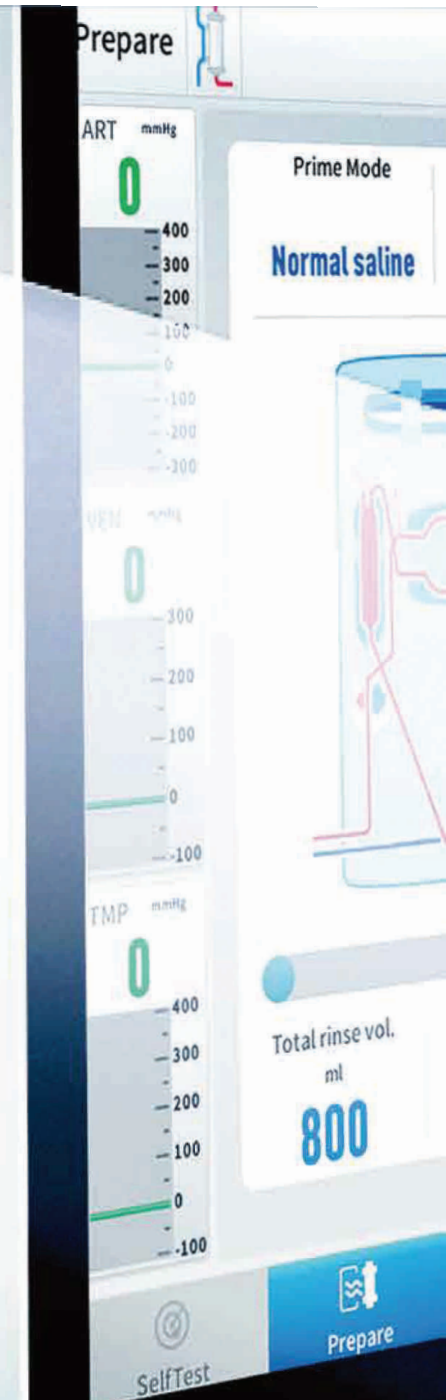


ENDO



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## ENDO HDF-2 Hemodialysis Machine

# PROVIDING HIGH-EFFICIENCY TREATMENT THROUGH ADVANCED TECHNOLOGIES

ENDO HDF-2 series is a hemodialysis system dedicated to Hemodialysis (HD), Hemofiltration (HF), and Hemodiafiltration (HDF) treatment. These new types of systems have an elegant design, simple operation, powerful function, and more importantly, is higher dialysis treatment quality.



## Advanced Therapy Options

ENDO HDF-2 series offers the HD, HF, HDF, IUF, and sequential dilay-sis therapy options.



## Multi-function Heparin Pump

Support 5ml, 10ml, 20ml, 30ml, and 50ml syringes. Automatic syringe-type check.



## High Capacity Battery

Equip with a 10000mAh battery that can continuously operate up to 30min during power outage.



## Leakage Detection \*

Quickly detect the liquid leakage and blood loss.

The \* means it is optional in some of the models.



## ■ MODERN MULTIFUNCTIONAL DESIGN

### Hemodialysis Machine ENDO HDF-2



#### Touchable glass screen

15-inch touch screen provides a perfect visual experience and an easy operation. Corrosion-resistance glass ensures the disinfectant will not cause any damage to the screen.



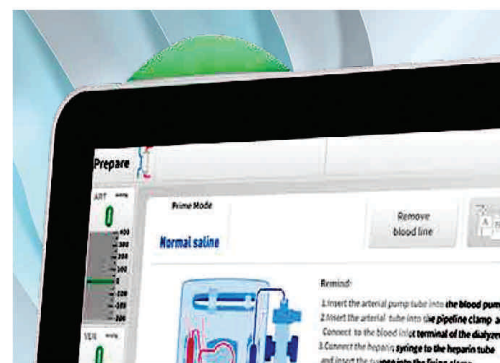
#### Large Accessory tray

ENDO HDF-2 equips a large size accessory tray on the back of the screen. Accessories like cables, blood pressure cuff, and oximeter can be easily placed and used on it.



