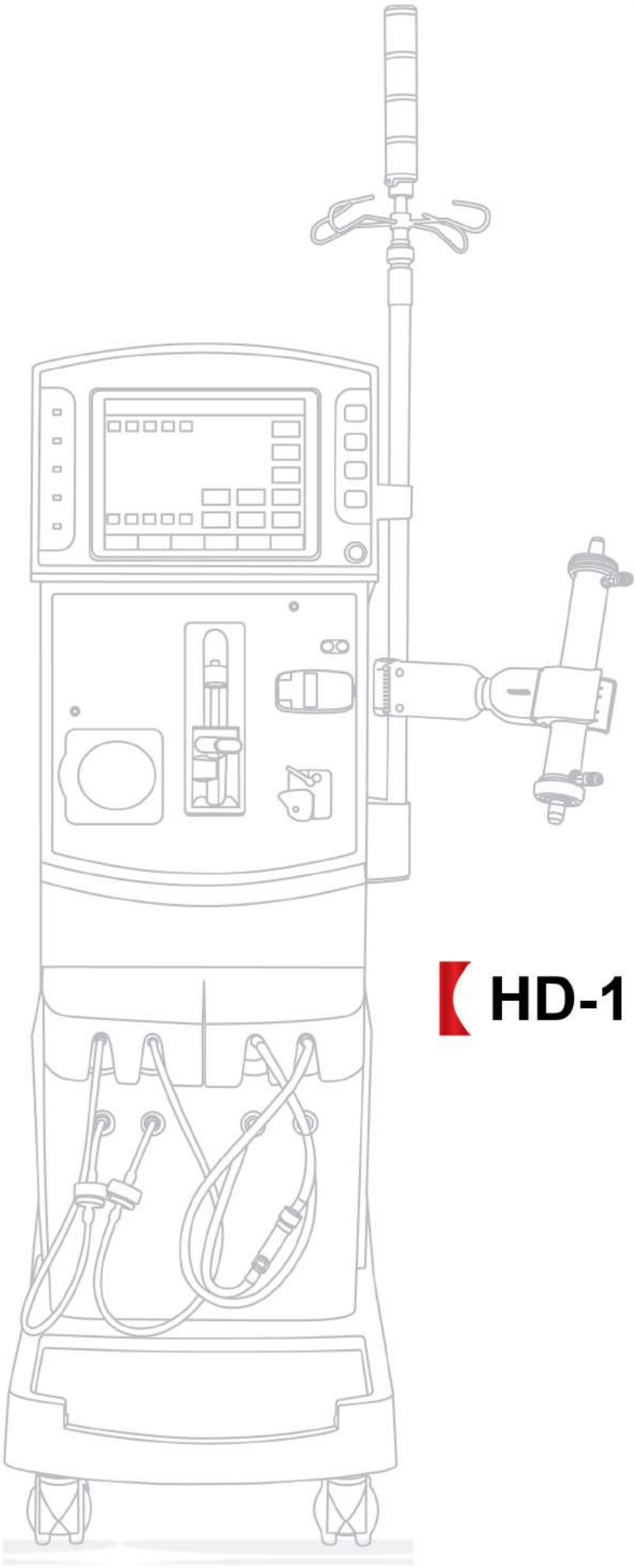
ENDO INDONESIA



HD-1 ENDO HEMODIALYSIS MACHINE

With the accumulated techniques of China first hemodialysis machine manufacturer in China, top public listed medical company and only the one who make hemodialysis products, clinic application hospital network cover all domestic of China.

We are confident at：

Provide most stable hemodialysis machine in China

Output precise data for operation safety

Offer comfortable treatment for patients and easy operation for users

Satisfy customer

Timely response to market needs

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 7.5ml/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.

Features

silicon gel button androtating knob

- 12.1 inch large color LCD touch screen, thumb-size silicon gel button, and unique knob to tune blood pump flow rate, very easy for operation.

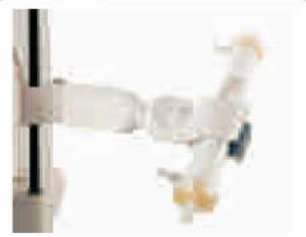
- Intelligent self diagnosis and alarm systemIn the courseof treatment, the machine has self diagnosis and self detection function. Alarm causeis literature and acousto-optic prompted, convenient to remind the clinical staff tocorrect and deal with alarm timely.

- Large capacity system log storage function:
  Including treatmentinfor-mation log, alarm information log, treatment status information log and clean status log.

concentrate A.B tray and lockable castors

- Multi-lingual and open system, compatible to different brand of dialysisconsumables 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.



dialyzer holder

- 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.

Operator friendly interface

12.1 inch wide color touch LCD screenAll monitoring parameters gathered on same interface, moreeasily to check and adjust.

Blood way diagram is showed in treatment viewforbetter understanding running condition of each blood way components.

