14mm)

Article No.	Holes
2510005 - 2510009 (interval : 1)	5 - 9 (Right / Left)

Oblique T-shapped Radius Reconstruction Plates

Article No.	Holes
2020006 - 2020009 (interval : 1)	6 - 9 (Right / Left)

Distal Radius / Fibula Plates

Article No.	Holes
3120003 - 3120010 (interval : 1)	3 - 10

1/3 Tubular Plates

Article No.	Holes
S1410005 - S1410010 (interval : 1)	5 - 10

Eaglebeak Plates (Reconstruction)

Article No.	Holes
S2110003 - S2110008 (interval : 1)	3 - 8 (Right / Left)

Proximal Humerus Plates III

Article No.	Holes
2321004 - 2321006 (interval : 1)	4 - 6 (Right / Left)
2321008 - 2321012 (interval : 2)	8 - 12 (Right / Left)

LC-DCP Humerus Plates

Article No.	Holes
S1230005 - S1230010 (interval : 1)	5 - 10

Reconstruction Plates

Article No.	Holes
S1310005 - S1310010 (interval : 1)	5 - 10
S1310012	12

LC-DCP Ulna Radius Plates

Article No.	Holes
S1220004 - S1220010 (interval : 1)	4 - 10

Restricted Compression Plates (Upper Limb)

Article No.	Holes
S1110004 - S1110010 (interval : 1)	4 - 10
S1110012	12

Trauma Implant
Stainless Steel, Non-Locking Fragment

S Clavicle Plates

Article No.	Holes
2450006	6
2450007 - 2450010	7 - 10 (Right / Left)
2450012	12 (Right / Left)

Small T Reconstruction Plates

Article No.	Holes
2010006 - 2010009 (interval : 1)	6 - 9

130° DHS Compression Hip Plates

Article No.	Holes
S3611004 - S3611008	4 - 8
S3611010	10

Lag Screw / DHS Screw

Article No.	Screw Length (mm)
S36312065 - S36312095 (interval : 5)	65 - 95 mm

Fibula Reconstruction Plates II

Article No.	Holes
3110004 - 3110007 (interval : 1)	4 - 7 (Right / Left)

L-Reconstruction Plates

Article No.	Holes
3410006 - 3410011 (interval : 1)	6 - 11 (Right / Left)

Proximal Femoral Condyle Long Plates

Article No.	Holes
3560005 - 3560007 (interval : 10)	5 - 7 (Right / Left)
3560009 - 3560011 (interval : 2)	9 - 11 (Right / Left)

Restricted Compression Plates (Femur Curve)

Article No.	Holes
S1131008 - S1131010 (interval : 1)	8 - 10
S1131012 - S1131016 (interval : 2)	12 - 16

Restricted Compression Plates (Tibia)

Article No.	Holes
S1120006 - S1120010	6 - 10
S1120012	12

T-Reconstruction Plates

Article No.	Holes
3420006 - 3420011 (interval : 1)	6 - 11 (Right / Left)

ENDO TRAUMA IMPLANTS

Trauma Implant
Stainless Steel, Non-Locking Fragment

Calcaneus Plates II (short)

Article No.	Holes
S3030011 - S3030013 (interval : 2)	11 - 13

Calcaneus Plates II (long)

Article No.	Holes
S3040013 - S3040015 (interval : 2)	13 - 15

Hexa Bone Screw Cortical Ø 2.7 mm

Article No.	Screw Length (mm)
DS7602706 - DS7602730 (interval : 2)	6 - 30 mm

Hexa Bone Screw Cortical Ø 3.5 mm Full Thread

Article No.	Screw Length (mm)
DS7603512	12 mm
S5043514 - S5043540 (interval : 2)	14 - 40 mm
DS7603542 - DS7603550 (interval : 2)	42 - 50 mm

Hexa Bone Screw Cancellous Ø 4.0 mm Full Thread

Article No.	Screw Length (mm)
S5364012 - S5364048 (interval : 2)	12 - 48 mm

Hexa Bone Screw Cortical Ø 4.5 mm Full Thread

Article No.	Screw Length (mm)
S5064520 - S5064550 (interval : 2)	20 - 50 mm
DS7614555	55 mm
S5064560	60 mm

Hexa Bone Screw Ø 6.5 mm Full Thread

Article No.	Screw Length (mm)
S5376530 - S5376590 (interval : 5)	30 - 90 mm

Hexa Bone Screw Ø 6.5 mm Half Thread

Article No.	Screw Length (mm)
S5346550 - S5346595 (interval : 5)	50 - 95 mm

Cannulated Compression Screw Ø 4.0 mm

Article No.	Screw Length (mm)
T5524026 -T5524050 (interval : 2)	26 - 50 mm

Femoris Cannulated Compression Screws Ø 6.5 mm

Article No.	Screw Length (mm)
T56265060 - T56265105 (interval : 5)	60 - 105 mm

Arthroplasty
Hip System, Bencox ID Cemented Stem

Specifications
• Bencox ID Cemented Stem

Size	Length (mm)	Offset (mm)	CCD (degree)	Rasp
3	129	39.1		3
5	137	40.4		5
7	145	41.9	132°	7
9	153	44.3		9
11	161	46.7		11

Cementless Stem Rasp Cemented Stem

Unified Instrumentation

• Cementless and cemented stem of ID system use same instrumentation.
• This instrumentation maximizes efficiency in the operating room, while still providing intraoperative flexibility.

Polished Double Tapered Distal Geometry - Collarless Type

• Generates the radial compressive load in distal body
• "Taper slip principle" allows the subsidence of the stem.
• Cement mantle longevity is related to the ability to convert the shear and tension to the compression.
• Cement is 3 times stronger in compression than in shear or tension.

Normalized Proximal Stress

• Proximally tapered & grooved stem geometry converts the shear forces to the compressive load.

Self Centering Distal Centralizer

• Uniform cement thickness is constructed by four deformable wings of centralizer, which protects the stress concentration due to the thin cement mantle
• Allows the cemented stem to move distally within the cement applying the compression to the cement.

Enhanced Neck Shape

• Patented trapezoidal neck design allows wide angulation and protects impingement and dislocation.
• Same neck design with Bencox stem is applied.

Compatible Tapered 12/14 Trunnion

• Adoptation of Bencox forte & delta, and Metal heads
• Provides 3 optional offset (Short, Medium, Long) Extra long offset provided for Metal heads

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Arthroplasty
Hip System, Bencox ID Cementless Stem

Specifications

Size	Length (mm)	Offset (mm)	CCD (degree)	Rasp
1	137	37.4		1
2	141	38.1		2
3	145	39.3		3
4	149	40.0		4
5	153	40.7		5
6	157	41.4	132°	6
7	161	42.1		7
8	165	43.3		8
9	169	44.5		9
10	173	45.7		10
11	177	46.9		11

Cementless Stem   Rasp   Cemented Stem

Unified Instrumentation

- Cementless and cemented stem of ID system use same instrumentation.
- This instrumentation maximizes efficiency in the operating room, while still providing intraoperative flexibility.

Proven Ti-Plasma Spray Porous Coating

- Provides the primary and secondary stability
- Protects osteolysis from the wear debris.

Long
Medium
Short

Compatible Tapered 12/14 Trunnion

- Adoptation of Bencox forte & delta, and Metal heads
- Provides 3 optional offset (Short, Medium, Long)
- Extra long offset provided for Metal heads

Wide Range of Prosthetic ROM (P-ROM)

- Patented trapezoidal neck design allows wide angulation and protects impingement and dislocation.
- Same neck design with Bencox stem is applied.

Normalized Proximal Stress

- Proximally tapered stem geometry converts the shear forces to compressive load.
- This helps the stem to resist subsidence and medial migration.

Extensive Stress Distribution

- Low elastic modulus of Ti alloy and the double tapered stem reduce stiffness which avoids distal load transfer and prevents proximal stress shielding.

Enhanced Rotational Stability

- Rectangular cross-section.
- Longitudinal grooves are designed to resist rotational motion.

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Arthroplasty
Hip System, Benfix Long Stem

Specifications

Size	Length (mm)	Offset (mm)	CCD (degree)
1	133	38.0	
2	148	38.5	
3	158	39.5	
4	163	40.0	
5	168	41.0	135°
6	178	41.5	
7	188	42.0	
8	193	43.0	
9	198	43.5	
10	208	44.5	
11	218	45.5	

Solution for the Osteoporotic & Comminuted Fracture

- Extended distal body enhances additional stability in the diaphysis.
- Wiring holes enable the reduction of the comminuted lesser and greater trochanter.

Compatible Tapered 12/14 Trunnion

- Adoptation of Bencox forte & delta, and Metal heads
- Provides 3 optional offset (Short, Medium, Long)
- Extra long offset provided for Metal heads

MOTION	Bencox 28mm	Bencox 32mm	Bencox 36mm
Flexion	120°	124°	132°
Extension	64°	68°	75°
Total (Flexion+Extension)	184°	192°	207°
Abduction	67°	70°	76°
Adduction	54°	57°	63°
Total (Abduction+Adduction)	121°	127°	139°
Internal Rotation	136°	142°	152°
External Rotation	73°	78°	88°
Total (Int. Rot.+Ext. Rot.)	209°	220°	240°

Wide Range of Prosthetic ROM (P-ROM)

- Enhances neck shape.
- Improved trapezoidal neck design allows wide angulation and protects impingement and dislocation.
- P-ROM of Benfix Long Stem.

Prevented Axial Displacement and Stress Shielding

- Proximal taper resists the axial displacement and avoids stress shielding.
- Stem locks against the dense bone of the calcar and greater trochanter and transferring load to the proximal femur.

Reduce Thigh Pain

- Low elastic modulus of Ti alloy and the tapered stem reduce stiffness which avoids distal load transfer and prevents proximal stress shielding.
- Distal slot provides stress distribution and reduces thigh pain.

Enhanced Rotation & Axial Stability

- Rectangular cross-section
- Longitudinal grooves - are designed to resist rotational motion.
- Transverse grooves - provides axial stability and converts hoop stresses to compressive loads.

Arthroplasty
Hip System, Bencox Bipolar Cup

38mm : 1mm   43mm : 1.5mm   50mm : 2.0mm

Proportional Eccentricity

- Multipolarity is achieved via multiple offsets within the system as cup sizes increase, the amount of eccentricity increases.
- Provides eccentricity that is proportional to the patient's anatomy.

| 38/22 | 39/22 | 40/22 | 41/22 | 42/22 | 43/28 | 44/28 | 45/28 | 46/28 | 47/28 | 48/28 | 49/28 |
| 50/28 | 51/28 | 52/28 | 53/28 | 54/28 | 55/28 | 56/28 | 57/28 | 58/28 | 59/28 | 60/28 | |

Optimal Fit

- A large array of component allows precise patient matching for optimal patient fit.
- Outer diameters from 38 to 60mm allow the surgeon to meet the unique challenges posed in a revision and extended situations.
- The bipolar cup offers use with 22, 28mm femoral heads.

Simple Locking Mechanism

- Ring mechanism allows for easy assembly of the femoral head.

Wide Range of Motion

- Enchanced 68° ROM resists the impingement to the UHMWPE locking ring.

Enhanced Stability

- Superior pull-out strength resists the dislocation of the femoral head.

![LKPP e-catalogue - Belanja Cepat Cara Tepat - Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah]

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Arthroplasty
Hip System, Bencox Cup System

***Bencox Hibrid Cup (2tab/3hole)
for both ceramic & PE bearing***

Acetabular Component

- Acetabular Component is hemisphere-shaped, maximizing the peripheral and polar contact at once. Three screw holes are anatomically designed and located for more effective fixation; and enough insertion angles are allowed to simplify the surgery.

Surface Treatment
Plasma Sprayed Ti Coating

- The surface treatment on an artificial join is an essential factor for success ; at the same time, it's the precise indication of a manufacturer's technique.
- Acetabular Component of Bencox Hip System is coated using plasma spray method.
- The microporous pure titanium coating with more than 30% porosity leads to direct bone apposition for secondary stability. Rough surface supports a more stable primary fixation.

Bencox forte   Bencox delta

Ceramic on Ceramic   Metal on Poly

Two in One Bearing Cup System

- Unique locking design allows for ceramic and PE liner in one cup.

Secure Locking Mechanism

- Cup and ceramic insert provides a secure locking mechanism while providing a self-locating feature to ease insert placement.
- The locking mechanism between cup and PE liner allows for secure fixation with superior congruency for the push-out, rotation and tilting.

MOTION	28M	28XL Non-skirt	28XL Skirted	32M	32XL Non-skirt	32XL Skirted	36mm
Flexion	123°	113°	98°	124°	118°	106°	128°
Extension	63°	54°	38°	65°	58°	46°	70°
Total (Flexion+Extension)	186°	167°	136°	189°	176°	152°	198°
Abduction	63°	64°	52°	63°	67°	58°	66°
Adduction	58°	51°	39°	58°	54°	45°	61°
Total (Abduction+Adduction)	121°	115°	91°	121°	121°	103°	127°
Internal Rotation	128°	128°	109°	129°	133°	118°	133°
External Rotation	64°	64°	45°	65°	69°	54°	70°
Total (Int. Rot.+Ext. Rot.)	192°	192°	154°	194°	202°	172°	203°

Flexion   Extension

Improved Range of Motion

- Optimal range of motion with the innovative stem
- neck design reduces the potential for impingement and dislocation.
- P-ROM following to the different head diameter and offset.

POLYETHYLENE THICKNESS

HEAD SIZE	OUTER DIAMETER	LOADING POINT	DOME	HEAD SIZE	OUTER DIAMETER	LOADING POINT	DOME
28mm	37mm	6.0mm	4.8mm	32mm	52mm	9.1mm	8.6mm
28mm	39mm	6.7mm	5.5mm	36mm	44mm	6.0mm	5.3mm
28mm	44mm	9.1mm	8.3mm	36mm	48mm	7.0mm	6.5mm
28mm	48mm	10.1mm	9.5mm	36mm	52mm	8.0mm	7.6mm
28mm	52mm	10.6mm	11.1mm	40mm	44mm	9.2mm	9.3mm
32mm	44mm	7.1mm	6.3mm	40mm	48mm	6.7mm	6.5mm
32mm	48mm	8.1mm	7.5mm	40mm	52mm	7.7mm	7.6mm

Various Choice of PE Liners

- Standard, extended, and elevated type allows for the use in extended indication situations.
- PE liner offers use with 28, 32, 36, 40mm CoCr Mo femoral heads.
- The wear resistance.

Cross-Linked UHMWPE for PE Liner

- Compression molded GUR1020 rods are used - initial toughness and strength is higher than 1050 Gamma irradiated at room temperature to a 75kGy to facilitate cross-linking After irradiation, the rods are heated above the melting point to eliminate residual free radicals and form additional cross-links PE liners are machined and cleaned, packaged, and EtO sterilized Residual free radicals and form additional cross-links.

Enhanced Wear Characteristics

- Cross-linked PE liners exhibiti 94% less wear in vitro tests than conventional PE liners.

Bencox Data

- Bencox Delta is a high performance ceramic biocomposite material with the potential to be used in applications which were not previously possible using ceramics. It combines the excellent material proeperties of alumina ceramics in terms of chemical and hydrothermal stability with extremely low wear, superior mechanical strength and improved fracture toughness. Bencox Delta is composed of approximately 75% aluminium oxide, which provides the basic hardness and wear resistance and approximately 25% zirconia, which together with other additives provides the improved mechanical properties compared with pure aluminium oxide ceramic Bencox Delta offers higher mechanical properties including higher fracture toughness.

Arthroplasty
Hip System, Ordering Information

Bencox Hybrid Cup

Article No.	Implant
01.02.054	Bencox Hybrid Cup 46 mm
01.02.056	Bencox Hybrid Cup 48 mm
01.02.058	Bencox Hybrid Cup 50 mm
01.02.060	Bencox Hybrid Cup 52 mm
01.02.062	Bencox Hybrid Cup 54 mm
01.02.064	Bencox Hybrid Cup 56 mm
01.02.066	Bencox Hybrid Cup 58 mm
01.02.068	Bencox Hybrid Cup 60 mm
01.02.070	Bencox Hybrid Cup 62 mm

Bencox Bipolar Cup

Article No.	Implant
01.03.038	Bencox Bipolar Cup #38
01.03.039	Bencox Bipolar Cup #39
01.03.040	Bencox Bipolar Cup #40
01.03.041	Bencox Bipolar Cup #41
01.03.042	Bencox Bipolar Cup #42
01.03.043	Bencox Bipolar Cup #43
01.03.044	Bencox Bipolar Cup #44
01.03.045	Bencox Bipolar Cup #45
01.03.046	Bencox Bipolar Cup #46
01.03.047	Bencox Bipolar Cup #47
01.03.048	Bencox Bipolar Cup #48
01.03.049	Bencox Bipolar Cup #49
01.03.050	Bencox Bipolar Cup #50
01.03.051	Bencox Bipolar Cup #51

Bencox ID Cemented Stem

Article No.	Implant
01.05.103	Bencox ID Cemented Stem 3
01.05.105	Bencox ID Cemented Stem 5
01.05.107	Bencox ID Cemented Stem 7
01.05.109	Bencox ID Cemented Stem 9

Bencox ID Stem

Article No.	Implant
01.05.021	Bencox ID Stem 1
01.05.022	Bencox ID Stem 2
01.05.023	Bencox ID Stem 3
01.05.024	Bencox ID Stem 4
01.05.025	Bencox ID Stem 5
01.05.026	Bencox ID Stem 6
01.05.027	Bencox ID Stem 7
01.05.028	Bencox ID Stem 8
01.05.029	Bencox ID Stem 9

Benfix Long Stem

Article No.	Implant
01.04.001	Benfix Long Stem 1
01.04.002	Benfix Long Stem 2
01.04.003	Benfix Long Stem 3
01.04.004	Benfix Long Stem 4
01.04.005	Benfix Long Stem 5

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Arthroplasty
Hip System, Ordering Information

Metal Head

Article No.	Implant
01.02.415	Metal Head 28 mm / L (STD)
01.02.410	Metal Head 28 mm / M (STD)
01.02.405	Metal Head 28 mm / S (STD)
01.02.430	Metal Head 32 mm / L (STD)
01.02.425	Metal Head 32 mm / M (STD)
01.02.420	Metal Head 32 mm / S (STD)
01.02.450	Metal Head 36 mm / L (STD)
01.02.445	Metal Head 36 mm / M (STD)
01.02.440	Metal Head 36 mm / S (STD)

Bone Plug

Article No.	Implant
01.05.413	Bone Plug 13 mm
01.05.420	Bone Plug 20 mm
01.05.427	Bone Plug 27 mm

Bone Screw

Article No.	Implant
01.01.202	Bone Screw 20 mm
01.01.203	Bone Screw 25 mm
01.01.204	Bone Screw 30 mm
01.01.205	Bone Screw 35 mm
01.01.206	Bone Screw 40 mm

PE Liner

Article No.	Implant
01.02.662	PE Liner 28 mm / 39G (Elevated)
01.02.673	PE Liner 32 mm / 44G (Elevated)
01.02.675	PE Liner 32 mm / 48G (Elevated)
01.02.683	PE Liner 36 mm / 44G (Elevated)
01.02.685	PE Liner 36 mm / 48G (Elevated)

Arthroplasty
Lospa Knee System

Lospa Femoral Component

- Single axis concept for articular stability with flexion and improving range of motion.