#### 270° angle rotation

270-degree screen rotation satisfies different angles of demand. It is convenient for the medical staff to operate the machine and watch the screen from different directions.



#### 360° sound light alarm

Three colors sound light alarm is located on the top of the screen. It will be noticed by the medical personnel no matter on which angle.

## ■ ACTION IN AN EARLY STAGE

### Non-invasive blood pressure monitor-BPM\*

Commonly, Hypotension and Hypertension might occur during the dialysis treatment, which will lead to multiple complications. BPM can avoid these acute complications and improve the dialysis quality.



### Oxygen Saturation Monitor-SpO2\*

Oxygen levels will drop 5-23% unnoticeably during dialysis. For the patient with heart and lung problems, monitoring the SpO2 can prevent the cause of unpleasant symptoms.

## ■ BI-CARTRIDGE



The cartridge system reduces the time required for both setup the machine and also the time spent clearing up once dialysis has ended. Also, it gives a more hygienic treatment and reduces the risk of contamination.

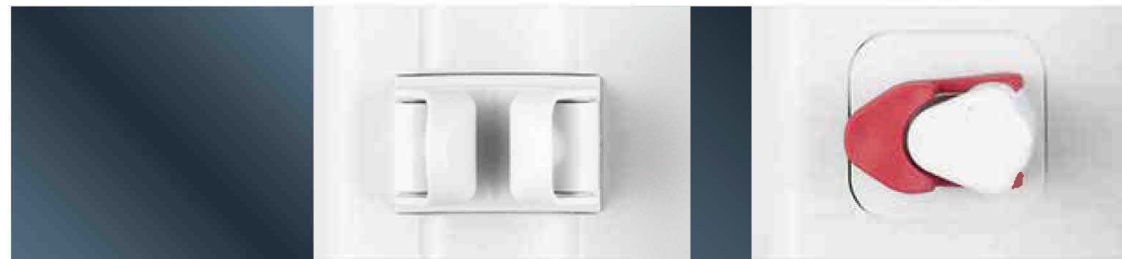
## ■ DUSTPROOF DIALYSATE CIRCUIT

Dialysate circuit dustproof cover protects the pipeline and dialysate away from contaminating, providing more hygienic and safer dialysis treatment to the patients.



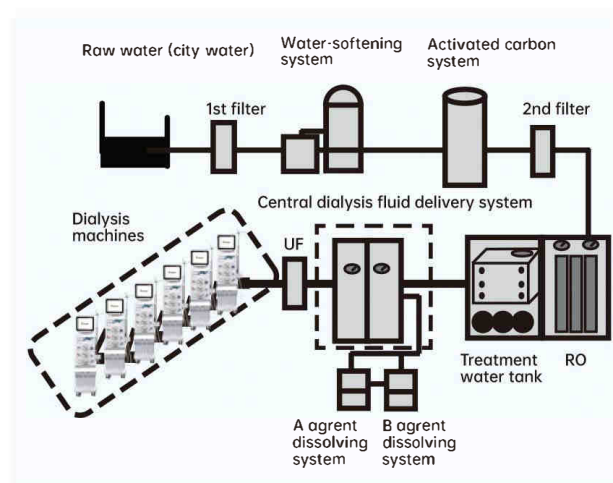
## ■ ARTERY CLAMP \* & ARTERY CHAMBER HOLDER

The machine equips the artery clamp and artery chamber holder to keep the treatment safe. It avoids the situation that put the patient in danger if the chamber falls down or bloodline has knotted.



## ■ CENTRAL DIALYSIS FLUID DELIVERY-CDDS\*

CDDS simplifies the maintenance and supervision involved by enabling the combined management of dialysis fluid for multiple persons, preparation of cleaning and antiseptic solutions, and delivery of these to each dialysis machine. It is a cost-effective, labor-saving, time-tested system with good microbial safety.