Setting interface
Password controlled to avoid error caused bymistakenly touch and random operation.

Heat and chemical disinfection

Operator friendly interface

In order to prevent Intradialytic complicationand reduce patient pain, UF profile and Na+ profile are widely used as most important tools for reference and control. Clinic staffcan adjust different time period's UF goal and Na+ volume in dialysis dose to make patient most conformable during dialysis treatment. System has 5 each build -in UF profile and Na+ profile, operator also can set and save his own profile.

Safety

- Control system of key electronic circuit and components adopts dual security control. If one failed to function, another one still fullfil the goal.

Air bubble and blood level detection

- Air bubble and blood level detection
  Air bubble detector can continuously check and catch single air bubble size bigger than 200μL while blood flow rate is 200ml/ min. If there is air bubble bigger than 200μL in blood flow, machine alarms to keep patient from risk of air embolism. If accumulated air is excessive than certain volume in venous drip chamber, then trigger blood level detector, machine alarms, and stops blood pump and UF pump.

- Blood leakage check
  Blood leakage detector continuously check blood hemoglobin in dialyzed waste dialysate. If there are over 1ml blood in 1L accumulated waste dialysate when dialysate flow at 800ml/min, then machine alarms and stops blood pump to avoid patients further losing blood.

Safety

Venous clamp and blood detection

- Venous clamp protect patient safety from machine malfunction and electricity cutWhen machine functions abnormally or electricity is cut, venous clamp responses automatically into close condition and stop blood transfusion in order to guard patient from continuously losing blood in extracorporeal circuit.

- Blood detection
  After blood is driven from patient's body by blood pump, blood detection components detect and automatically make machine run into treatment mode. While after blood return back into patient's body, blood detection components check the tubing. If there is without blood in the tubing, then response and stop the blood pump.

concentrate A.B base with cover

- Supply-return fluid and concentrate A.B base with cover, avoid dirty entering into dialysate access.

- Fluid supply loop and return loop is completely separate disinfected to avoid cross infection and contamination, which make dialysis treatment more safe.

Overhead 360 degree visual alarm light

- Overhead 360 degree visual alarm light
  Easy to be found and seen with distance to shorten the time of solving problem.

- Temperature and conductivity sensor designed to automatically self-check before dialysis treatment.

- Temperature and conductivity probe adopts redundant design, independent collect and analysis data, which make more safe and output more precise data.

- Battery back up: Rechargeable battery keep machine running at least 30 min after electricity cut.24V10A

Technical information

General information

Dimensions: 650x550x1320 mm (W x L x H)
Gross Weight: Appro. 70KG
Power Supply: AC220V±10%, AC110V (optional) 50HZ
Output power: ≤2200W
Water SupplyPressure range: 0.1-0.5 Mpa, Temperature range: 5-30℃
Back-up power supply: last for at least 30 min after electricity cut

Blood way

Blood pump flow rate: 30～500 mL/min, Accuracy:±10 mL/min
Heparin pumprate: 1～10 mL/h, Accuracy:±0.2 mL/h
Bolus: 2.5ml/min (syringe 10ml), 5ml/min (syringe 20ml),
7.5ml/min (syringe 30ml)
Injector size: 10ml/20ml/30ml/50ml(optional)
Venous pressure
Display range: -50～+300 mmhg, Accuracy:±10 mmhg
Arterial pressure
Display range: -300～+400 mmhg, Accuracy:±10 mmhg
Transmembrane pressure
Display range: -100～+600 mmhg, Accuracy:±20 mmhg

Waterway

Dialysate flow rate: 300～500 mL/min linearity adjustable,
Accuracy: -5%～10% mL/min
Dialysate temperature: 33-40℃, Accuracy:±0.5℃
Conductivity range: 12-15.5 ms/cm, Accuracy: ±0.2 ms/cm
UF rate: 50～2000 mL/h, Accuracy:±30 mL/h (±1%)

Alarm and monitoring

Air bubble detector
Infrared check and response threshold value: single air bubble of 200μL exists when blood flow rate is 200ml/min

Blood leak detector

Detecting blood leak ≧1ml/L (dialysate flow: 800ml/min)
Blood level monitor: Ultrasonic sensor

Cleaning and disinfection

Rinse/disinfection: Chemical disinfection(citric acid, peracetic acid)
Hot rinse: 85℃

Treatment modes

Acetate dialysis
Bicarbonate dialysis (fluid bicarbonate concentrate)
ISO UF (sequential UF)
Hemoperfusion (HP)
Plasma Exchange (PE)
UF and Sodium profiles

PT. ENDO INDONESIA
Jl. Raya Menganti No. 14, Wiyung - Surabaya 60223
Tel : (031) 767 3636 | Email : info@endo.id
Fax : (031) 767 3737 | URL : https://endo.id
Toll Free : 0800 177 ENDO (3636)