(CR Version)   (PS Version)

- Anterior flange shape and dimension for the optimal patella tracking.

- Intercondylar cam design of PS type for reducing the risk of dislocation in deep flexion.

- Sphere-shaped articular surface for reducing contact stress and improving stability.

Lospa Tibial Insert (Fixed Type)

- High conformity at the frontal plane to improve contact area.

- Double radius at the sagittal plane for improved anterior stability and deep flexion.

- Rotated articular surface considering axial rotation fo the femoral component.

- Rounded tibial post to reduce edge loading in the PS type (in the case of PS type)

- Improved anterior relief for deep flexion.

![Orentec - Implant Specialist logo]

Arthroplasty
Lospa Knee System

Lospa Tibial Baseplate

- Stem with keel for improving initial implant stability. Stem with posterior slope aiding in reducing the anterior cortex impingement.

- Commonality of tibial baseplate: CR/PS in fixed type

Lospa Patellar Component

- Cement pockets - provide optimal condition for cemented fixation. There is cement pocket which has 1.0mm depth, but which is not deep enough to compromise the strength of the component. There is reinforcement in the center of these pocket and the peripheral rim is maintained with 1.5mm thickness.

Arthroplasty
Lospa Knee System

Lospa Femoral Component (PS)

Article No.	Implant
01.10.043	Femoral Component No 3 PS Left
01.10.063	Femoral Component No 3 PS Right
01.10.044	Femoral Component No 4 PS Left
01.10.064	Femoral Component No 4 PS Right
01.10.045	Femoral Component No 5 PS Left
01.10.065	Femoral Component No 5 PS Right
01.10.047	Femoral Component No 7 PS Left
01.10.067	Femoral Component No 7 PS Right
01.10.049	Femoral Component No 9 PS Left
01.10.069	Femoral Component No 9 PS Right
01.10.04B	Femoral Component No 11 PS Left
01.10.06B	Femoral Component No 11PS Right

Lospa Patellar Component

Article No.	Implant
01.10.941	Patellar Component 28 mm
01.10.961	Patellar Component 30 mm
01.10.981	Patellar Component 32 mm
01.10.9A2	Patellar Component 34 mm

Lospa Tibial Baseplate

Article No.	Implant
01.10.50B	Tibial Base Plate No. 11
01.10.503	Tibial Base Plate No. 3
01.10.504	Tibial Base Plate No. 4
01.10.505	Tibial Base Plate No. 5
01.10.507	Tibial Base Plate No. 7
01.10.509	Tibial Base Plate No. 9

Lospa Tibial Insert

Article No.	Implant
01.10.232	Tibial Insert PS - 3 x 10 mm
01.10.234	Tibial Insert PS - 3 x 12 mm
01.10.236	Tibial Insert PS - 3 x 14 mm
01.10.238	Tibial Insert PS - 3 x 16 mm
01.10.23A	Tibial Insert PS - 3 x 18 mm
01.10.242	Tibial Insert PS - 4 x 10 mm
01.10.244	Tibial Insert PS - 4 x 12 mm
01.10.246	Tibial Insert PS - 4 x 14 mm
01.10.248	Tibial Insert PS - 4 x 16 mm
01.10.24A	Tibial Insert PS - 4 x 18 mm
01.10.252	Tibial Insert PS - 5 x 10 mm
01.10.254	Tibial Insert PS - 5 x 12 mm
01.10.254	Tibial Insert PS - 5 x 14 mm
01.10.258	Tibial Insert PS - 5 x 16 mm
01.10.25A	Tibial Insert PS - 5 x 18 mm
01.10.272	Tibial Insert PS - 7 x 10 mm
01.10.274	Tibial Insert PS - 7 x 12 mm
01.10.276	Tibial Insert PS - 7 x 14 mm
01.10.278	Tibial Insert PS - 7 x 16 mm
01.10.27A	Tibial Insert PS - 7 x 18 mm
01.10.292	Tibial Insert PS - 9 x 10 mm
01.10.294	Tibial Insert PS - 9 x 12 mm
01.10.296	Tibial Insert PS - 9 x 14 mm
01.10.298	Tibial Insert PS - 9 x 16 mm
01.10.29A	Tibial Insert PS - 9 x 18 mm
01.10.2B2	Tibial Insert PS - 11 x 10 mm
01.10.2B4	Tibial Insert PS - 11 x 12 mm
01.10.2B6	Tibial Insert PS - 11 x 14 mm
01.10.2B8	Tibial Insert PS - 11 x 16 mm

Arthroplasty
Revision Knee System

Lospa Modular Knee System

Maintains Lospa Primary Knee System's Anatomical Features :
- Stability, constrained motion increased AP stability
- Modularity, stem extension available Augmentation
- Longevity, stabilized concave tibial post, secure insert locking rod
- Compatibility, modular femoral component, primary tibial PS/CR insert, modular tibial baseplate

Stem housing angle 6°
The modular femoral component has a stem housing that is tilted 6 laterally

Stem housing position : 35% from anterior

Femoral Component

- Stem housing angle 6°, the modular femoral component has a stem housing that is tilted 6 laterally
- Stem housing position : 35% from anterior

at knee extension   at 75° flexion

	Varus-Valgus	I-E Rotation
Lospa Modular Knee System	±2°	±4°
Competitor 'S'	±2°	±10°
Competitor 'T'	±2°	±7°
Competitor 'N'	±1.25°	±2°
Competitor 'V'	±1°	±0.5°

AP stability with more conforming articular surface

Baseplate - Insert Locking
Full peripheral capture reduce micro motion. Locking rod reinforces fixation

Hole and Cap

Concaved shape

Tibial Component, Concaved Post Design

- The posterior part of the post is concavely curved. After cam-post engagement at 75 degrees of flexionm, the cam travels down the post. This reduces the risk of the dislocation and allows for deep flexion with joint stability

Femoral Component													
Size		3	4	5	6	7	8	9	11	12	14	16
Height (mm)		26	28	28	28	28	28	28	30	30	30	30
Tibial Insert	3	23											
	4	23											
	5	25											
	6	25											
	7	25											
	8	25											
	9	25											
	11	27											
	12	27											
	14*	27											
	16*	27											

Heightened Post

- For better stability during the entire knee motion, the post height is designed higher than the Lospa Primary Knee System

Stem
Plug

Stem Length

Baseplate	Stem / Plug Length
#3~ #9	30 mm
#11~ #16	35 mm
Plug	10 mm

35%

Stem housing position : 35% from anterior

Reference	Position from anterior (%)
Lospa Modular Knee System	35%
Competitor 'S'	40%
Competitor 'T'	34%
Competitor 'N'	30%
Competitor 'V'	37%
Competitor 'P'	43%

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Arthroplasty
Revision Knee System

Augment

- Augment, Lospa Modular Knee System has 2 types of the Augment (block & choren pad)

Femoral Distal Block   Femoral Posterior Block   Tibial Half Block

- Block, complementing bone deficits, thickness : 5, 10, 15mm Bolt / Cement fixation

Femoral Distal Pad   Femoral Posterior Pad   Tibial Half Pad

- Choren Pad (Correct Height Orientation Renovation) Correcting unbalanced knee joint Thickness : 2,3 mm Cement Fixation

Offset Adaptor

Stem Extention

Stem Extension

- Stem Extension
  The fluted design can enhance the resistance to rotation, cemented type.
  Diameter : Ø 9, 10, 11, 12, 13, 14, 15, 16, 18mm
  Length : 30, 60, 90, 120, 150mm

- Offset Adaptor
  Offset : 2, 4, 6mm
  Screw nut locking, 360 positioning
  Length : 30mm

Size Combination, Bearing Couple

*: Special order

Tibial inserts	Femoral components										
	F3 51AP/59ML	F4 54AP/62ML	F5 57AP/65ML	*F6 60AP/65ML	F7 60AP/68ML	*F8 63AP/68ML	F9 63AP/71ML	F11 66AP/74ML	*F12 69AP/74ML	*F14 72AP/77ML	*F16 75AP/80ML
TI3 40AP/61ML	•										
TI4 42AP/64ML		•									
TI5 44AP/67ML			•								
*T6 45AP/70ML				•	•						
TI7 46AP/72ML				•	•	•	•				
*TI8 48AP/72ML						•	•				
TI9 48AP/74ML											
TI11 50AP/76ML								•			
*TI12 52AP/81ML									•		
*TI14 56AP/84ML										•	
*TI16 58AP/86ML											•

Size Combination Chart

*: Special order

Φ26 Φ28 Φ30 Φ32 Φ34 Φ36 *Φ38 *Φ40

| F3 | F4 | F5 | *F6,F7 | *F8,F9 | F11 | *F12 | *F14 | *F16 |

| TI3 | TI4 | TI5 | *TI6,TI7 | *TI8,TI9 | TI11 | *TI12 | *TI14 | *TI16 |

| T3 | T4 | T5 | *T6,T7 | *T8,T9 | T11 | *T12 | *T14 | *T16 |

Arthroplasty
Revision Knee System, Ordering Information

Femoral Component

Part No. Left	Part No. Right	Size	AP / ML (mm)
K2.FBL.5159	K2.FBR.5159	3	51 / 59
K2.FBL.5462	K2.FBR.5462	4	54 / 62
K2.FBL.5765	K2.FBR.5765	5	57 / 65
K2.FBL.6065	K2.FBR.6065	6	60 / 65
K2.FBL.6068	K2.FBR.6068	7	60 / 68
K2.FBL.6368	K2.FBR.6368	8	63 / 68
K2.FBL.6371	K2.FBR.6371	9	63 / 71
K2.FBL.6674	K2.FBR.6674	11	66 / 74
K2.FBL.6974	K2.FBR.6974	12	69 / 74
K2.FBL.7277	K2.FBR.7277	14	72 / 77
K2.FBL.7580	K2.FBR.7580	16	75 / 80

Tibial Baseplate with hole cap

Part No.	Size	L (mm)	AP / ML (mm)
K2.BFN.4061-ASM	3	30	40 / 61
K2.BFN.4264-ASM	4	30	42 / 64
K2.BFN.4467-ASM	5	30	44 / 67
K2.BFN.4570-ASM	6	30	45 / 70
K2.BFN.4672-ASM	7	30	46 / 72
K2.BFN.4872-ASM	8	30	48 / 72
K2.BFN.4874-ASM	9	30	48 / 74
K2.BFN.5076-ASM	11	35	50 / 76
K2.BFN.5281-ASM	12	35	52 / 81
K2.BFN.5684-ASM	14	35	56 / 84
K2.BFN.5886-ASM	16	35	58 / 86

Stem Extension

Part No.	DxL (mm)	Part No.	DxL (mm)	Part No.	DxL (mm)	Part No.	DxL (mm)
K2.C09.0030	9 x 30	K2.C11.0150	11 x 150	K2.C14.0090	14 x 90	K2.C16.0120	16 x 120
K2.C09.0060	9 x 60	K2.C11.0180	11 x 180	K2.C14.0120	14 x 120	K2.C16.0150	16 x 150
K2.C09.0090	9 x 90	K2.C12.0030	12 x 30	K2.C14.0150	14 x 150	K2.C16.0180	16 x 180
K2.C09.0120	9 x 120	K2.C12.0060	12 x 60	K2.C14.0180	14 x 180	K2.C18.0030	18 x 30
K2.C09.0150	9 x 150	K2.C12.0090	12 x 90	K2.C15.0010	15 x 10	K2.C18.0060	18 x 60
K2.C09.0180	9 x 180	K2.C12.0120	12 x 120	K2.C15.0015	15 x 15	K2.C18.0090	18 x 90
K2.C10.0030	10 x 30	K2.C12.0150	12 x 150	K2.C15.0020	15 x 20	K2.C18.0120	18 x 120
K2.C10.0060	10 x 60	K2.C12.0180	12 x 180	K2.C15.0030	15 x 30	K2.C18.0150	18 x 150
K2.C10.0090	10 x 90	K2.C13.0030	13 x 30	K2.C15.0060	15 x 60	K2.C18.0180	18 x 180
K2.C10.0120	10 x 120	K2.C13.0060	13 x 60	K2.C15.0090	15 x 90	K2.C20.0030	20 x 30
K2.C10.0150	10 x 150	K2.C13.0090	13 x 90	K2.C15.0120	15 x 120	K2.C20.0060	20 x 60
K2.C10.0180	10 x 180	K2.C13.0120	13 x 120	K2.C15.0150	15 x 150	K2.C20.0090	20 x 90
K2.C11.0030	11 x 30	K2.C13.0150	13 x 150	K2.C15.0180	15 x 180	K2.C20.0120	20 x 120
K2.C11.0060	11 x 60	K2.C13.0180	13 x 180	K2.C16.0030	16 x 30	K2.C20.0150	20 x 150
K2.C11.0090	11 x 90	K2.C14.0030	14 x 30	K2.C16.0060	16 x 60	K2.C20.0180	20 x 180
K2.C11.0120	11 x 120	K2.C14.0060	14 x 60	K2.C16.0090	16 x 90		

Arthroplasty
Revision Knee System, Ordering Information

Tibial Insert

Part No.	Size	AP/ML (mm)	Locking Rod L (mm)	Part No.	Size	AP/ML (mm)	Locking Rod L (mm)
K2.IBN.4061-10A	3-10		31	K2.IBN.4570-10A	6-10		31
K2.IBN.4061-12A	3-12		33	K2.IBN.4570-12A	6-12		33
K2.IBN.4061-14A	3-14		35	K2.IBN.4570-14A	6-14		35
K2.IBN.4061-16A	3-16		37	K2.IBN.4570-16A	6-16		37
K2.IBN.4061-18A	3-18	40 / 61	39	K2.IBN.4570-18A	6-18	45 / 70	39
K2.IBN.4061-20A	3-20		41	K2.IBN.4570-20A	6-20		41
K2.IBN.4061-22A	3-22		43	K2.IBN.4570-22A	6-22		43
K2.IBN.4061-24A	3-24		45	K2.IBN.4570-24A	6-24		45
K2.IBN.4061-26A	3-26		47	K2.IBN.4570-26A	6-26		47
K2.IBN.4264-10A	4-10		31	K2.IBN.4672-10A	7-10		31
K2.IBN.4264-12A	4-12		33	K2.IBN.4672-12A	7-12		33
K2.IBN.4264-14A	4-14		35	K2.IBN.4672-14A	7-14		35
K2.IBN.4264-16A	4-16		37	K2.IBN.4672-16A	7-16		37
K2.IBN.4264-18A	4-18	42 / 64	39	K2.IBN.4672-18A	7-18	46 / 72	39
K2.IBN.4264-20A	4-20		41	K2.IBN.4672-20A	7-20		41
K2.IBN.4264-22A	4-22		43	K2.IBN.4672-22A	7-22		43
K2.IBN.4264-24A	4-24		45	K2.IBN.4672-24A	7-24		45
K2.IBN.4264-26A	4-26		47	K2.IBN.4672-26A	7-26		47
K2.IBN.4467-10A	5-10		31	K2.IBN.4872-10A	8-10		31
K2.IBN.4467-12A	5-12		33	K2.IBN.4872-12A	8-12		33
K2.IBN.4467-14A	5-14		35	K2.IBN.4872-14A	8-14		35
K2.IBN.4467-16A	5-16		37	K2.IBN.4872-16A	8-16		37
K2.IBN.4467-18A	5-18	44 / 67	39	K2.IBN.4872-18A	8-18	48 / 72	39
K2.IBN.4467-20A	5-20		41	K2.IBN.4872-20A	8-20		41
K2.IBN.4467-22A	5-22		43	K2.IBN.4872-22A	8-22		43
K2.IBN.4467-24A	5-24		45	K2.IBN.4872-24A	8-24		45
K2.IBN.4467-26A	5-26		47	K2.IBN.4872-26A	8-26		47

Arthroplasty
Revision Knee System, Ordering Information

Tibial Insert

Part No.	Size	AP/ML (mm)	Locking Rod L (mm)	Part No.	Size	AP/ML (mm)	Locking Rod L (mm)
K2.IBN.4874-10A	9-10		31	K2.IBN.5684-10A	14-10		31
K2.IBN.4874-12A	9-12		33	K2.IBN.5684-12A	14-12		33
K2.IBN.4874-14A	9-14		35	K2.IBN.5684-14A	14-14		35
K2.IBN.4874-16A	9-16		37	K2.IBN.5684-16A	14-16		37
K2.IBN.4874-18A	9-18	48 / 74	39	K2.IBN.5684-18A	14-18	56 / 84	39
K2.IBN.4874-20A	9-20		41	K2.IBN.5684-20A	14-20		41
K2.IBN.4874-22A	9-22		43	K2.IBN.5684-22A	14-22		43
K2.IBN.4874-24A	9-24		45	K2.IBN.5684-24A	14-24		45
K2.IBN.4874-26A	9-26		47	K2.IBN.5684-26A	14-26		47
K2.IBN.5076-10A	11-10		31	K2.IBN.5886-10A	16-10		31
K2.IBN.5076-12A	11-12		33	K2.IBN.5886-12A	16-12		33
K2.IBN.5076-14A	11-14		35	K2.IBN.5886-14A	16-14		35
K2.IBN.5076-16A	11-16		37	K2.IBN.5886-16A	16-16		37
K2.IBN.5076-18A	11-18	50 / 76	39	K2.IBN.5886-18A	16-18	58 / 86	39
K2.IBN.5076-20A	11-20		41	K2.IBN.5886-20A	16-20		41
K2.IBN.5076-22A	11-22		43	K2.IBN.5886-22A	16-22		43
K2.IBN.5076-24A	11-24		45	K2.IBN.5886-24A	16-24		45
K2.IBN.5076-26A	11-26		47	K2.IBN.5886-26A	16-26		47
K2.IBN.5281-10A	12-10		31				
K2.IBN.5281-12A	12-12		33				
K2.IBN.5281-14A	12-14		35				
K2.IBN.5281-16A	12-16		37				
K2.IBN.5281-18A	12-18	52 / 81	39				
K2.IBN.5281-20A	12-20		41				
K2.IBN.5281-22A	12-22		43				
K2.IBN.5281-24A	12-24		45				
K2.IBN.5281-26A	12-26		47				