## ■ ULTRAPURE DIALYSIS\*

Combining with dialysis fluid filters, the ENDO HDF-2 series can minimize the bacteria, endotoxin, and insoluble particle to implement safe and high-efficient ultrapure dialysis treatment.

## ■ ONLINE HDF

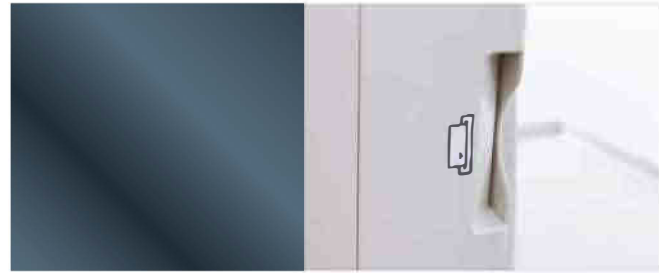
ENDO HDF-2 series provides the substitute fluid online through the double-stage DF210 dialysis fluid filters. It reduces the usage of saline and achieves safe and high-quality HDF treatment.



## PATIENT DATA MANAGEMENT\*

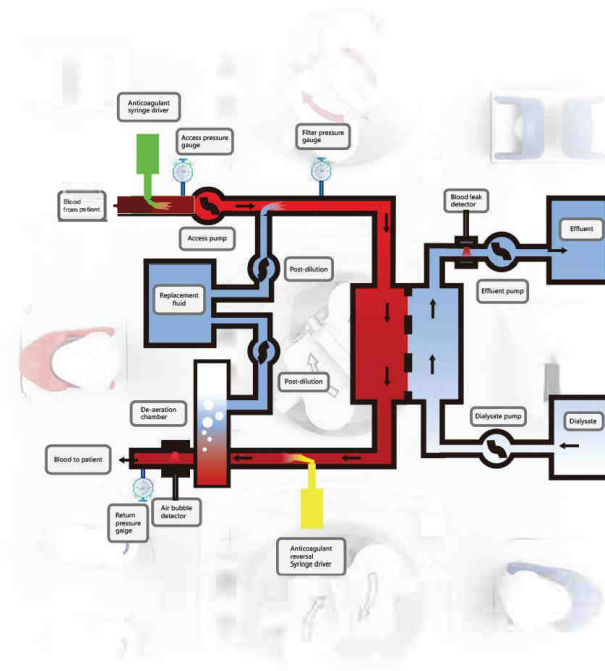
ENDO HDF-2 series provides the patient IC card function to document the patients' therapy data during the treatment.

The individualized therapy data can be stored in the patient IC card as an electronic medical record for reviewing the previous treatment.



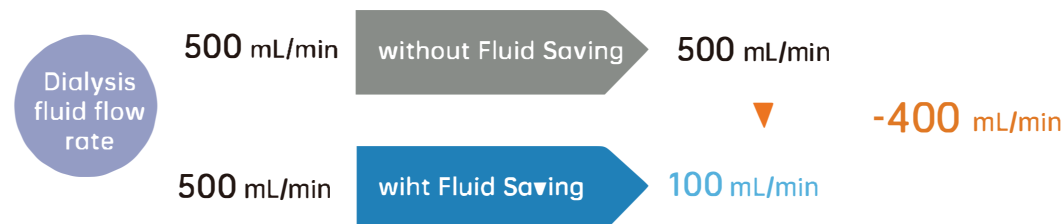
## MIXED-DILUTION

With two Substitute fluid pumps on ENDO HDF-2 Plus, it can implement mixed dilution (pre-dilution and post-dilution at the same time). It combines the advantages of pre-dilution and post-dilution, improving the clearance rate, lower the consumption of substitute fluid and anticoagulant, also reducing the cost of treatment relatively.