Offset Adaptor

Part No.	Offset (mm)
K2.OFT.15802-ASY	2
K2.OFT.15804-ASY	4
K2.OFT.15806-ASY	6
K2.OFT.15808-ASY	8

Stem Plug

Part No.	D (mm)
K2.BXP.1510	10

Arthroplasty
Revision Knee System, Ordering Information

Augment - Choren Pad

Femoral Distal Choren Pad

Part No.	Femur Size	T (mm)
K4.FDA.0302	3	2
K4.FDA.0402	4	2
K4.FDA.0502	5	2
K4.FDA.0602	6	2
K4.FDA.0702	7	2
K4.FDA.0802	8	2
K4.FDA.0902	9	2
K4.FDA.1102	11	2
K4.FDA.1202	12	2
K4.FDA.0303	3	3
K4.FDA.0403	4	3
K4.FDA.0503	5	3
K4.FDA.0603	6	3
K4.FDA.0703	7	3
K4.FDA.0803	8	3
K4.FDA.0903	9	3
K4.FDA.1103	11	3
K4.FDA.1203	12	3

Femoral Posterior Choren Pad

Part No.	Femur Size	T (mm)
K4.FPA.0302	3	2
K4.FPA.0402	4	2
K4.FPA.0502	5	2
K4.FPA.0602	6	2
K4.FPA.0702	7	2
K4.FPA.0802	8	2
K4.FPA.0902	9	2
K4.FPA.1102	11	2
K4.FPA.1202	12	2
K4.FPA.0303	3	3
K4.FPA.0403	4	3
K4.FPA.0503	5	3
K4.FPA.0603	6	3
K4.FPA.0703	7	3
K4.FPA.0803	8	3
K4.FPA.0903	9	3
K4.FPA.1103	11	3
K4.FPA.1203	12	3

Tibial Half Choren Pad

Part No.	Femur Size	T (mm)
K4.THA.0302	3	2
K4.THA.0402	4	2
K4.THA.0502	5	2
K4.THA.0602	6	2
K4.THA.0702	7	2
K4.THA.0802	8	2
K4.THA.0902	9	2
K4.THA.1102	11	2
K4.THA.1202	12	2
K4.THA.0303	3	3
K4.THA.0403	4	3
K4.THA.0503	5	3
K4.THA.0603	6	3
K4.THA.0703	7	3
K4.THA.0803	8	3
K4.THA.0903	9	3
K4.THA.1103	11	3
K4.THA.1203	12	3

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Arthroplasty
Revision Knee System, Ordering Information

Augment - Block

Femoral Distal Block with fixation bolt

Part No.	Femur Size	T (mm)
K4.FD2.0305-ASY	3	5
K4.FD2.0405-ASY	4	5
K4.FD2.0505-ASY	5	5
K4.FD2.0605-ASY	6	5
K4.FD2.0705-ASY	7	5
K4.FD2.0805-ASY	8	5
K4.FD2.0905-ASY	9	5
K4.FD2.1105-ASY	11	5
K4.FD2.1205-ASY	12	5
K4.FD2.1405-ASY	14	5
K4.FD2.1605-ASY	16	5
K4.FD2.0310-ASY	3	10
K4.FD2.0410-ASY	4	10
K4.FD2.0510-ASY	5	10
K4.FD2.0610-ASY	6	10
K4.FD2.0710-ASY	7	10
K4.FD2.0810-ASY	8	10
K4.FD2.0910-ASY	9	10
K4.FD2.1110-ASY	11	10
K4.FD2.1210-ASY	12	10
K4.FD2.1410-ASY	14	10
K4.FD2.1610-ASY	16	10
K4.FD2.0315-ASY	3	15
K4.FD2.0415-ASY	4	15
K4.FD2.0515-ASY	5	15
K4.FD2.0615-ASY	6	15
K4.FD2.0715-ASY	7	15
K4.FD2.0815-ASY	8	15
K4.FD2.0915-ASY	9	15
K4.FD2.1115-ASY	11	15
K4.FD2.1215-ASY	12	15
K4.FD2.1415-ASY	14	15
K4.FD2.1615-ASY	16	15

Femoral Posterior Block with fixation bolt

Part No.	Femur Size	T (mm)
K4.FP2.0305-ASY	3	5
K4.FP2.0405-ASY	4	5
K4.FP2.0505-ASY	5	5
K4.FP2.0605-ASY	6	5
K4.FP2.0705-ASY	7	5
K4.FP2.0805-ASY	8	5
K4.FP2.0905-ASY	9	5
K4.FP2.1105-ASY	11	5
K4.FP2.1205-ASY	12	5
K4.FP2.1405-ASY	14	5
K4.FP2.1605-ASY	16	5
K4.FP2.0310-ASY	3	10
K4.FP2.0410-ASY	4	10
K4.FP2.0510-ASY	5	10
K4.FP2.0610-ASY	6	10
K4.FP2.0710-ASY	7	10
K4.FP2.0810-ASY	8	10
K4.FP2.0910-ASY	9	10
K4.FP2.1110-ASY	11	10
K4.FP2.1210-ASY	12	10
K4.FP2.1410-ASY	14	10
K4.FP2.1610-ASY	16	10
K4.FP2.0315-ASY	3	15
K4.FP2.0415-ASY	4	15
K4.FP2.0515-ASY	5	15
K4.FP2.0615-ASY	6	15
K4.FP2.0715-ASY	7	15
K4.FP2.0815-ASY	8	15
K4.FP2.0915-ASY	9	15
K4.FP2.1115-ASY	11	15
K4.FP2.1215-ASY	12	15
K4.FP2.1415-ASY	14	15
K4.FP2.1615-ASY	16	15

Tibial Half Block with fixation bolt

Part No.	Femur Size	T (mm)
K4.TH2.0305-ASY	3	5
K4.TH2.0405-ASY	4	5
K4.TH2.0505-ASY	5	5
K4.TH2.0605-ASY	6	5
K4.TH2.0705-ASY	7	5
K4.TH2.0805-ASY	8	5
K4.TH2.0905-ASY	9	5
K4.TH2.1105-ASY	11	5
K4.TH2.1205-ASY	12	5
K4.TH2.1405-ASY	14	5
K4.TH2.1605-ASY	16	5
K4.TH2.0310-ASY	3	10
K4.TH2.0410-ASY	4	10
K4.TH2.0510-ASY	5	10
K4.TH2.0610-ASY	6	10
K4.TH2.0710-ASY	7	10
K4.TH2.0810-ASY	8	10
K4.TH2.0910-ASY	9	10
K4.TH2.1110-ASY	11	10
K4.TH2.1210-ASY	12	10
K4.TH2.1410-ASY	14	10
K4.TH2.1610-ASY	16	10
K4.TH2.0315-ASY	3	15
K4.TH2.0415-ASY	4	15
K4.TH2.0515-ASY	5	15
K4.TH2.0615-ASY	6	15
K4.TH2.0715-ASY	7	15
K4.TH2.0815-ASY	8	15
K4.TH2.0915-ASY	9	15
K4.TH2.1115-ASY	11	15
K4.TH2.1215-ASY	12	15
K4.TH2.1415-ASY	14	15
K4.TH2.1615-ASY	16	15

SBM ▶▶▶
Science & Bio Materials

Arthroscopic Reconstructive Surgery
ACL / PCL Reconstruction

We have the right option for your ACL / PCL Reconstruction Surgical Technique

SBM
Science & Bio Materials

Arthroscopic Reconstructive Surgery
ACL / PCL Reconstruction

PULLUP adjustable juxtacortical fixation system
Pull, Flip, Adjust

- Reproducible, controlled locking at blind tunnel endstop, conservation of bone stock.
- Simple, no pre-op planning of tunnel length, perioperative adjustment.
- Reliable, stable locking system, renowned materials.

External traction of the graph. Material: PE (Polyesther)

Adjustable length of the loop. Material: UHWMPE

Titanium performance

Controlled blocking of the graft (standard prepared loop: 40 mm)

Reliable flip

Chinese finger trap locking system

PULLUP®
4 mm
12 mm | 2 mm

PULLUP® XL
4 mm
20 mm | 2 mm

Pull   Flip   Adjust   Cut

Arthroscopic Reconstructive Surgery
ACL / PCL Reconstruction

LIGAFIX interference screws
Bioabsorbable and osteoconductive fixation

- Bioabsorbable, made of duosorb material, the implant are absorbed progressively and do not compromise future interventions.
- Osteoconduction, the high level of TCP promotes bone ingrowth.
- Variety, Ligafix screws are available in numerous sizes, different compositions and various designs to match your technique.

Tricalcium Phosphate (β-TCP) + Poly DL Lactic Acid (PDLLA)

100% Osteoconductive   Mechanical strenght
100% Absorbable   Elasticity
100% Bioactive

30% β-TCP + 70% PDLLA
For all types of graft, ideal for the Kenneth Jones technique.
Optimizes mechanical strength, the screw is in direct contact with the bone plug.

60% β-TCP + 40% PDLLA
Only for soft tissue graft.
Optimizes the kinetics of absorption.

- 2 heads for femoral and tibial fixation
  Length : from 20 to 35 mm, Diameters : from 7 to 11 mm
- Round head screws
  Femoral level : preserves the graft during articular flexion
  Tibial level : ensures optimal locking
- Flat head screws, only for tibia, insertion facilitated at the end of screwing

![SBM Science & Bio Materials logo]

Arthroscopic Reconstructive Surgery
ACL / PCL Reconstruction, Ordering Information

Ligafix 30 Round Head

Article No.	Implant
COM3007020	LIGAFIX 30 ROUND HEAD Ø=7 L=20
COM3007025	LIGAFIX 30 ROUND HEAD Ø=7 L=25
COM3007030	LIGAFIX 30 ROUND HEAD Ø=7 L=30
COM3008020	LIGAFIX 30 ROUND HEAD Ø=8 L=20
COM3008025	LIGAFIX 30 ROUND HEAD Ø=8 L=25
COM3008030	LIGAFIX 30 ROUND HEAD Ø=8 L=30
COM3008035	LIGAFIX 30 ROUND HEAD Ø=8 L=35
COM3009020	LIGAFIX 30 ROUND HEAD Ø=9 L=20
COM3009025	LIGAFIX 30 ROUND HEAD Ø=9 L=25
COM3009030	LIGAFIX 30 ROUND HEAD Ø=9 L=30
COM3009035	LIGAFIX 30 ROUND HEAD Ø=9 L=35
COM3010R25	LIGAFIX 30 ROUND HEAD Ø=10 L=25
COM3010R30	LIGAFIX 30 ROUND HEAD Ø=10 L=30
COM3010R33	LIGAFIX 30 ROUND HEAD Ø=10 L=33
COM3010R35	LIGAFIX 30 ROUND HEAD Ø=10 L=35

Ligafix 60 Round Head

Article No.	Implant
COM6007020	LIGAFIX 60 ROUND HEAD Ø=7 L=20
COM6007025	LIGAFIX 60 ROUND HEAD Ø=7 L=25
COM6007030	LIGAFIX 60 ROUND HEAD Ø=7 L=30
COM6008020	LIGAFIX 60 ROUND HEAD Ø=8 L=20
COM6008025	LIGAFIX 60 ROUND HEAD Ø=8 L=25
COM6008030	LIGAFIX 60 ROUND HEAD Ø=8 L=30
COM6008035	LIGAFIX 60 ROUND HEAD Ø=8 L=35
COM6009020	LIGAFIX 60 ROUND HEAD Ø=9 L=20
COM6009025	LIGAFIX 60 ROUND HEAD Ø=9 L=25
COM6009030	LIGAFIX 60 ROUND HEAD Ø=9 L=30
COM6009035	LIGAFIX 60 ROUND HEAD Ø=9 L=35
COM6010R25	LIGAFIX 60 ROUND HEAD Ø=10 L=25
COM6010R30	LIGAFIX 60 ROUND HEAD Ø=10 L=30

Ligafix 30 Flat Head

Article No.	Implant
COM3010030	LIGAFIX 30 FLAT HEAD Ø=10 L=30
COM3010035	LIGAFIX 30 FLAT HEAD Ø=10 L=30
COM3011030	LIGAFIX 30 FLAT HEAD Ø=11 L=30
COM3011035	LIGAFIX 30 FLAT HEAD Ø=11 L=35

Ligafix 60 Flat Head

Article No.	Implant
COM6010030	LIGAFIX 60 FLAT HEAD Ø=10 L=30
COM6010035	LIGAFIX 60 FLAT HEAD Ø=10 L=35
COM6011030	LIGAFIX 60 FLAT HEAD Ø=11 L=30

Pullup

Article No.	Implant
PULLU01201	PULLUP FIXATION Ø=4.5
PULXL01202	PULLUP XL FIXATION Ø=5-10

Spine System, Spinal Implant
PLIF / T-PLIF PEEK Cage System

- Lospa IS PLIF / T-PLIF cage system is a spinal interbody fusion system that was developed to solve the drawback of current spinal fusion systems in the market. The cage, which closely resembles human anatomy, is designed for implanation between the endplates of the lumbar vertebral bodies. The instruments with this system are simple and easy to use, which could lead to reduced operation time quick patient recovery.

Anatomical Shape

Teeth on cage surface
Provide initial stability and prevent migration

Large Windows
Facilitate packing of bone or bone substitute and allow bone growth through the cage

Radiolucency
2 tantalum markers to indicate cage position on X-ray

Indications

- Discogenic back pain
- Disc herniation with radicular pain and major back pain component
- Facet syndrome
- Spondylolysis
- Spondylolisthesis
- Failed posterior intertranseverse fusion

Application Levels

- L2 - S1

Spine System, Spinal Implant
TLIF PEEK Cage System

- Transforaminal lumbar interbody fusion (TLIF) procedure of LOSPA IS TLIF compared with the PLIF procedure included a decrease in potential neurological injury, improvement in lordotic alignment given graft placement within the anterior column, and preservation of posterior column integrity through minimizing lamina, facet, and pars disscetion.

TLIF PEEK Cage System

- Provide resistance to spacer migration, 0.7 mm of teeth profile

Anatomical Shape

- Convex (630R) implant meet better contact with body surface
- Posterior holding edge
- Help rotating via the axial plane
- Self-distracting bullet nose
- Easier and less damage while inserting.

Material

- PEEK with tantalum x-ray markers
- Axial window
- Fully opened, accommodate bone graft to allow fusion
- 7 lordotic angle
- Accommodates the natural spine lordotic curve
- Large depth

TLIF Approach

- Open technique
- Minimally Invasive Technique

Spine System, Spinal Implant
ACIF PEEK Cage System

- Lospa IS ACIF cage system is a spinal interbody fusion system that was developed to solve the drawback of current spinal fusion systems in the market. The cage, which closely resembles human anatomy, is designed for implanation between the endplates of the cervical vertebral bodies. The instruments with this system are simple and easy to use, which could lead to reduces operation time quick patient recovery.

Anatomical Shape

Teeth on cage surface
Provide initial stability and prevent migration

Large Windows
Facilitate packing of bone or bone substitute and allow bone-through growth

Radiolucency
3 tantalum makers to indicate cage position on X-ray

Indications

- Degenerative disc disease
- Herniated disc
- Osteo arthritic foraminal stenosis
- Pseudarthrosis

Application Levels

- C2 - T1

IMPLANT SPECIALIST

Spine System, Spinal Implant
Pedicle Screw

- Material : Ti-6Al-4V ELI (ASTM F 136-78)
- Having the low profile (Ø 13mm x L 11mm) minimizes the post-surgical projection
- Available in standard and guided types to be selected to meet the surgeon's preference
- Anodized with various colors for distinguishing the different size
- The application of the double tapered thread has improved the screw's pullout strength
- Self tappered

Set Screw
As the specially designed screw thread tightens the set screw, the screw head gets restrained, hence, even without a cap or a sleeve, a strong fixation can be obtained by the application of the set screw itself

Rod
Diameter : 6.0mm
Length : 40 - 500mm

Monoaxial Pedicle Screw | Monoaxial Guided Pedicle Screw | Polyaxial Pedicle Screw | Polyaxial Guided Pedicle Screw

Advanced Polyaxial Pedicle Screw

- Possible rotation of approximately 25 (25 conical angle) from the axis of the housing of the rod
- Ability to stably place the rod even at a sudden rod bending

Rod Link

- It is simple assembling and strong stable fixation (Oblique fixation design)

CRENTEC
IMPLANT SPECIALIST

Spine System, Spinal Implant
Pedicle Screw, Ordering Information

ACIF Cage System

Article No.	Implant
SC.250.2405	ACIF PEEK Cage (12 x 14 x 05mm)
SC.250.2406	ACIF PEEK Cage (12 x 14 x 06mm)
SC.250.2407	ACIF PEEK Cage (12 x 14 x 07mm)
SC.250.2408	ACIF PEEK Cage (12 x 14 x 08mm)
SC.250.2409	ACIF PEEK Cage (12 x 14 x 09mm)
SC.250.4605	ACIF PEEK Cage (14 x 16 x 05mm)
SC.250.4606	ACIF PEEK Cage (14 x 16 x 06mm)
SC.250.4607	ACIF PEEK Cage (14 x 16 x 07mm)
SC.250.4608	ACIF PEEK Cage (14 x 16 x 08mm)
SC.250.4609	ACIF PEEK Cage (14 x 16 x 09mm)

PLIF / T-PLIF PEEK Cage System

Article No.	Implant
SC.B50.2508	PLIF PEEK Cage (25 x 0 x 10 x 8mm)
SC.B50.2509	PLIF PEEK Cage (25 x 0 x 10 x 9mm)
SC.B50.2510	PLIF PEEK Cage (25 x 0 x 10 x 10mm)
SC.B50.2511	PLIF PEEK Cage (25 x 0 x 10 x 11mm)
SC.B50.2512	PLIF PEEK Cage (25 x 0 x 10 x 12mm)
SC.B50.2513	PLIF PEEK Cage (25 x 0 x 10 x 13mm)
SC.B54.2509	PLIF PEEK Cage (25 x 4 x 10 x 9mm)
SC.B54.2510	PLIF PEEK Cage (25 x 4 x 10 x 10mm)
SC.B54.2511	PLIF PEEK Cage (25 x 4 x 10 x 11mm)
SC.B54.2512	PLIF PEEK Cage (25 x 4 x 10 x 12mm)
SC.B54.2513	PLIF PEEK Cage (25 x 4 x 10 x 13mm)
SC.B54.2514	PLIF PEEK Cage (25 x 4 x 10 x 14mm)
SC.B58.2510	PLIF PEEK Cage (25 x 8 x 10 x 8mm)
SC.B58.2511	PLIF PEEK Cage (25 x 8 x 10 x 10mm)
SC.B58.2512	PLIF PEEK Cage (25 x 8 x 10 x 12mm)
SC.B54.2809	T-PLIF PEEK Cage (28 x 4 x 10 x 9mm)
SC.B54.2810	T-PLIF PEEK Cage (28 x 4 x 10 x 10mm)
SC.B54.2811	T-PLIF PEEK Cage (28 x 4 x 10 x 11mm)
SC.B54.2812	T-PLIF PEEK Cage (28 x 4 x 10 x 12mm)
SC.B54.2813	T-PLIF PEEK Cage (28 x 4 x 10 x 13mm)
SC.B54.3109	T-PLIF PEEK Cage (31 x 4 x 10 x 9mm)
SC.B54.3110	T-PLIF PEEK Cage (31 x 4 x 10 x 10mm)
SC.B54.3111	T-PLIF PEEK Cage (31 x 4 x 10 x 11mm)
SC.B54.3112	T-PLIF PEEK Cage (31 x 4 x 10 x 12mm)
SC.B54.3113	T-PLIF PEEK Cage (31 x 4 x 10 x 13mm)

Pedicle Screw

Article No.	Implant
01.26.565	Monoaxial Guided Pedicle Screw Ø 5.5 x 40mm
01.26.665	Monoaxial Guided Pedicle Screw Ø 6.5 x 40mm
01.26.453	Monoaxial Pedicle Screw Ø 4.5 x 30mm
01.26.454	Monoaxial Pedicle Screw Ø 4.5 x 35mm
01.26.455	Monoaxial Pedicle Screw Ø 4.5 x 40mm
01.26.553	Monoaxial Pedicle Screw Ø 5.5 x 30mm
01.26.554	Monoaxial Pedicle Screw Ø 5.5 x 35mm
01.26.555	Monoaxial Pedicle Screw Ø 5.5 x 40mm
01.26.556	Monoaxial Pedicle Screw Ø 5.5 x 45mm
01.26.654	Monoaxial Pedicle Screw Ø 6.5 x 35mm
01.26.655	Monoaxial Pedicle Screw Ø 6.5 x 40mm
01.26.656	Monoaxial Pedicle Screw Ø 6.5 x 45mm
01.26.755	Monoaxial Pedicle Screw Ø 7.5 x 40mm
01.26.756	Monoaxial Pedicle Screw Ø 7.5 x 45mm
01.28.565	Polyaxial Guided Pedicle Screw Ø 5.5 x 40mm
01.28.566	Polyaxial Guided Pedicle Screw Ø 5.5 x 45mm
01.28.567	Polyaxial Guided Pedicle Screw Ø 5.5 x 50mm
01.28.665	Polyaxial Guided Pedicle Screw Ø 6.5 x 40mm
01.28.666	Polyaxial Guided Pedicle Screw Ø 6.5 x 45mm
01.28.667	Polyaxial Guided Pedicle Screw Ø 6.5 x 50mm
01.28.453	Polyaxial Pedicle Screw Ø 4.5 x 30mm
01.28.454	Polyaxial Pedicle Screw Ø 4.5 x 35mm
01.28.455	Polyaxial Pedicle Screw Ø 4.5 x 40mm
01.28.553	Polyaxial Pedicle Screw Ø 5.5 x 30mm
01.28.554	Polyaxial Pedicle Screw Ø 5.5 x 35mm
01.28.555	Polyaxial Pedicle Screw Ø 5.5 x 40mm
01.28.556	Polyaxial Pedicle Screw Ø 5.5 x 45mm
01.28.654	Polyaxial Pedicle Screw Ø 6.5 x 35mm
01.28.655	Polyaxial Pedicle Screw Ø 6.5 x 40mm
01.28.656	Polyaxial Pedicle Screw Ø 6.5 x 45mm
01.28.657	Polyaxial Pedicle Screw Ø 6.5 x 50mm
01.28.754	Polyaxial Pedicle Screw Ø 7.5 x 35mm
01.28.755	Polyaxial Pedicle Screw Ø 7.5 x 40mm
01.28.756	Polyaxial Pedicle Screw Ø 7.5 x 45mm
01.22.920	Rod Link 35~40mm
01.22.921	Rod Link 40~50mm
01.22.922	Rod Link 48~63mm
01.22.923	Rod Link 60~78mm
01.21.067	Rod Ø 6.0 x 100mm
01.21.068	Rod Ø 6.0 x 110mm
01.21.069	Rod Ø 6.0 x 120mm
01.21.070	Rod Ø 6.0 x 130mm
01.21.072	Rod Ø 6.0 x 150mm
01.21.061	Rod Ø 6.0 x 40mm
01.21.361	Rod Ø 6.0 x 45mm
01.21.083	Rod Ø 6.0 x 500mm
01.21.062	Rod Ø 6.0 x 50mm
01.21.063	Rod Ø 6.0 x 60mm
01.21.064	Rod Ø 6.0 x 70mm
01.21.065	Rod Ø 6.0 x 80mm
01.21.066	Rod Ø 6.0 x 90mm
01.22.020	Set Screw Ø 10 x 5.0mm

![TECRES logo] Advancing High Technology

Bone Substitute
Bone Cement

Cemex System Genta

- Suitable when there is a risk (or in presence) of infections caused by gentamicin sensitive organisms
  Package : 60g

Cemex System Genta Fast

- Suitable when there is a risk (or in presence) of infections caused by gentamicin sensitive organisms and when short application times are required
  Package : 40g

Cemex System Genta ID Green

- Green version of the Cemex System Genta Fast, with a stable and durable colour; suitable for every surgical site and whenever there is a short time need.
- Package : 40g

Gun 01

- To be used with Cemex System for extrude bone cement

Benefits

- No risk of contamination : Cemex System is completely sealed. Operators do not come into contact with the material at any stage of the cementation process, not do the components come into contact with the environment.
- No vapours : the system is completely odour-free, thus protecting operators from being exposed to monomer fumes.
- Easy to use and store : Cemex System combines a bone-cement mixing system with a bone-cement delivery system. Cement can be prepared in a very short time and this can be done by just one person. Its practicality and compactness mean more room on shelves and in the operating theatre.

TECRES
Advancing High Technology

Bone Substitute
Reinforced Bone Substitute

Cal-CEMEX

- Cal-CEMEX is the innovative reinforced bone substitute with an hybrid formulation β-TCP+ PMMA that facilitate bone growth and assure immediately a very high mechanical resistance.
- Osteoconductivity
  favoured by the β - TCP component, is due to the material special porosity :
    - Open porosity : allows fluids to penetrate inside the material, to favour bone ingrowth
    - Microporosity : the bone is able to reconstitute in a more diffuse manner
    - Macroporosity : macropores accomodate the new bone tissue, allowing differentiation into lamellae
- Thanks to the PMMA component, Cal-CEMEX :
    - Achieves maximum mechanical resistance immediately
    - Maintains an unaltered volume over time
    - Is a long-lasting support for bone tissue

Shakit

- The device for easy mixing even of high viscosity bone void fillers and acrylic resins

Xtruder

- The device for easy and fast application even of high viscosity bone void fillers abd acrylics resins

Benefits

- Proven osteoconductivity
- High mechanical performance, immediately
- For injection of manual application
- Working time up to 5 min 45 sec
- Radiopaque, visible at X-Ray

ORTHOPAEDICS

BFIX™

External Fixator

Peek Fixator

- 1 DA21
  D124-2 Metaphyseal Kit Sterile, Radiolucent
- 2 DA21
  D123-2 Ankle Kit Sterile, Radiolucent
- 3 DA21
  D126-2 Hybrid Kit Sterile, Radiolucent
  Note : Used together with Rings
- 4 DA21
  D1022 Additional Screw Holder

Micro Movement Fixator

- Together with Compression - Distraction Unit, 6mm Allen Key
  "()" means applicable
- 1 DA1
  D101 Micro Movement Fixator (long)
  27.6cm between outermost screws when fixator fully closed, extends by 8cm
- 2 DA1
  D102 Micro Movement Fixator (middle) 23.6cm between outermost screws when fixator fully closed, extends by 4cm
- 3 DA1
  D103 Micro Movement Fixator (short)
  21.6cm between outermost screws when fixator fully closed, extends by 2cm

Ball-Jointed Modules

- Optional Clamps
  4 DA1 : D1001 Straight Clamp
  5 DA2 : D1002 T Clamp
  6DA18 : D3001 Extended Range Clamp
  7 ZA6 : H8001 Hybrid Coupling with Ball-Joint
  8 DA5 : D1004PK Radiolucent Ankle Clamp

BFIX ™

External Fixator

Micro Movement Fixator

Components / Replacements

- 1 D1010-12 Central Bodies
  2 (M4) Central Body Components-A
  3 (M5) Central Body Components-B
  4 Compression-Distraction Unit
  D1016 Long, D1017 Middle, D1018 Short

Ball-Jointed Modules

- 1 DA3 : D1021 Metaphyseal Clamp
  2 (M1) GT Clamp
  3 DA4 : D1020 B.G.T Clamp
  4 DA6 : D1005 Angled Clamp
  5 D1009 Double-Coupling Clamp

Paediatric Fixator

- 1 DA1
  D104 Paediatric Fixator (middle)
  2 DA1
  D1007 Paediatric Straight Clamp
  3 DA2
  D1008 Paediatric T Clamp
  4 D1105 Paediatric Double Coupling Clamp

Sterile Radiolucent Ankle Kit

- 6 G18003 Sterile Radiolucent Ankle Kit

Ball-Joint Modules

Non Ball-Jointed Modules

- 7 D1022 Additional Screw Holder

BFIX™
External Fixator

Adult Limb Reconstruction System

- 1 DA8
  D201 L.R.S. Fixator (long)
  With 2 L.R.S. Straight Outer Clamps
  and 1 L.R.S. Straight Central Clamp
  2 DA8
  D202 L.R.S. Fixator (middle)
  With 2 L.R.S. Straight Outer Clamps
  and 1 L.R.S. Straight Central Clamp
  3 DA8
  D203 L.R.S. Fixator (short)
  With 2 L.R.S. Straight Outer Clamps
  and 1 L.R.S. Straight Central Clamp

Components / Replacements

- 1 DA8001 L.R.S. Rails
  D2001 Long, D2002 Middle, D2003 Short
  2 DA8
  D2013 L.R.S. Straight Outer Clamp
  3 DA8
  D2014 L.R.S. Straight Central Clamp
  4 DA10
  D2015 L.R.S. T-Clamp
  5 ZS7
  D2016 L.R.S. Ball-Joint Coupling
  6 DA11
  D2019 L.R.S. Micrometric Swivelling
  Clamp
  7 (M12) L.R.S. Micrometric BGT Clamp
  8 DA12001
  D2021 L.R.S. Multiplanar Clamp
  9 D2029 L.R.S. Hinged Rail Coupling
  10 (M13) L.R.S. T Clamp Coupling
  11
  D2023 Sandwich Clamp (8mm)
  D2022 Sand wich Clamp (15mm)
  12 D2017 Dynamic Unit
  13 Compression-Distraction Unit
  D1016 Long, D1017 Middle, D1018 Short

BFIX ™
External Fixator

Paediatric Limb Reconstruction System

- 1 DA9
  D204 paediatric L.R.S. Fixator (250mm)
  With 3 Paediatric L.R.S. Straight Clamps
  2 DA9
  D205 paediatric L.R.S. Fixator (200mm)
  With 2 Paediatric L.R.S. Straight Clamps
  3 DA9
  D206 paediatric L.R.S. Fixator (150mm)
  With 2 Paediatric L.R.S. Straight Clamps

Components / Replacements

- 1 DA9001 L.R.S. Rail
  D2004 Long, Length 25cm
  D2005 Middle, Length 20cm
  D2006 Short, Length 15cm
  2 DA9
  D2025 Paediatric L.R.S. Stright, Outer Clamp
  3 DA9
  D2047 Paediatric L.R.S. T-Clamp
  4 DA9
  D2028 Paediatric L.R.S. ball joining coupling
  5
  D2026 Paediatric L.R.S. Swivelling Clamp
  Enables an appropriate Ball-jointed
  Module to be attached to the rail.
  6
  D2048 Paediatric Dynamic Unit
  7
  D1019 Paediatric Compression - Distraction Units

ORTHOPAEDICS

BFIX™
External Fixator

Wrist Fixator

- 1 DA20
  D401 Wrist Fixator 22m
  Consisting of: 1 Short Module with
  Straight Clamp, Cam dan Bush,
  1 Long Module with Straight Clamp,
  Cam and Bush and 1 Double
  Ball-Joint
  2 DA21
  D402 Wrist Fixator
  (compression-distraction) 22mm
  Consisting of: 1 Long Module with
  Straight Clamp, Cam and Bush
  1 Compression-Distraction Module
  with Straight Clamp, Cam and Bush,
  and 1 Double Ball-Joint
  3 DA22
  D403 Wrist Fixator (extra-articular)
  20mm
  Consisting of: 1 Short Module with
  T-Clamp, Cam and Bush,
  1 Compression-Distraction Module
  with Straight Clamp, Cam and Bush,
  and 1 Double Ball-Joint

Components / Replacements

- 4 D4005 Wrist Fixator-Short Module
  With Straight Clamp, Cam and Bush
  5 D4008 Wrist Fixator-Short Module
  With T-Clamp, Cam and Bush
  6 D4007 Wrist Fixator-Long Module
  With Straight Clamp, Cam and Bush
  7 D4008 Wrist Fixator-Straight Clamp
  8 DA22002
  D4001 Wrist Fixator-T-Clamp
  9 D4006 Wrist Fixator-Compression - Distraction
  Module, with Straight Clamp, Cam and Bush
  10 D4002 Wrist Fixator-Ulnar Outrigger Clamp
  11 D4009 Wrist Fixator-Double Ball-Joint

BFIX™

External Fixator

Mini Fixator

- 1 DA25 (D501 Long)
  Consisting of: 1 Minifixator Long Body
  (2 Minifixator Standard Clamps and 2 Minifixator Compression-Distraction Nuts)
  2 DA25 (D502 Standard)
  Consisting of:
  (1 Minifixator Standard Body, 2 Minifixator Compression- Distraction Nuts.)
  3 DA25 (D503 Short)
  Consisting of:
  (1 Minifixator Short Body, 2 Minifixator Standard Clamps and 2 Minifixator Compression-Distraction Nuts)

Components / Replacements

- 4 DA25 Minifixator Bodies D5004 Long
  (1 Long Bar and 1 Standard Bar : total length 87mm)
  D5005 Standard (2 Standard Bars; total length 72mm)
  D5006 Short (1 Standard Bar and 1 Short Bar; total length 62mm)
  5 DA25 (M35) Minifixator Clamp Locking Screw
  6 DA25; D5003 Minifixator Standard Clamps (1 pair)
  7 DA30; D5001 Minifixator L-Clamps (Left-Right)
  8 Minifixator Spacer
  Used in association with Compression - Distraction Nut, Lengthening Bar and Standard Clamp.
  9 D501-001 Minifixator Compression Distraction Nut
  10 G10012 Allen Wrench 3mm
  11 Threaded Wires Ø 2mm (pack of 4)
  Total length 100mm, Thread length 15mm
  12 Threaded Wires Ø 1.6mm (pack of 4)
  Total length 70mm, Thread length 15mm

BFIX™

External Fixator

Minirail Fixator

- 1 DA26
  D504 Minirail Fixator (170mm)
  2 DA26
  D505 Minirail Fixator (95mm)
  3 DA26
  D506 Minirail Fixator (70mm)
  4 DA27
  D507 Minirail Fixator (horizontal axis)
  Allows articulation round an axis parallell to the bone screws
  5 DA28
  D509 Minirail Fixator (vertical axis)
  Allows articulation round an axis at vertical to the bone screws
  6 DA29
  D512 Minirail Fixator (horizontal II), Horizontal
  7 G21000 T-Wrench For Bone Screws
  8 (M29) T-Wrench For Clamp Screws
  9 G10012 Allen Wrench 3mm

BFIX™
External Fixator

Pelvic Fixator

- 1 DA16
  D301 Pelvic Short-(235-305mm); T-Clamps
  Consisting of (2 Primary Links, 1 Pelvic Fixator
  Connecting Unit, 2 Cams, 2 Bushes, 2 T-Clamp and
  1 Allen Wrench 6 mm)
  2 DA17
  D302 Pelvic Long-530mm (420-535mm)
  Straight Clamps
  Consisting of : (2 Primary Links, 1 Pelvic Fixator
  Supplementary Link, 1 Pelvic Fixator Connecting Unit,
  2 Cams, 2 Bushes, 2 Straight Clamps and 1 Allen
  Wrench 6 mm)
  3 DA17
  D307 Pelvic long Carbon Clamp & Rod (510-620mm)
  Modules for independent Screw Placement
  Consisting of : (2 Primary Links,1 Pelvic Fixator
  Supplementary Link,1 Pelvic Fixator Connecting Unit,
  2 Cams, 2 Bushes, 2 Ball-Jointed Modules for
  independent Screw Placement and 1 Allen Wrench
  6 mm

Ball - Jointed Modules

- 4 DA2
  D1002 T-Clamp For anterior applications
  Acts as its own template for insertion of screw
  between the interior and superiorli spines
  5 DA1
  D1001 Straight Clamp For iliac crest applications
  Acts as its own template for insertion of screws into
  the iliac crest.