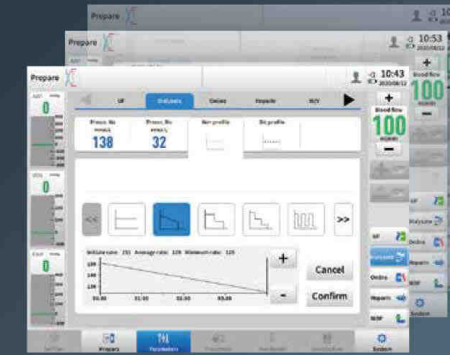
## COST EFFICIENT DESIGN

Normally, the dialysis fluid should keep running after the self-test and priming of the machine. The dialysis fluid saving function will adjust the flow rate to save the cost and reduce the waste of the dialysate.



## MULTIPLE TREATMENT PROFILES

ENDO HDF-2 series provides Na<sup>+</sup>, UF, Temperature, Heparin, Bicarbonate, and Flow profiles to implement personalized treatment.



## SEQUENTIAL DIALYSIS

ENDO HDF-2 has the ability to set the isolated ultrafiltration time before it goes to the dialysis (include UF+Dispersion) treatment. After setting the I-UF time and UF remaining time, the machine can implement the sequential dialysis to treat the patient.

## ■ TECHNICAL SPECIFICATIONS

### Basic parameters

Basic parameters	
Dimension	1610×534×790mm (H×W×D)
Weight	Approx. 92kg
Screen	15-inche color touch screen. 270° rotation available

### Product configuration

Model	ENDO HDF-2	ENDO HDF-2	ENDO HDF-2
Scope of application	HD, IUF, Sequential Dialysis	HF, HD, HDF, IUF, sequential Dialysis	HF, HD, HDF, IUF, sequential Dialysis
Heparin Pump	✓	✓	✓
Blood pump	1	1	1
Subtitution Fluid Pump	0	1	2
Leakage Detection	Optional	Optional	Standard
Ultrapure Dialysis	Optional	Standard	Standard
NIBP	Optional	Standard	Standard
SPO2	Optional	Standard	Standard
Bi-cartridge	Standard	Standard	Standard
CDDS	Optional	Optional	Standard
Artery Clamp	Optional	Optional	Standard
IC Card	Optional	Standard	Standard
PBE	Optional	Optional	Standard

### Extracorporeal circulation

Arterial pressure monitoring	
Range	-600mmHg ~ +600mmHg
Accuracy	±10mmHg
Venous pressure monitoring	
Range	-600mmHg ~ +600mmHg
Accuracy	±10mmHg
Dialyzer inlet blood pressure monitoring	
Range	-600mmHg ~ +600mmHg
Accuracy	±10mmHg
Transmembrane pressure monitoring	
Range	-600mmHg ~ +600mmHg
Accuracy	±20mmHg

Blood pump	
Applicable line diameters	6mm、8mm
Flow ranges	20~400ml/min (6mm) 20~600ml/min (8mm)
Accuracy	±10mL/min

Replacement fluid pump	
Flow ranges	20~400ml/min (6mm) 20~600ml/min (8mm)
Accuracy	±10mL/min

Air Bubble detection	
Sensitivity	In 200ml/min standard blood flow, the system will raise the sound light alarm, stop the blood pump from running and block the venous bloodline when it detects a single air bubble is no smaller than 200μl.

Heparin pump	
Flow range	0,0.1~10ml/h
syringe size	5ml, 10ml, 20ml, 30ml, 50ml
Heparin initial dose	1.0~20.0ml 1.0~20.0ml adjustable

### Dialysate Circulation

Water supply	
Water inlet pressure	0.1MPa ~ 0.6MPa
Water inlet temperature	5°C ~ 30°C
Maximum outlet height	1.2m

Dialysate ratio	
Formula ratio	1)1:1.225:32.775 (Fresenius) 2)1:1.83:34 (Gambro) 3)Custom formula
Bi-cartridge	Support

Ultrafiltration	
Rate	0~4000ml/h
Accuracy	±30mL/h

Leakage detector	
Sensitivity	Under the condition of the maximum ultrafiltration rate and dialysis flow, the maximum alarm limit should be ≤0.35mL/min (HCT of blood is 32%).

Hemodiafiltration	
Replacement rate	20~600ml/min (8mm) 20~400ml/min (6mm)