BFIX™
External Fixator

Elbow Fixator

- 1 DA18; D305 Elbow Fixator With Straight Clamps
  Consisting of : (2 Primary Links, 1 Elbow Fixator
  Central Connecting Unit, 2 Cams, 2 Bushes, 1 Elbow
  Fixator Small Distractor, 2 Straight Clamps, 1 pair of
  Elbow Fixator Compression - Distraction Unit Spacers,
  1 Long Compression-Distraction Unit, 1 Allen Wrench
  6mm and 1 Allen Wrench 3 mm
  2 DA1 (D1007 Straight Clamp)
  Acts as its own template for insertion of screws in the
  humerus and ulna
  3 D3001 Elbow Extended Range Clamp Acts as its
  own template for screw insertion in the ulna. It is
  used when a wider choice of angle for screw
  placement is necessary
  4 Allen Wrench F10012 3mm, G10017 6mm
  5 K-Wire Without Olive Ø 2mm, Length 150mm
  6 D120 Petrochanteric Fixator complete with Allen
  Wrench 5mm

Hybrid Fixator System

- 1 ZA6
  Hybrid Fixator Assembly
  Consisting of: 1 2/3 Ring, 2 Two-Hole, K-Wire Securing
  Pins, 2 Three-Hole Wire, Clamp Slider Units,
  1 Micromovement Central body (Short or Standard),
  1 Micromovement Straight Clamp, 1 Hybrid Coupling
  with Ball-Joint, 2 Posts, 2 Supplementary Screw
  Holder Clamps
  2 HA5 Sheffield Ring Fixator Assembly For
  Reconstruction
  Consisting of : 2 2/3 Rings, 2 Two-Hole Securing Pins,
  2 Three-Hole Wire Clamp Slider Units, 1 Sheffield
  Clamp, 3 Reduction Units
  3 HA5 Sheffield Ring Fixator Assembly for
  Reconstruction
  Consisting of : 2 2/3 Rings, 2 1/3 Rings, 4 locking
  Screws, 1 Sheffield Clamp, 2 Hinge Clamps,
  4 Threaded Bars and 8 Nuts and Washer,
  1 Compression-Distraction Clicker Unit,
  2 Extension Plates and 2 single Screw Clamps

BFIX™
External Fixator

Hybrid Fixator System, Component Replacement

- 1 ZA6005 2/3 Rings
  H7001 inner Ø 150mm
  H7002 inner Ø 175mm
  H7003 inner Ø 190mm
  H7004 inner Ø 220mm
  H7135 inner Ø 120mm
  2 ZA6005 1/3 Rings
  H7154 inner Ø 120mm
  H7005 inner Ø 150mm
  H7006 inner Ø 175mm
  H7007 inner Ø 190mm
  H7008 inner Ø 220mm
  3 Bolt
  M6X20 Bolts Length 16mm (set of 10)
  M6X21 Bolts Length 20mm (set of 10)
  M6X22 Bolts Length 24mm (set of 10)
  4 ZA6002
  H7009 Three Hole Wire Clamp
  Should be used with 1 or 2 wires only
  5 ZA6002 (H7010 Two Hole Pin Clamp)
  6 (M31) Independent Wire Clamp
  7 (M32) Large Washers
  8 ZA6001 (H8001 Hybrid Coupling)

Hybrid Fixator System, Component Replacement

- 9 K-Wire With Lateral Olive
  10 K-Wire With Central Olive
  11 K-Wire Without Olive
  12
  D6010Cr 6mm Rod (300mm)
  D6011Cr 6mm Rod (200mm)
  D6012Cr 6mm Rod (100mm)
  13
  D6010Ts 6mm Rod (350mm) Carbon
  D6011Ts 6mm Rod (250mm) Carbon
  D6012Ts 6mm Rod (150mm) Carbon
  14 DA1001 (H7013 Ring Clamp)
  15 ZS2001 (M33) Supplementary
  Screw Holder Clamp
  16 ZA6003 (H7012 Single Screw Clamp)
  17 (M34) Half Pin Fixation Bolt
  18 ZA6004 (H7011 Post)

BFIX™

External Fixator

Hybrid Fixator System, Component Replacement

- 19 H7201 Self-Lengthen Rod Distractor - Double Ring
  20 Revision Locking Screw Washers
  21 Nuts and Washers

Hybrid Fixator System, Instrumentation

- 1 G18002 Wire Guide
  2 (M35) Universal Allen Wrench
  3
  G10017 Allen Wrench 6mm
  G30017 Allen Wrench 5mm
  G10013 Allen Wrench 4mm
  G10012 Allen Wrench 3mm
  4 G81031 Speed Wrench
  5 (M36) Speed Wrench
  6 G18001 2.0mm Wire Tensioner

Rod to Pin

- 1 Rod to Pin Fixator

Components / Replacements & Template

- 2 Rods
  3 ZS2001
  D6025 14mm Rod Clip Clamp
  4 ZS1002
  D6029 14mm Pin Clip Clamp
  5 D6028 6mm Rod to Pin / Rod Clamp

Instrumentation

- 6 G30017 Allen Wrench 5mm

BFIX™
External Fixator

TK - Ring System

- 1 HA3
  H715 Deformity Corrcetion Fixator (80mm)
  H716 Deformity Corrcetion Fixator (100mm)
  H717 Deformity Corrcetion Fixator (120mm)
  H718 Deformity Corrcetion Fixator (130mm)
  H719 Deformity Corrcetion Fixator (140mm)
  H720 Deformity Corrcetion Fixator (150mm)
  H721 Deformity Corrcetion Fixator (160mm)
  H722 Deformity Corrcetion Fixator (170mm)
  H723 Deformity Corrcetion Fixator (180mm)
  H724 Deformity Corrcetion Fixator (200mm)
  H725 Deformity Corrcetion Fixator (220mm)
  H726 Deformity Corrcetion Fixator (240mm)

External Supports

- 2
  H7019 Ring 150mm
  H7020 Ring 160mm
  H7021 Ring 170mm
  H7022 Ring 180mm
  H7023 Ring 200mm
  H7024 Ring 220mm
  H7025 Ring 240mm
  3
  1/2 Rings
  HA2005 Half Ring Ø 120mm
  HA2005 Half Ring Ø 150mm
  HA2005 Half Ring Ø 170mm
  HA2005 Half Ring Ø 200mm
  4
  H7040 Foot Ring 120mm
  H7043 Foot Ring 150mm

External Fixator

TK - Ring System
Hinges, Distractors, and Connections

- 1 (M38) Universal Hinge
  2 HA2001
  H7122 Inline Hinge
  H7123 Outboard Hinge
  3
  H7050-001 20mm Plate
  H7050-002 30mm Plate
  H7050-003 40mm Plate
  H7050-004 50mm Plate
  4
  H7211 Self-Lengthen Rod Distractor-70mm
  H7212 Self-Lengthen Rod Distractor-100mm
  H7213 Self-Lengthen Rod Distractor-150mm
  H7214 Self-Lengthen Rod Distractor-200mm
  5 H7231 Oblique Support Rod
  6 HA1001
  H7140 Threaded Rod 60mm
  H7142 Threaded Rod 110mm
  H7144 Threaded Rod 150mm
  H7146 Threaded Rod 200mm
  H7148 Threaded Rod 300mm
  H7150 Threaded Rod 400mm
  7 ha2002 Angular Distractors
  H7136 (Standard)
  H7137 (Long)

Fixation Elements

- 8 Bayonet Wire With Stopper
  9 K Wire   1.8mm x 400mm
  10 H7124 Pin Bolt
  11 (M40) Half Pin Fixation Bolt
  12
  H7126 1 Hole Post
  H7127 2 Hole Post
  H7128 3 Hole Post
  H7129 4 Hole Post
  13 Bolt
  M6X20 Bolts Length 16mm (set of 10)
  M6X21 Bolts Length 20mm (set of 10)
  M6X22 Bolts Length 24mm (set of 10)
  14 T97.1 Nuts (set of 10)
  15 Covers
  16 (M41) Nut Applicator
  17 Half Pin

Instrumentation

- 18
  G10017 Allen Wrench 6mm
  G30017 Allen Wrench 5mm
  G10013 Allen Wrench 4mm
  G10012 Allen Wrench 3mm
  19 G81031 Speed Wrench
  20 G521061 Wrench With Double Open Ends
  21 G18001 2.0mm Wire Tensioner

BFIX™

External Fixator

Transknee Fixator System

- 1
  308 Transknee Fixator (L.R.S.)
  Consisting of:
  1 2/3 ring, 1 ring clamp,
  1 L.R.S. Transknee body
  2/3 ring
  H7001 inner Ø 150
  H7002 inner Ø 175
  H7003 inner Ø 190
  H7135 inner Ø 120
  2 D309 Transknee Fixator (Rod to Pin)
  Consisting of:
  1 Rod to Pin Transknee body,
  5 14mm Pin Clip Clamp (Peek Rod)

ORTHOPAEDICS

BFIX™
External Fixator

Bone Screws, Self Tapping Screw

Screw Code	Shaft	Thread Length	Total Length	Thread
PLT6050220 (5060)	6 mm	50 mm	220 mm	50-60 mm
PLT6060220 (5060)	6 mm	60 mm	220 mm	50-60 mm
PLT6070220 (5060)	6 mm	70 mm	220 mm	50-60 mm
PLT6050200 (5060)	6 mm	50 mm	200 mm	50-60 mm
PLT6070200 (5060)	6 mm	70 mm	200 mm	50-60 mm
PLT6040200 (5060)	6 mm	40 mm	200 mm	50-60 mm
PLT6030200 (5060)	6 mm	30 mm	200 mm	50-60 mm
PLT6060200 (5060)	6 mm	60 mm	200 mm	50-60 mm
PLT6060190 (5060)	6 mm	60 mm	190 mm	50-60 mm
PLT6050190 (5060)	6 mm	50 mm	190 mm	50-60 mm
PLT6050180 (5060)	6 mm	50 mm	180 mm	50-60 mm
PLT6060180 (5060)	6 mm	60 mm	180 mm	50-60 mm
PLT6070180 (5060)	6 mm	70 mm	180 mm	50-60 mm
PLT6040180 (5060)	6 mm	40 mm	180 mm	50-60 mm
PLT6030180 (5060)	6 mm	30 mm	180 mm	50-60 mm
PLT6040170 (5060)	6 mm	40 mm	170 mm	50-60 mm
PLT6030150 (5060)	6 mm	30 mm	150 mm	50-60 mm
PLT6040150 (5060)	6 mm	40 mm	150 mm	50-60 mm
PLT6050150 (5060)	6 mm	50 mm	150 mm	50-60 mm
PLT6060150 (5060)	6 mm	60 mm	150 mm	50-60 mm
PLT6070150 (5060)	6 mm	70 mm	150 mm	50-60 mm
PLT6050130 (5060)	6 mm	50 mm	130 mm	50-60 mm
PLT6040130 (5060)	6 mm	40 mm	130 mm	50-60 mm
PLT6030120 (3545)	6 mm	30 mm	120 mm	35-45 mm
PLT6040120 (5060)	6 mm	40 mm	120 mm	50-60 mm
PLT6040120 (3545)	6 mm	40 mm	120 mm	35-45 mm
PLT6050120 (5060)	6 mm	50 mm	120 mm	50-60 mm
PLT6040110 (3545)	6 mm	40 mm	110 mm	35-45 mm
PLT6030110 (5060)	6 mm	30 mm	110 mm	50-60 mm
PLT6040110 (5060)	6 mm	40 mm	110 mm	50-60 mm
PLT6030100 (5060)	6 mm	30 mm	100 mm	50-60 mm
PLT6030100 (3545)	6 mm	30 mm	100 mm	35-45 mm
PLT6050100 (5060)	6 mm	50 mm	100 mm	50-60 mm
PLT6040100 (3545)	6 mm	40 mm	100 mm	35-45 mm
PLT6040100 (5060)	6 mm	40 mm	100 mm	50-60 mm
PLT6030100 (4045)	6 mm	30 mm	100 mm	40-45 mm
PLT6020100 (3540)	6 mm	20 mm	100 mm	35-40 mm
PLT6040100 (4045)	6 mm	40 mm	100 mm	40-45 mm
PLT603090 (5060)	6 mm	30 mm	90 mm	50-60 mm
PLT603580 (3235)	6 mm	35 mm	80 mm	32-35 mm
PLT603080 (3235)	6 mm	30 mm	80 mm	32-35 mm
PLT602080 (3540)	6 mm	20 mm	80 mm	35-40 mm
PLT403580 (2530)	4 mm	35 mm	80 mm	25-30 mm
PLT602070 (3235)	6 mm	20 mm	70 mm	32-35 mm
PLT402070 (2530)	4 mm	20 mm	70 mm	25-30 mm
PLT402070 (3033)	4 mm	20 mm	70 mm	30-33 mm

BFIX™
External Fixator

Bone Screws, Hydroxyapatite Screw

Screw Code	Shaft	Thread Length	Total Length	Thread
HA1-PLT6050180 (5060)	6 mm	50 mm	180 mm	50-60 mm
HA1-PLT6040170 (5060)	6 mm	40 mm	170 mm	50-60 mm
HA1-PLT6030150 (5060)	6 mm	30 mm	150 mm	50-60 mm
HA1-PLT6040150 (5060)	6 mm	40 mm	150 mm	50-60 mm
HA1-PLT6050130 (5060)	6 mm	50 mm	130 mm	50-60 mm
HA1-PLT6040130 (5060)	6 mm	40 mm	130 mm	50-60 mm
HA1-PLT6030120 (3545)	6 mm	30 mm	120 mm	35-40 mm
HA1-PLT6030110 (5060)	6 mm	30 mm	110 mm	50-60 mm
HA1-PLT403580 (2530)	4 mm	35 mm	80 mm	25-30 mm
HA1-PLT402070 (2530)	4 mm	20 mm	70 mm	25-30 mm

Bone Screws, Self Drilling Screw

Screw Code	Shaft	Thread Length	Total Length	Thread
ZLO6080250 (5060)	6 mm	80 mm	250 mm	50-60 mm
ZLO6060220 (5060)	6 mm	60 mm	220 mm	50-60 mm
ZLO6040220 (5060)	6 mm	40 mm	220 mm	50-60 mm
ZLO6050200 (5060)	6 mm	50 mm	200 mm	50-60 mm
ZLO6060150 (5660)	6 mm	60 mm	150 mm	56-60 mm
ZLO6050150 (5660)	6 mm	50 mm	150 mm	56-60 mm
ZLO6040150 (5660)	6 mm	40 mm	150 mm	56-60 mm
ZLO6040150 (5060)	6 mm	40 mm	150 mm	50-60 mm
ZLO6050150 (5060)	6 mm	50 mm	150 mm	50-60 mm
ZLO6050140 (5060)	6 mm	50 mm	140 mm	50-60 mm
ZLO6050130 (5060)	6 mm	50 mm	130 mm	50-60 mm
ZLO6040120 (3545)	6 mm	40 mm	120 mm	35-45 mm
ZLO6050120 (5060)	6 mm	50 mm	120 mm	50-60 mm
ZLO4030100 (3033)	4 mm	30 mm	100 mm	30-33 mm
ZLO3030100 (2530)	3 mm	30 mm	100 mm	25-30 mm
ZLO403580 (3033)	4 mm	35 mm	80 mm	30-33 mm
ZLO403070 (3033)	4 mm	30 mm	70 mm	30-33 mm
ZLO303070 (2530)	3 mm	50 mm	70 mm	25-30 mm
ZLO302070 (2530)	3 mm	20 mm	70 mm	25-30 mm
ZLO301570 (2530)	3 mm	15 mm	70 mm	25-30 mm
ZLO301850 (2530)	3 mm	18 mm	50 mm	25-30 mm
ZLO302045 (2025)	3 mm	20 mm	45 mm	20-25 mm

ORTHOPAEDICS

BFIX™
External Fixator

Upper Limbs : Rod & Instruments

ZS9 Upper Limbs

- 1 ZS92001 Rod to rod coupling
  2 ZS92002 Pin to rod coupling
  3 ZS92012 Inverted pin to rod coupling
  4 ZS92003 Double pin to rod coupling
  5 ZS92013 Inverted Double pin to rod coupling
  6 ZS91004 5 hole pin clamp
  7 ZS91002 Multi-pin clamp
  8 ZS91003 Joint Clamp
  9 ZS93003 30°angled post
  10 ZS93001 Straight post
  11 ZS99001 Connecting rod for elbow (short)
  12 ZS99002 Connecting rod for elbow (long)
  13 ZS99003 Connecting rod for wrist
  14
  ZS95050 SS connecting rod Ø 5x50
  ZS95100 SS connecting rod Ø 5x100
  ZS95150 SS connecting rod Ø 5x150
  ZS95200 SS connecting rod Ø 5x200
  ZS95250 SS connecting rod Ø 5x250
  15
  ZS96050 Carbon connecting rod Ø 5x50
  ZS96100 Carbon connecting rod Ø 5x100
  ZS96150 Carbon connecting rod Ø 5x150
  ZS96200 Carbon connecting rod Ø 5x200
  ZS96250 Carbon connecting rod Ø 5x250
  16
  ZS97001 Semi-circlar rod (S)
  ZS97002 Semi-circlar rod (M)
  ZS97003 Semi-circlar rod (L)
  17 G20002 Hex pin driver
  18 G20004 Guide for pin
  19 G20006-01 Thumbwheel
  20 G20010 T-wrench
  21 G20008 Reduction wrench
  22 G20012 Multi-pin insertion guide
  23 G20014 Manual drill handle

BFIX™

External Fixator

Lower Limbs : Rod & Instruments

ZS8 Lower Limbs

- 1 ZS82001 Rod to rod coupling
  2 ZS82002 Pin to rod coupling
  3 ZS82012 Inverted pin to rod coupling
  4 ZS82003 Double pin to rod coupling
  5 ZS82013 Inverted double pin to rod coupling
  6 ZS81001 5 hole pin clamp
  7 ZS81002 Multi-pin clamp
  8 ZS8001 Dynamization tube (single)
  9 ZS83003 30°angled post
  10 ZS83001 Straight post
  11 ZS89003 Connecting rod for elbow (short)
  12 ZS88004 Compression / distraction tube (M)
  ZS88014 Compression rod to pin coupling
  13 ZS88021 Adjustable tube (short)
  ZS88022 Adjustable tube (long)
  14 ZS89001 Connecting rod for knee (L)
  ZS89002 Connecting rod for knee (R)
  15 ZS84150 AL Connecting rod Ø 8x150
  ZS84200 AL Connecting rod Ø 8x200
  ZS84250 AL Connecting rod Ø 8x250
  ZS84300 AL Connecting rod Ø 8x300
  ZS84350 AL Connecting rod Ø 8x350
  ZS84400 AL Connecting rod Ø 8x400
  16 ZS86150 Carbon Connecting rod Ø 8x150
  ZS86200 Carbon Connecting rod Ø 8x200
  ZS86250 Carbon Connecting rod Ø 8x250
  ZS86300 Carbon Connecting rod Ø 8x300
  ZS86350 Carbon Connecting rod Ø 8x350
  ZS86400 Carbon Connecting rod Ø 8x400
  17 ZS87001 Semi-circlar rod (S)
  ZS87002 Semi-circlar rod (M)
  ZS87003 Semi-circlar rod (L)
  18 G20001 Hex pin driver
  19 G20005 Guide for pin
  20 G20006-2 Thumbwheel
  21 G20010 T-wrench
  22 G20009 Reduction wrench
  23 G20012 Multi-pin insertion guide
  24 G20011 Tourque limited wrench
  25 G20014 Manual drill handle
  26 G20017 Pin holder

BFIX™

External Fixator

SK-ZS Universal Set for Upper Limbs

SK-ZS Universal Set for Lower Limbs

Smart Mini System

- 1 ZS102001 Rod to rod coupling
  2 ZS102002 Pin to rod coupling
  3 ZS102012 Inverted pin to rod coupling
  4 ZS102003 Double pin to rod coupling
  5 ZS102013 Inverted double pin to rod coupling
  6 ZS102002 Multi-pin clamp
  7 ZS106050 Carbon connection rod Ø 3x50
  ZS106100 Carbon connection rod Ø 3x100
  ZS106150 Carbon connection rod Ø 3x150
  8 ZS92001 Rod to rod coupling x4
  ZS92002 Pin to rod coupling x2
  ZS92012 Inverted pin to rod coupling x2
  ZS92003 Double pin to rod coupling x2
  ZS92013 Inverted double pin to rod coupling x2
  ZS91004 4 hole pin clamp x2
  ZS93003 30°angled post x2

Smart Mini System

- 8 ZS93001 Straight post x4
  ZS95050 SS connecting rod Ø 5x50 x1
  ZS95100 SS connecting rod Ø 5x100 x1
  ZS95150 SS connecting rod Ø 5x150 x1
  ZS95200 SS connecting rod Ø 5x200 x1
  ZS95250 SS connecting rod Ø 5x250 x1
  ZS97001 Semi-circlar rod (S) x1
  ZS97002 Semi-circlar rod (M) x1
  ZS97003 Semi-circlar rod (L) x1
  ZS99003 Connecting rod for wrist x1
  ZSA30-100 3.0x100mm pin x2
  ZSA40-120 4.0x120mm pin x2
  G20002 Hex pin driver (upper limbs) x1
  G20004 Guide for pin 5mm x1
  G20006-01 Thumbwheel x1
  G20008 Reduction wrench (upper limbs) x2
  G20010 T-wrench x1
  G20012 Multi-pin insertion guide x1
  G20014 Manual drill handle x1
  G20015 Pin holder 3mm x1
  G20016 Pin holder 4mm x1
  9 ZS82001 Rod to rod coupling x8
  ZS82002 Pin to rod coupling x2
  ZS82012 Inverted pin to rod coupling x2
  ZS82003 Double pin to rod coupling x2
  ZS82013 Inverted double pin to rod coupling x2
  ZS81001 5 hole pin clamp x3
  ZS83003 30 angled post x6
  ZS83001 Straight post x2
  ZS84200 AL connecting rod Ø 8x200 x1
  ZS84250 AL connecting rod Ø 8x250 x1
  ZS84300 AL connecting rod Ø 8x300 x1
  ZS84350 AL connecting rod Ø 8x350 x1
  ZS87001 Semi-circlar rod (S) x1
  ZS87002 Semi-circlar rod (M) x1
  ZS87003 Semi-circlar rod (L) x1
  ZSA50-150 5.0x150mm pin x10
  ZSA40-120 4.0x120mm pin x6
  G20005 Guide for pin 8mm x1
  G20006-02 Thumbwheel x1
  G20009 Reduction wrench (lower limbs) x2
  G20010 T-wrench x1
  G20012 Multi-pin insertion guide x1
  G20014 Manual drill handle x1
  G20016 Pin holder 4mm x1
  G20017 Pin holder 5mm x1

DISPOSABLES

Anesthesia
Disposable ESU Plate
ECG Electrode
Gastroenterology
Micropipette Tip
Monopolar Pencil
Respirometer
Surgery
Surgical Stapler
Transfusion
Ultrasound Gel
Umbilical Cord Clamp
Urology
Vacuum Tube

Anesthesia
Oxygen Mask, Flexi Mask GS-2020

Features

- Flexi Mask is designed for convenient oxygen therapy.
- Moulded face mask is manufactured from non-toxic, non irritant medical grade PVC.
- Provided with adjustable elastic strap for proper positioning of mask on the nasal area.
- Swivel connector for convenience of attachment to the oxygen tube.
- 210 cm. (7ft) multichannel tube is provided to ensure continuous flow of oxygen.
- Proximal end of tube is fitted with soft funnel shape connector for easy connection to oxygen source.
- Non-sterile, individually packed in poly bag.
- Master Box of 50.

Sizes	Tube Length
Adult	210 cm (7 ft)
Child	210 cm (7 ft)

Anesthesia
Venturi Mask, Oxy Lock GS-2038

Features

- Variable venturi system to ensure accurate concentrations of oxygen with single unit.
- Transparent air entrainment mask with soft anatomical form with easily adjustable elastic strap.
- Wide, adjustable strap for proper positioning of mask on the nasal area.
- Rotating type connector for patient's comfort.
- Unique spring loaded mechanism locks prescribed concentration in place ensuring safety & accuracy.
- 210 cm (7 ft.) multichannel tube provided to ensure continuous flow of oxygen.
- Master box of 50.

Mask Size	Tube Length
Adult	210 cm
Child	210 cm

Romsons

Anesthesia
Micro Mist Nebulizer Set, Aeromist GS-2074

Features

- Soft, clear Aerosol Mask with anatomical form is ideal for long term use.
- Gently rolled, feathered edges with integrated nose bridge for extra comfort.
- Swivel connector for convenience of nebulization in horizontal and vertical position.
- Larger surface area provided by unique convex cone design, ensures maximum capillary action and eliminates medicinal wastage.
- Nebulization rate : 3cc / 10 mins.
- Set consists of : Aerosol Mask, Nebulizer chamber & 210 cm. (7ft) Multichannel tube.
- Master box of 50 pcs.

Power Drool GS-2082

- Nebulizer Chamber.
- T-Shape connector.
- One Mouth Piece.
- 210cm (7ft) long multi channel tubing.

Anesthesia
Oxygen Mask with Reservoir Bag, Hi Mask GS-2044

Features

- High Concentration Oxygen Therapy.
- Equipped with soft, transparent and odour free Mask for greater patient comfort.
- Non return valves provided at inhale and exhale points, prevent carbon dioxide retention.
- Light weight reservoir improves the oxygen efficiency and patient comfort.
- Master box of 50.

Unit consists of

- Mask with Elastic Strap and Non Return Valve.
- Mask Connector with Non Return Valve.
- 600 ml Reservoir capacity.
- 210 cm. (7 ft.) long Multichannel Tube.

Product Code	Reservoir	Tube Length
GS 2044	600 ml	210 cm

Anesthesia
Oxy Set GS-2016

Features

- Oxy-Set is suitable for easy application and efficient administration of oxygen for greater comfort of the patient.
- The system of attachment provides maximum freedom to the patient and leaves the patient's mouth free for nutritional and communication purposes.
- Twin prong / nasal tips are designed to ensure equal volume of oxygen to both the air passages.
- Soft funnel shaped connector facilitates easy connection to the oxygen source.
- Multichannel tube ensures continuous supply of oxygen, even if the tube is accidentally kinked.
- Manufactured from soft, light weight non toxic material.
- Available in sterile and non–sterile options.
- Sterile packed in peelable soft blister pack.
- Box of 20/Master box of 200 (Sterile).
- Non-sterile packed in polybag.
- Master box of 100 (Non-Sterile).

Prong Sizes	Tube Length
Adult	210 cm (7 ft)
Child	210 cm (7 ft)
Infant	210 cm (7 ft)
Neonate	210 cm (7 ft)

Anesthesia
Manual Resuscitators, Resq Bag
GS-2050, GS-2052, GS-2049

Resq Bag GS-2050 (Reusable)

- Resq Bag kit consists of a Silicone Manual Resuscitator, Multichannel Kink Resistant Oxygen Tubing, Reservoir Bag & Silicone Mask.
- Silicone Resuscitator provides excellent bag re-expansion property.
- Pressure limiting valve ensures crucial adjustments for enhanced performance.
- Presence of 360° swivel joint between patient valve and face mask facilitates ease of maneuverability to interface with the patient's posture.
- Autoclavable.
- Box of 1/Master Box of 8.

Resq Bag GS-2052 (Disposable)

- Resq Bag kit consists of a TPE Manual Resuscitator, Multichannel Kink Resistant Oxygen Tubing, Reservoir Bag and Inflatable Mask.
- The Resuscitator supports excellent bag re-expansion property.
- Pressure limiting valve ensures crucial adjustments for enhanced performance.
- Presence of 360° swivel joint between patient valve and face mask & facilitates ease of maneuverability to interface with the patient's posture.
- Box of 1/Master Box of 10.

Silko Mask GS-2049

- 100% Silicone material.
- Spare mask.

Product	Sizes
Resq Bag	Adult
	Child
	Infant
Silko Mask	0, 1, 2
	3, 4, 5

DISPOSABLES

Romsons

Anesthesia
Oropharyngeal Airway, Guedel Airways GS-2012

Features

- Guedel Airways are designed to maintain an unobstructed oropharyngeal airway during or following general anaesthesia and also in patients who are unconscious for other reasons.
- Integral hard bite block avoids airway occlusion and biting of tongue.
- Stepless airway path for easy cleaning / suctioning.
- Bite blocks are colour coded for instant identification of sizes.
- Manufactured from non toxic, non-irritant polymer PE.
- Individually packed in peelable soft blister pack.
- Sterile, ready for use.
- Box of 50/Master box of 400.

Sizes	Colour Code
000	-
00	Blue
0	Black
1	White
2	Green
3	Yellow
4	Red
5	Orange

Anesthesia
Suction Catheter GS-2006, GS-2022, GS-2023, GS-2030

ENDO Bronchial Suction Catheter

- Suction catheters are suitable for removal of secretion from mouth, trachea and bronchial tubes.
- Manufactured from non-toxic non-irritant medical grade PVC.
- Distal end is open with one lateral eye.
- Frozen surface tubing for smooth intubation.
- Colour coded for instant size identification.
- Straight packed in a peelable soft blister
- Sterile, ready to use.
- Box of 100 / master box of 1000

Suction Catheter (Plain)

- Provided with universal funnel shaped connector for safe connection to the standard suction equipment.

Suction Catheter (Thumb Control)

- Provided with "T" type vacuum control valve with thumb control for proper manoeuvring.

Anesthesia
Endotracheal Tube (Plain) GS-2002

Features

- Manufactured from thermosensitive material readily conforming to body contours at body temperature.
- Naso–oral tip Suitable for Nasal / Oral intubation.
- Kink resistant tube minimizes possibility of tube occlusion.
- Radio-opaque line throughout the tube length to facilitate exact location of the tube.
- Proximal end is fitted with standard 15mm connector conforming to ISO-5356-1.
- Single Use, no risk of cross infection.
- Sterile, individually packed in blister pack
- Box of 10/Master box of 100.

Sizes
2.0 mm to 5.0 mm Bore with 0.5 mm stage

Anesthesia
Endotracheal Tube (Cuffed) GS-2004

Features

- Thermo sensitive tube softens at body temperature to conform to the anatomy of the respiratory tract.
- Kink resistant inflation tube ensures patient safety during cuff inflation and deflation.
- Murphy eye has a polished smoothness, assisted by lateral ventilation of airway.
- Low Pressure Cuff reduces the risk of creasing or inflation and minimizes pressure on trachea wall.
- Soft, high volume, low pressure cuff provides an air tight fit between tube and trachea.
- Radio opaque line throughout the length to facilitate exact location of the tube.
- Standard 15mm Connector conforming to ISO-5356-1.
- Conforms to F-29 standards.
- Sterile, individually packed in blister pack.
- Sterile, ready for use.
- Box of 10/Master box of 100.

Sizes
5.0 mm to 10.0 mm Bore with 0.5 mm stage

Romsons

Anesthesia
Epidural Kit GS-2026, GS-2018

Epi Kit GS-2026

- EPIDURAL/TUOHY NEEDLE : Tuohy type needle is provided with clear depth marking for accurate insertion depth reading, polished inner bevel edge minimize the risk of catheter shearing.
- EPIDURAL CATHETER : Closed round soft tip with three lateral eyes.
- LOR SYRINGE : Specially designed syringe suitable for air & saline technique, provides clear identifi cation of epidural space.
- THREADING ASSIST GUIDE : Fits securely into the needle & assists in easy advancement of catheter.
- DETACHABLE CONNECTOR : Separate twist lock connector.
- HYDROPHOBIC FILTER : Hydrophobic 0.2 micron fi lter provides additional safety & control against microbial infections.
- Box of 1/Master Box of 50.

Epi Cath GS-2018

- Epidural catheter is specially designed for continuous anaesthesia and pain relief therapy.
- Catheter is made from unique plasticizer free formulation of polymer with excellent bio-compatibility.
- Flexible & atraumatic soft tip with three lateral eyes.
- Catheter is printed to determine the depth of insertion and accurate placement of catheter in the epidural space.
- Luer lock twist connector.
- Crystal clear catheter with radio opaque line.
- Sterile, individually packed in peelable pack.
- Box of 10/Master box of 400.

Anesthesia
Catheter Mount GS-2040

Features

- Double swivel elbow connector with suction port and cap provides better flexibility, easy accessibility and provides comfort to the patient during suction.
- 15mm I.D./22mm O.D. connector, snugly fits to all tracheal tubes.
- 22mm standard female connector is compatible with all breathing & ventilator circuits.
- Specially designed port at the elbow facilitates suction & gas sampling without disconnecting the breathing circuit.
- Stepless airway path for easy cleaning.
- Collapsible corrugated tubing is inert to all anaesthetic gases & reagents.
- Individually packed in poly bag.
- Box of 20/Master box of 200

![Romsons logo]

Transfusion
I.V Cannula GS-3022, GS-3031

Features

- Kink resistant FEP-Teflon cannula has extremely smooth inner and outer surface to ensure minimum trauma and smooth flow.
- Double tapered moulded cannula tip ensures smooth and less traumatic cannulation.
- Super sharp triple facette bevelled needle is specially designed with two cutting edges for smooth penetration.
- Transparent flashback chamber allows immediate detection of blood.
- Sterile, individually packed in blister pack.

I.V. Cannula, Intra Cath 2 GS-3022

- I.V Cannula with Wing, Injection Port and Luer Lock.
- I.V. Cannula with Injection Port and non return valve is provided for additional medication.
- Injection Port Cap is size colour coded for instant size identifications.
- I.V. Cannula bears three radioopaque stripes for X-Ray detection.
- Sterile, individually packed in peel open blister pack.
- Sizes : 14, 16, 18, 20, 22 & 24 G
- Box of 100/Master box of 1000.

Micron, Neonate I.V. Cannula

- Neonate I.V Cannula with wing and luer lock.
- Sterile, Blister Pack, Tyvek Lid.
- Size : 26G, Length : 19 mm
- Box of 100/ Master box of 1000.

Transfusion
Needle Free Devices, Exteena GS-3048

Features

- Needle free devices prevent thrombotic occlusion in I.V line & inhibit microbial colonization.
- Secure fitment to I.V Cannula, I.V Set, Extension Lines and CVC
- Closed system controls infection / air embolism.
- Swabable port prevents infection and allows safe access.
- Clear ABS body.
- Latex free.
- Based on split septum technology.
- Luer fitment as per ISO Standards.
- Low reverse pressure facilitates easy connection.
- Compatible with MRI.
- Sterile, individually packed in blister pack.

Exteena Duo

- Needle less I.V connector with dual extension for running two lines simultaneously with rotating luer slip lock and two clamps.
- Sterile blister pack, Length of 13cm.
- Low prime volume : 0.6 ml.
- Box of 20/Master box of 200.

DISPOSABLES

Romsons

Transfusion
**RMS Vented Infusion Set, Infusion Set
SS-3060**

Features

- Sharp piercing spike for easy insertion in I.V container.
- Infusion set with built in air vent and bacteria barrier hydrophobic filter.
- Specially designed cylindrical collapsible drip chamber to visualize the flow rate.
- Provided with disc type fluid filter to filter any particulate matters in the I.V fluid.
- Long super smooth kink resistant tubing with efficient roller controller for accurate and unrestricted flow.
- Flash ball type injection port for extra medication.
- Infusion set with drop rate of 20 drops / ml
- Polybag of 25 / Master box of 500.

Tube Length	Drop Rate
150 cm	20 drops / ml

Transflow GS-3063

Features

- Specially designed vented infusion set with latex free "Y" injection site along with needle-prick protection shield.
- Unique rotating type luer-slip-connector.
- Compatible with all infusion pumps.

Transfusion
**RMS Blood Administration Set
Blood Transfusion Set SS-3052**

Features

- Conforms to ISO 1135-4.
- Cylindrical drip chamber provided with 200 micron filter to prevent passage of any clot into the chamber.
- Sharp non-vented spike suitable for blood bags and all type of standard blood containers.
- Available with or without 19 G vein needle.
- Flash ball type injection port for extra medication.
- 150 cm. kink resistant tube.
- Efficient roller controller for accurate adjustment of infusion rate.
- Sterile and individually packed.
- Polybag of 25/Master box of 500.

Romsons

Transfusion
Measured Volume Set, Pedia Drip SS-3058

Features

- Burette type measured volume chamber of 100ml with 10ml overflow limit.
- Micro drip with drop sizes 60 drops per ml.
- Burette chamber is made of biocompatible medical grade transparent polymer, suitable for infusion of all types of fluids.
- Specially designed hanger facilitates the hanging of complete device on the I.V. stand.
- Floating auto shut off valve acts as floating indicator and automatically shuts off the drain path when the chamber gets empty to prevent any air trapping into the fluid line or entering patient's venous system (air embolism).
- Roller controller provides accurate flow control.
- No-Kink device prevents the kinking of tube during transportation.
- Separate injection ports for extra medication and continuous change over.
- Sterile individually ribbon packed.
- Box of 10 / Master box of 100.

Pedia Drip Plus SS-3057

- 100% latex free measured volume set provided with Y-injection site & luer slip connector
- All other features are as above

Transfusion
Central Venous Catheter Kit, Centro GS-3042

Features

- Manufactured from specially formulated and biocompatible PU material.
- Specially designed soft tip catheter to make the insertion easy and non-traumatic.
- Based upon much preferred Seldinger technique.
- Specially designed Guidewire with soft J-tip prevents the perforation and provides good torque to ensure firm insertion.
- Radio-opaque catheter with clear marking, facilitates correct placement.
- Sterile, individually packed in hard blister pack.
- Box of 10/Master box of 20.

Kit consists of

- Soft tip Polyurethane catheter ,"J" tip Guide Wire with dispenser
- "Y" shaped Introducer Needle,Tissue dilator
- Suture wing and clamp fastener, Scalpel
- Extension Line clamp, Syringe 5ml
- Injection site, Hypodermic needle (20G x 25mm)
- Needle sponge

Optional	Sizes
Single Lumen	5 Fr x 20 cm
Double Lumen	5 Fr x 8 cm
	7 Fr x 16 cm
	7 Fr x 20 cm
Triple Lumen	7 Fr x 16 cm
	7 Fr x 20 cm

Romsons

Transfusion
Three Way Stop Cock, Bi-Valve GS-3040

Features

- Three Way Stop Cock is suitable for use during pressure infusion and invasive blood pressure monitoring.
- Comprises of one male luer lock with rotating nut and two female luer lock connectors.
- Clear transparent, polycarbonate lipid resistant body, facilitates easy visualisation of fluid flow.
- Rigid construction with circular flow channel prevents air entrapment.
- Smooth three arm handle is easy to operate and indicates fluid path.
- Universal 6% luer taper facilitates leak proof connection with corresponding devices.
- Male luer lock with rotating nut prevents accidental disconnection.
- Sterile, individually packed in blister pack.
- Box of 50/Master box of 1000.

Residual Vol.	Pressure
<= 0.20 ml	5 bar

Transfusion
Three Way with Tube, Vein O Line GS-3034

Features

- Male luer lock at one end and 3-way stop cock at other end and fits all standard equipment.
- Sterile, individually packed in peelable soft blister pack.
- Length : 10, 50, 100, 150, 200 cm.
- Box of 20/Master box of 200.

Perfusor Line, PM-O-Line GS-3036

Features

- Small bore high pressure extension line.
- Suitable for high pressure monitoring.
- Provided with male and female luer lock at either ends and fits all standard equipment.
- Luer lock provide secure fitment.
- Sterile, individually packed in peelable soft blister pack.
- Lengths available on request.
- Box of 20/Master box of 200.

Romsons

Surgery
Chest Drainage Catheter GS-5010, GS-5034, GS-5011

Features

- Thoracic drainage catheters are most suitable for post operative drainage following cardio-thoracic surgeries.
- Distal end is open with super smooth large eyes to maximise the drainage from the chest.
- Proximal end is fitted with specially designed tapered tongue to provide excellent forceps grip and nontraumatic insertion.
- Catheters are marked at every 2 cm. from the last eye to ascertain the depth of placement.
- Packed with matching size spare connector which facilitates easy connection to drainage system.
- Sterile, ready for use.
- Box of 20/Master box of 200.

Sizes in FG	Length
12	450 mm
16	450 mm
20	450 mm
24	450 mm
28	450 mm
32	450 mm
36	450 mm

Surgery
Thoracic Trocar Catheter GS-5030

Features

- Specially designed for quick non-operative pleural and chest drainage for the relief of chest conditions such as tension pneumothorax.
- Catheter manufactured from medical grade PVC fits snugly over the trocar.
- Blunt yet smooth tip.
- Flat handle facilitates easy manoeuvrability.
- Large, smooth drainage eyes for efficient drainage.
- Markings provided at 5, 10 ,15 & 20 cm from the distal tip help ascertain depth of penetration.
- Proximal end is fitted with tapered connector for easy connection to drainage bottle.
- Sterile, individually double packed in peelable pouch.
- Box of 10/Master box of 100.

Sizes in FG	Length
8	80 mm
10	160 mm
12	160 mm
14	160 mm
16	190 mm
18	350 mm
20	350 mm
24	350 mm
28	350 mm
32	350 mm
36	350 mm

DISPOSABLES

Romsons

Surgery
Tracheostomy Tube Plain, GS-2008

Features

- Made of thermosensitive medical grade PVC which provides sufficient hardness during insertion.
- Being light in weight and non irritant, it avoids inflammation around tracheostomy tube.
- Soft flexible flange.
- 15mm connector can be rotated in 360 degree direction and facilitates safe connection to breathing system.

Product Code	Size in mm
GS 2008	4, 4.5, 5, 6, 7, 7.5, 8, 9, 10

Surgery
Tracheostomy Tube Cuffed, GS-2010

Features

- Made of thermosensitive material.
- Soft low pressure cuff dynamically adjusts the pressure at the point of contact during the breathing cycle.
- Pilot balloon with non return valve facilitates cuff inflation and deflation.
- Radio opaque blue line.
- Soft and flexible flange provided with inner & outer diameter sizes.

Product Code	Size in mm
GS 2010	5, 6, 7, 7.5, 8, 9, 10

Surgery
Yankaur Suction Set GS-5016 A6

Features

- Yankaur Suction Set is suitable for convenient removal of secretions, blood and debris etc peri operatively.
- Complete set is provided with Yankaur suction tip mounted on 2 mtr long ribbed tube, provided with universal connector at both ends.
- Universal connectors are moulded from soft PVC, so as to accommodate the suction tip on one end and all type of connectors of suction apparatus at the other end.
- Ribbed tube is kink resistant and has the strength to withstand the suction.
- Box of 10 / Master box of 100.
- Tube length 200 cm, OD 9.00 mm, ID 6.00 mm, Tip Midi VC.

Surgery
Vaccu Suck Set, Yankaur Suction GS-5016

Features

- Moulded Yankaur suction handle attached with 2.5 mtr long tube.
- Specially designed flexible, kink resistant tube provides unobstructed suction during the prolonged use.
- Soft flexible adaptors at both ends of the tube provides safe grip to the handle as well as at the suction source.
- Vent port is permanently closed with tight fit sleeve, which can be removed with small incision by blade to change over to vent control system.
- Box of 10/Master box of 100.

![Romsons logo]

Surgery
Close Wound Suction Unit, Romo Vac Set
GS-5002

Features

- Suitable to offer surgeons an effective device for close wound drainage under negative pressure postoperatively with the option to use one or two catheters simultaneously.
- Redon drain catheters are provided with size colour coded, radio opaque line and satin smooth eyes.
- Connecting tube is kink resistant and is provided with additional strength to withstand the suction.
- Available in different sizes with catheter matching size curved needle to meet minor,moderate to heavy drainage needs.
- Easy to depress chamber to activate the suction of bellow unit, single handedly.

Unit Consists of

- Bellow unit, Connecting tube with clamp and "Y" connector, Redon Needle (Curved needle) attached to matching size catheter and Spare catheter.
- Curved Needle Length 175 cm for all sizes except FG 8 where it is 90 cm and bellow capacity is 50 ml.
- Sterile, Box of 1.

Sizes in FG	Colour Code
8	Blue
10	Black
12	White
14	Green
16	Orange
18	Red

Surgery
Water Seal Drainage System, Romo Seal
GS-5020, GS-5031, GS-5032

Features

- Available in different capacities.
- Easy to read graduation on the bottle helps to determine the drain volume precisely.
- Clearly marked initial level ensures the under water seal.
- Write on facility on the side of scale helps in monitoring of the drainage volume.
- Separate suction port is provided for connection with the suction unit.
- Kink resistant large bore tubing facilitates unrestricted flow.
- Extra large connector provided to facilitate easy connection to the catheter.
- Unit is provided with metal hangers and floor stand.
- Complete unit is sterile and packed in a box.
- Box of 1/Master box of 10.

Product Code	Capacity
GS 5020	2000 ml
GS 5031	1200 ml
GS 5032	500 ml

Romsons

Urology
Urometer 250 GS-1018-250

Urology
Urometer 500 GS-1018-500

Features

- Specially designed for measurement of hourly urine output.
- Clear and transparent measured volume chamber provides accurate measurement.
- Urine chamber directly attached to the urine bag with overflow facility.
- 150 cm long kink resistant tubing ensures unrestricted flow of urine.
- Completely closed system eliminates the risk of contamination.
- Screw type bottom outlet provided for easy and quick emptying of urine bag.
- Universal tapered connector with sampling port facilitates mid stream urine sampling.
- Sterile and individually packed in a box.
- Box of 1/Master box of 50.

Sizes	Chamber Capacity	Bag Capacity
GS-1018-250 : Standard		
Adult	250 ml	2000 ml

Features

- Closed urine drainage system with graduated chamber to measure the urine output on hourly basis in ICU & CCU's.
- 500 ml transparent chamber has four fine measuring sections to measure the accurate & precise volume of the urine.
- Collection chamber is provided with hydrophobic filter to minimize the risk of urinary tract infection.
- Single handed operation of the valve for emptying all chambers simultaneously.
- Bye pass system is provided to prevent the overflow.
- Two ltr capacity urine collecting bag with clamp & "T" shaped bottom outlet.
- 120 cm long kink resistant tubing ensures unrestricted flow of urine.
- Tapered connector with sampling port facilitates easy & aseptic mid stream urine sampling.
- Flexible fastening strap for easy hanging to bed side.
- Sterile, individually packed in box.
- Box of 1/Master box of 20.

Chamber Capacity	500 ml
Length of Tube	120 cm

Romsons

Urology
Urine Collecting Bags, Urine Bag GS-1020

Features

- Closed urine drainage system for short and long term use.
- Manufactured from soft clinical grade PVC sheeting.
- Reinforced eyelets allow easy hanging and provide maximum protection against tearing.
- Push / Pull type bottom outlet allows convenient emptying.
- Kink resistant 90cm tube provided with universal tapered connector.
- Easy to read scale for quick determination of urine volume.
- Sterile individually packed, Pack of 25 / Master box of 250.
- Non sterile bulk pack, Box of 200 / Master box of 400.

Capacity	Tube length
2000 ml	90 cm

Urology
Urine Leg Bag GS-1024

Features

- Suitable for day and night use for incontinence.
- Manufactured from soft clinical grade PVC sheeting.
- Available with "T" type bottom outlet.
- Non-return valve to prevent the back flow of urine.
- Printed with easy to read scale.
- Convenient for tying on thigh with optional elastic straps.
- Supplied As : Sterile, individually packed. Box of 10/Master box of 200.
- Non sterile bulk pack. Master box of 200.

Sizes	
Capacity : 750 ml	
Product Code	**Tube Length**
GS 1024 A	10 cm
GS 1024 B	30 cm
GS 1024 C	40 cm
Capacity : 500 ml	
Product Code	**Tube Length**
GS 1024 D	10 cm
GS 1024 E	30 cm
GS 1024 F	40 cm

Optional : Elastic Strap

Romsons

Urology
Foley Balloon Catheter 2 Way GS-1072

Features

- Symmetrical large capacity balloon ensuring a straight tip for proper flow and good sphincter action, thus preventing bladder leakage.
- Manufactured from natural rubber coated with silicone to eliminate the risk of encrustation.
- Coned distal end provided with burr free eyes for atraumatic intubation.
- Hard valve ensures easy inflation and deflation of balloon.
- Colour coded for instant size identification.
- Sterile, individually packed in peelable pack.
- Box of 50/Master box of 500.

Sizes in FG	Balloon Capacity
8	3-5 ml/cc
10	3-5 ml/cc
12	15-30 ml/cc
14	15-30 ml/cc
16	30-45 ml/cc
18	30-45 ml/cc
20	30-45 ml/cc
22	30-45 ml/cc
24	30-45 ml/cc

Urology
Male Catheter GS-1010

Features

- Male Cath is specially designed for urine incontinence for day and night use in male patients.
- Manufactured from 100% latex for soft and gentle feel.
- Provided with soft adhesive coated strip for proper fixation.
- Proximal end is tubular shaped, designed for safe and easy connection to the urine bag or leg bag.
- Individually packed in peelable soft blister pack.
- Sterile, ready for use.
- Box of 50/Master box of 500.

Sizes	
Small	20 mm
Medium	25 mm
Large	30 mm
Extra Large	35 mm

![Romsons logo]

Urology
Urine Drainage Catheter, Nelaton Catheter
GS-1004

Gastroenterology
Nasogastric Tube, Romolene GS-4032

Features

- Nelaton catheters are used for short term bladder catheterisation.
- Manufactured from non-toxic, non-irritant medical grade PVC compatible with catheter lubricants.
- Frozen surface tubing for super smooth intubation.
- Presence of radio opaque line throughout the catheter tube.
- Distal end is coned for non-traumatic introduction with two lateral eyes for efficient drainage.
- Proximal end is fitted with universal funnel shaped connector for extension.
- Funnel shape connectors are colour coded for instant identification of sizes.
- Straight packed in peelable soft blister pack.
- Sterile, ready for use.
- Available in male and female versions.
- Box of 100/Master box of 1000.

Features

- Suitable for nasogastric introduction, for nutritional purposes or aspiration of intestinal secretions.
- Manufactured from medical grade PVC.
- Super smooth, low friction surface facilitates easy intubation and reduces the incidence of nasal discharge.
- Radio opaque line is provided throughout the length.
- Proximal end is provided with universal funnel shaped connector.
- Sterile, soft peelable blister pack.
- Marked at 50, 60 & 70 cm.
- Box of 50/Master box of 500

Sizes in FG	Colour Code
8	Blue
10	Black
12	White
14	Green
16	Orange
18	Red
20	Yellow
Effective Length : 102 cm	Total Length : 105 cm

Sizes in FG	Colour Code
6	Sea Green
8	Blue
10	Black
12	White
14	Green
16	Orange
18	Red
20	Yellow
22	Violet
24	BLue
Male	Effective Length : 37 cm / Total Length : 40 cm
Female	Effective Length : 17 cm / Total Length : 20 cm

Romsons

Gastroenterology
Infant Feeding Tube GS-4008

Features

- Manufactured from DEHP free PVC.
- Suitable in neonatal and paediatric enteral nutritional feeding.
- Distal end is coned with two lateral eyes.
- Proximal end with female luer mount for easy connection to enteral feeding bag connector or luer mount/luer slip syringe.
- Tube is marked at 20 cm from the tip.
- Low friction tubing and super smooth tip ensures trauma free intubation.
- Provided with radio opaque line to facilitate accurate location.
- Sterile, straight packed in peelable soft blister pack.
- Box of 100/Master box of 2000.

Sizes in FG	Colour Code
4	Clear
5	Grey
6	Green
7	Clear
8	Blue
9	Orange
10	Black
Effective Length : 50 cm	Total Length : 52 cm

Gastroenterology
Feeding Bag GS-4028

Features

- Specially designed 1.2 Lit. capacity bag for feeding purpose.
- An ice pouch is provided with the bag for preserving the food for longer period.
- A transfer set is directly connected to the bag for easy feeding.
- Roller controller is provided to control the flow at which food is going to the patient.
- A hanger is provided with bag for easy handling.
- Sterile, individually packed in peelable pouch
- Box of 5/Master Box of 50

Miscellaneous
Infant Mucus Extracting Device, Mucus Extractor GS-5018

Features

- Used for aspiration of secretion from oropharynx in newly born babies to ensure free respiration.
- Clear transparent container permits immediate visual examination of the aspirate.
- Also suitable for obtaining mucus specimen for microbiological examination.
- Spare plug cap is provided to seal the container for safe transportation of specimen to the laboratory for aseptic disposal of container.
- Low friction surface catheter is provided with open end silk smooth round tip, for trauma free insertion.
- Individually packed in peelable soft blister pack for aseptic handling.
- Sterile, ready for use.
- Box of 20/Master box of 400.

Romsons

Miscellaneous
Breathing Exerciser, Respirometer GS-6018

Features

- Innovative system to exercise respiration through inspiration.
- Specially designed with three stage chambers to provide more efficient exercise to patient on a step up basis.
- Device is composed of base and central part divided into three chambers containing three small spheres of different size and colour.
- Three spheres rise proportionately to the inspiration exerted.
- It can be dismantled for cleaning and disinfection.
- Box of 1/Master box of 20.

Miscellaneous
Umbilical Cord Clamp GS-5084

Features

- Suitable for clamping the umbilical cord of new born baby, immediately after birth.
- Provided with dual security lock with distinct "click" to indicate the correct locking.
- Finger grip ensures safe and convenient handling, particularly when gloves are wet.
- Provided with grooves all along the length to prevent the slipping of umbilical cord and retain it in the same position.
- Manufactured from non toxic medical grade polymer.
- Supplied in blue colour.
- Individually packed in blister pack.
- Sterile, ready for use.
- Box of 100/Master box of 4000.

ENDO INDONESIA

Micropipette Tip

Compatible

- Micropipette is a device used to move liquids in small quantities accurately.
- Compatible : Eppendorf blue, white and yellows tips.

DISPOSABLES

WASTON 华森
MEDICAL

Surgical Stapler
Disposable Circular Stapler III

Features

- Stronger penetrability
- Specification can be known at a glance
- Fool-firing position
- The special design of the outer ring prevent anastomotic tissue from excessive squeezing.
- If there's no edema of the tissue, the red pointer in the safety window must be aligned with the center line of the green zone before firing.
- 36 three-row titanium staples around can effectively close the tissue. The sharp circular knife can effectively cut.
- B-type staple with slightly incurved feet make the anastomotic a higher tensile strength.

Surgical Stapler
Disposable Linear Cutter

Advantages

- The cutter can be replaced to ensure the sharp cutting. Meanwhile, it can reduce the possibility of implantation metastasis in the tumor resection.
- The tissue space controlling mechanism is in favor of parallel closing and smoother firing.
- The staple line is longer than the cutting line for effectively avoiding errhysis.
- It can prevent the medical care personnel from being hurt by the cutter. Also, it prevents a used reloading unit from being refired.
- Both sides of the cutter can fire, which makes the operation more flexible.
- With the quick release button, you can easily start the instrument.

Surgical Stapler
Disposable PPH Stapler III

Features

- This type of three-row PPH stapler comes with exceptional hemostatic effect. Anastomotic wound is dry and has no bleeding after firing. No longer need to manually suture absence of special circumstances.
- The PPH stapler cartridge arrangement is more compact and its outermost surface has a special design.
- With 48 three-row titanium screws, the tissue can be closed with effect.
- A greater lumen of the staple cartridge can hold more diseased tissue.
- The anvil and guide shaft, both of which are made of stainless steel, make the closing and firing more stable. Under the help of the two symmetrical sutures, the tissue can enter into the equipment.
- The sharp circular knife is highly effective when used for cutting.
- The 0.75mm suture clearance compresses the mucosa that has the best hemostatic effect.
- Fool-firing position is adopted. The stapler can be fired once it has been adjusted to the position shown in the picture.
- After molding, B-type staple with slightly incurved feet make the anastomotic a higher tensile strength.
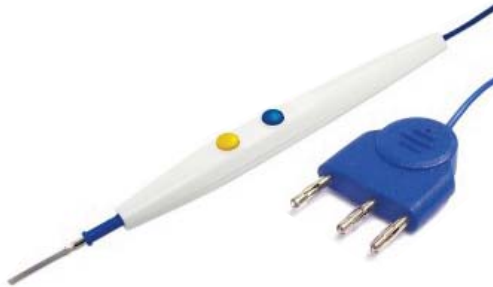
Surgical Stapler
Disposable Auto Linear

Various Type

- Basic Length (±10mm) : 395, 400, 405
- Effective length (±5mm) : 30, 45, 60, 90
- Staple Height (±0,3mm) : 3,8 , 4,5

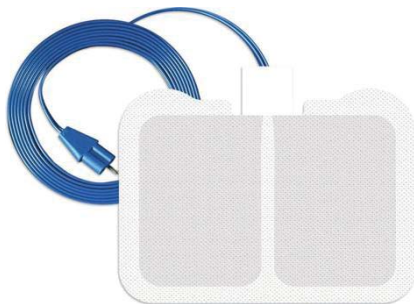
Monopolar Pencil
Electrosurgical Unit : ESU

Features

- The PROPENCIL Electrosurgical Unit Pencils are intended to be used in general electrosurgical appllictions for cutting and coagulating during surgical procedures. Smoke Pencil is used for cutting, coagulation and removing smoke generated during electrosurgery when used in conjunction with an effective smoke evacuation system. It is provided sterile and is intended for single use.
- Compact design
  Providing stable grip with less fatigue and balance of high-quality surgical instrument
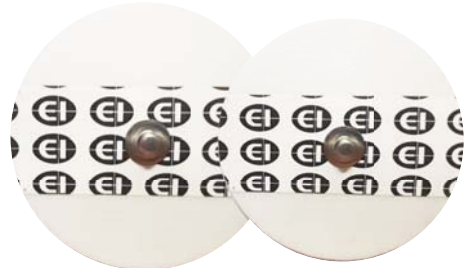
Disposable ESU Plate
Electrosurgical Unit : ESU

Features

- Designed for optimal conductivity and adhesive. Due to the optimal hydro-gel of low impedance characteristics removal of the Hot spot area. Applied biocompatible hydrogel and adhesive. No side effects caused by backing and gel adhesive. Do not need working direction. Used less space than the existing area, the surface of skin of patient maintain high current density distribution. Provide a cost effective.

ECG Electrode
ENDO ECG Electrode Disposable

Features

- ENDO Disposable ECG Electrode, which are used for various ECG test. It uses an Ag/AgCl sensing element and Hydro-gel for adhesion. These are components for sensitive monitoring. Hydro-gel's main advantage is one of reducing movement artifacts by increasing the bond between the skin and the sensing element. The ECG electrode of ENDO ECG fields. An Ag/AgCl sensing element has the best sensitivities and the solid adhesive hydro-gel has very low impedance.

Ultrasound Gel
USG Gel 250 ml & 5 Liter

Features

- Based on the same "can't be copied" formula of the World Standard; Ultrasound Transmission Gel, without fragrance or color. For diagnostic and therapeutic medical ultrasound procedures, like obstetrics, gynecology, digestion urinary and nervous systems, etc.
- No fragrance
- No color / transparent
- Acoustically correct for the broad range of frequencies used
- No formaldehyde
- Hypoallergenic, bacteriostatic, non-irritating
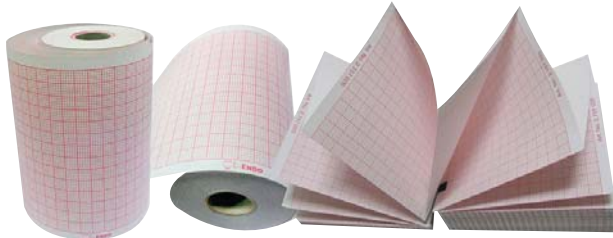
ENDO INDONESIA

Vacuum Tube

Specification

Nama Item	Spesifikasi	Volume	Additive	Qty / Box	Qty / Karton
K2.EDTA 3 mL - Glass	Ø 13x75 mm	3 ml	EDTA K2	100	1800
K2.EDTA 2 mL - Glass	Ø 13x75 mm	2 ml	EDTA K2	100	1800
K3EDTA 3 mL - Glass	Ø 13x75 mm	3 ml	EDTA K3	100	1800
K3EDTA 3 mL - Glass, for Soft Needle	Ø 13x75 mm	3 ml	EDTA K3	100	1800
K3EDTA 3 mL - Plastic	Ø 13x75 mm	3 ml	EDTA K3	100	1800
K3EDTA 2 mL - Glass	Ø 13x75 mm	2 ml	EDTA K3	100	1800
K3EDTA 0.5 mL - Glass		0.5 ml	EDTA K3	100	3000
Plain / Serum 3 mL - Glass	Ø 13x75 mm	3 ml	Plain / No Additive	100	1800
Plain / Serum 3 mL - Plastic	Ø 13x75 mm	3 ml	Plain / No Additive	100	1800
Plain / Serum 5 mL - Glass	Ø 13x75 mm	5 ml	Plain / No Additive	100	1800
Plain / Serum 5 mL - Plastic	Ø 13x75 mm	5 ml	Plain / No Additive	100	1800
Plain / Serum 10 mL - Glass	Ø 16x100mm	10 ml	Plain / No Additive	100	1800
Clot Activator 3 mL - Glass	Ø 13x75 mm	3 ml	Clot Activator	100	1800
Clot Activator 3 mL - Plastic	Ø 13x75 mm	3 ml	Clot Activator	100	1800
Clot Activator 5 mL - Glass	Ø 13x75 mm	5 ml	Clot Activator	100	1800
Clot Activator 5 mL - Glass, for Soft Needle	Ø 13x75 mm	5 ml	Clot Activator	100	1800
Clot Activator 5 mL - Plastic	Ø 13x75 mm	5 ml	Clot Activator	100	1800
Sodium Citrate 1.8 mL - Glass	Ø 13x75 mm	1.8 ml	Sodium Citrate	100	1800
Sodium Citrate 2.7 mL - Glass	Ø 13x75 mm	2.7 ml	Sodium Citrate	100	1800
Sodium Fluoride 3 mL - Glass	Ø 13x75 mm	3 ml	Sodium Fluoride	100	1800
Lithium Heparin 4 mL - Glass	Ø 13x75 mm	4 ml	Heparin Sodium	100	1800
Gel Clot Activator 3 mL - Glass	Ø 13x75 mm	3 ml	Gel & Clot Activator	100	1800
Gel Clot Activator 3 mL - Plastic	Ø 13x75 mm	3 ml	Gel & Clot Activator	100	1800
Gel Clot Activator 5 mL - Glass	Ø 13x75 mm	5 ml	Gel & Clot Activator	100	1800

MEDICAL RECORDING CHART PAPER

ECG / EKG Paper
USG Paper
Audiometer Paper
Auto Refractometer Paper
CTG / NST Paper
Defibrillator Paper
Hematology Analyzer Paper
Patient Monitor Paper
Spirometer Paper
Treadmill Paper
Urine Analyzer Paper

ECG Paper

Treadmill Paper

CTG / NST Paper

Thermal Paper

Tersedia lebih dari 90 tipe paper yang kompatibel dengan merk mesin ECG / CTG di pasaran :

- Biocare
- Bionet
- Biosys
- Bistos
- BTL
- Burdick
- Cardiette / Cardioline
- Corometrics
- Edan Instrument
- Esaote Biomedica
- Fukuda ME / Cardisuny
- Fukuda Denshi
- GE Medical (Mac-400, 600, 1200, 2000)
- Hellige Contrast / Marquette

- Huntleigh
- Innomed
- Kenz Suzuken
- Mediana
- Mortara
- Nihon Kohden
- Phillips / Hewlett Packard
- Quinton
- Schiller
- Sonicaid
- Toitu
- Well Allyn
- Zoll
- Zondan

ECG Paper

NO	MACHINE TYPE	SPECIFICATION	PART NUMBER
1	ECG ROLL - 1 CHANNEL	50MM X 20M	VARIOUS
2	ECG ROLL - 1 CHANNEL	50MM X 30M	VARIOUS
3	ECG ROLL - 1 CHANNEL	58MM X 20M	VARIOUS
4	ECG ROLL - 1 CHANNEL	58MM X 25M	VARIOUS
5	ECG ROLL - 1 CHANNEL	58MM X 30M	VARIOUS
6	ECG ROLL - 3 CHANNEL	63MM X 30M	VARIOUS
7	ECG ROLL - 3 CHANNEL	80MM X 20M	VARIOUS
8	ECG ROLL - 3 CHANNEL	80MM X 25M	VARIOUS
9	ECG ROLL - 3 CHANNEL	80MM X 30M	VARIOUS
10	ECG ROLL - 6 CHANNEL	106MM X 20M	VARIOUS
11	ECG ROLL - 6 CHANNEL	106MM X 30M	VARIOUS
12	ECG ROLL - 6 CHANNEL	110MM X 30M	VARIOUS
13	ECG ROLL - 6 CHANNEL	112MM X 25M	VARIOUS
14	ECG ROLL - 12 CHANNEL	210MM X 25M	VARIOUS
15	ECG ROLL - 12 CHANNEL	210MM X 30M	VARIOUS
16	ECG ROLL - 12 CHANNEL	215MM X 25M	VARIOUS
17	ECG BIOCARE iE6	112MM X 140MM X 160SH	-
18	ECG BIONET CARDIOCARE 2000/3000, CARDIOTOUCH 7	215MM X 25M	-
19	ECG BURDICK SERIES 8, E-800	210MM X 150MM X 300SH	79 82
20	ECG BURDICK E-PLUS ECG 92301	210MM X 300MM X 200SH	79 85
21	ECG BURDICK QUEST, ATRIA 3000	215MM X 280MM X 200SH	79 83 / 79 84
22	ECG BURDICK E600, E350i, ELE 11	215MM X 280MM X 200SH	78 68
23	ECG CARDIETTE CARDIOLINE AR-600	60MM X 15M X 16MM	BLUE ROLL
24	ECG CARDIETTE CARDIOLINE AR-1200	120MM X 110MM X 300SH	660 100 39
25	ECG CARDIETTE CARDIOLINE AR-2100 ADV/VIEW	210MM X 140MM X 200SH	66010045
26	ECG CARDIETTE CARDIOLINE AR-2100 ADV/VIEW	210MM X 280MM X 200SH	66010045
27	ECG EDAN INS. SE-1201	210MM X 140MM X 180SH	-
28	ECG ESAOTE BIOMEDICA P-80	90MM X 70MM X 400SH	96900 29000
29	ECG ESAOTE BIOMEDICA P-8000	80MM X 70MM X 300SH	97404 40041
30	ECG ESAOTE BIOMEDICA P-80 SIX / POWER	210MM X 280MM X 215SH	96900 29100
31	ECG ESAOTE BIOMEDICA ARCHIMED	210MM X 300MM X 200SH	96900 33000
32	ECG FUKUDA ME / CARDISUNY ALPHA-1000	63MM X 100MM X 300SH	063F30-H03
33	ECG FUKUDA ME / CARDISUNY C-320	145MM X 150MM X 400SH	145F60-H05
34	ECG FUKUDA DENSHI FX-101, FX-102	50MM X 75MM X 400SH	OP-115TE
35	ECG FUKUDA DENSHI FX2201X, FX2111	63MM X 75MM X 400SH	OP-122TE
36	ECG FUKUDA DENSHI	63MM X 100MM X 300SH	OP-114TE
37	ECG FUKUDA DENSHI FX7202	110MM X 140MM X 143SH	OP-222TE
38	ECG FUKUDA DENSHI FX3101, FCP131 / 140 / 145	145MM X 30M	OP-358TE
39	ECG HELLIGE CONTRAST / MARQUETTE MAC-400, MAC-600, MAC-i	80MM X 90MM X 280SH	2030887-001
40	ECG HELLIGE CONTRAST / MARQUETTE MAC-500	90MM X 90MM X 360SH	2261 6702
41	ECG HELLIGE CONTRAST / MARQUETTE MAC-800	110MM X 140MM X 200SH	2036970-001
42	ECG HELLIGE CONTRAST / MARQUETTE MAC-1200 ST	215MM X 280MM X 150SH	2261 6606
43	ECG HELLIGE CONTRAST / MARQUETTE MAC-1200	210MM X 295MM X 150SH	2261 6611
44	ECG HEWLETT PACKARD / PHILIPS PAGES WRITERS	210MM X 300MM X 200SH	M1709A

MEDICAL RECORDING CHART PAPER

ECG Paper

NO	MACHINE TYPE	SPECIFICATION	PART NUMBER
45	ECG KENZ SUZUKEN 302	112MM X 30M	R112-27R
46	ECG KENZ SUZUKEN 302, 303	112MM X 90MM X 300SH	R112-27Z
47	ECG KENZ SUZUKEN CARDICO 601	112MM X 90MM X 300SH	R112-27Z-C2
48	ECG KENZ SUZUKEN CARDICO 1210	210MM X 150MM X 200SH	P210-48Z
49	ECG KENZ SUZUKEN CARDICO 1201	210MM X 300MM X 200SH	R210-60Z-D
50	ECG KENZ SUZUKEN CARDICO 1210	210MM X 300MM X 200SH	P210X60 Z-DM
51	ECG MARQUETTE, CASE 12, CENTRA, MAC, VU MAX, MUSE	215MM X 280MM X 300SH	9402-020
52	ECG MEDIANA YM812i	215MM X 280MM X 200SH	YS-M248
53	ECG MINDRAY BENEHEART R12	210MM X 295MM X 100SH	095-002775-00
54	ECG MORTARA ELI-50, ELI-50i	50MM X 70MM X 200SH	9100-001
55	ECG MORTARA ELI-150	108MM X 140MM X 200SH	9100-028-50
56	ECG MORTARA ELI-200	215MM X 280MM X 250SH	9100-07-01
57	ECG MORTARA ELI-250	210MM X 300MM X 250SH	9100-026-51
58	ECG MORTARA ELI-250	215MM X 280MM X 250SH	9100-026
59	ECG MORTARA ELI-250	215MM X 280MM X 250SH	9100-026-50
60	ECG NIHON KOHDEN BSM2300, BSM4100, BSM4103	50MM X 100MM X 300SH	FQW50-3-100
61	ECG NIHON KOHDEN GEM, 9010, 9020, 9022	110MM X 140MM X 143SH	FQW110-2-140
62	ECG NIHON KOHDEN 9320	210MM X 295MM X 250SH	FQW210-10-295
63	ECG NIHON KOHDEN 9110, 9130, 9132	210MM X 140MM X 200SH	FQW210-3-140
64	ECG QUINTON Q-4500E	210MM X 300MM X 200SH	30146-001
65	ECG QUINTON Q-STRESS	210MM X 300MM X 200SH	36868-001
66	ECG QUINTON Q-3000, Q-4000	215MM X 280MM X 200SH	15022-001
67	ECG QUINTON Q-4500	215MM X 280MM X 218SH	18416-001
68	ECG SCHILLER AT-1	90MM X 90MM X 400SH	2157-014
69	ECG SCHILLER AT-101	80MM X 70MM X 300SH	2157-026
70	ECG SCHILLER AT-102	210MM X 280MM X 200SH	2157-025
71	ECG SCHILLER AT-2, CS200	210MM X 280MM X 215SH	2157-017
72	ECG SCHILLER AT-6	145MM X 100MM X 350SH	2157-005
73	ECG SCHILLER AT-10	210MM X 140MM X 250SH	2157-012
74	ECG WELCH ALLYN CP100 / CP200	210MM X 280MM X 200SH	94.01800
75	ECG ZOLL 8000-0300	90MM X 90MM X 200SH	M-SERIES

Plain Paper

NO	MACHINE TYPE	SPECIFICATION	PART NUMBER
76	PLAIN PAPER	50MM X 45MM X 16MM	-
77	PLAIN PAPER	50MM X 50MM X 16MM	-
78	PLAIN PAPER	57MM X 50MM X 12MM	-
79	PLAIN PAPER	110MM X 50MM X 16MM	-

EEG Paper

NO	MACHINE TYPE	SPECIFICATION	PART NUMBER
80	EEG NIHON KOHDEN	245MM X 300MM X 1000SH	FV245-30

MEDICAL RECORDING CHART PAPER

CTG / NST Paper

NO	MACHINE TYPE	SPECIFICATION	PART NUMBER
81	CTG BIOCARE FM-801	112MM X 100MM x 160SH	BC 112100 / 160R
82	CTG BIONET FC-1400	151MM X 25M	-
83	CTG BIONET FC700	215MM X 25M	-
84	CTG BIONICS BFM-900	112MM X 25M	
85	CTG BIOSYS BFM-800	112MM X 120MM X 150SH	-
86	CTG BISTOS BT-350	150MM X 90MM X 150SH	FS151-90-80R-01
87	CTG BISTOS BT-300	130MM X 120MM X 250SH	FS130-120-30R-01
88	CTG BISTOS BT-330	130MM X 120MM X 250SH	FS130-120-30R-A
89	CTG COROMETRICS BAO4305 / DAO4305	152MM X 90MM X 150SH	118/120/145/170/2 120is/150
90	CTG COROMETRICS AAO4305 / BAO4306	152MM X 90MM X 150SH	
91	CTG EDAN INS. CADENCE	112MM X 90MM X 150SH	
92	CTG HUNTLEIGH ACC 15	152MM X 150MM X 200SH	BD3000, BD4000
93	CTG NIHON KOHDEN OFM8001K, 8300K	150MM X 90MM X 300SH	FQS150-2.7-90
94	CTG PHILIPS M1351A, M1353A, M2702A, M2703A	150MM X 100MM X 150SH	M1912A, M1913A
95	CTG SONICAID 8400-8003	142MM X 150MM X 300SH	MERIDIAN-800
96	CTG TOITU 0030-026	152MM X 150MM X 150SH	MT-516
97	CTG ZONDAN DS120B	112MM X 100MM X 160 SH	-

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ENDO MEDICAL RECORDING CHART PAPER

terdiri dari tipe :
ROLL dan
PACK / Z-FOLD

DURICO

USG Video Printer Paper

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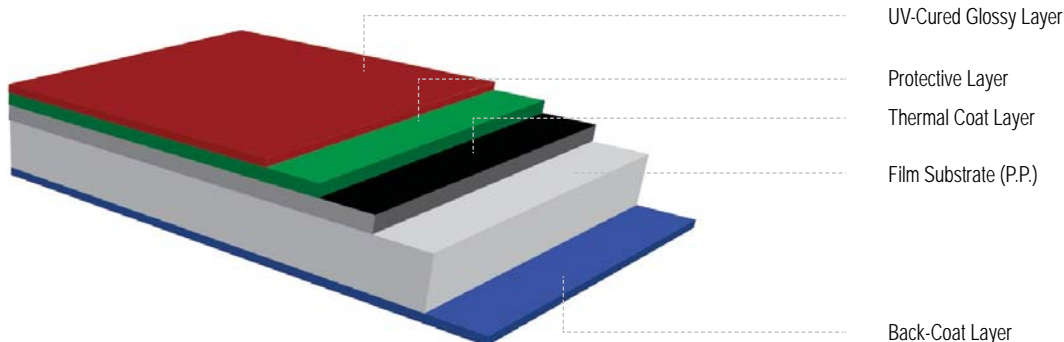| Grade	Size	Durico	Sony	Mitsubishi
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ULSTAR	Other Compatible	ULSTAR	Other Compatible
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- Protective Layer
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