RENO
Low Temperature Plasma Sterilizer
Promise...

Supreme quality plasma sterilizer is the promise RENOSEM offers to you

About RENOSEM

RENOSEM Co., LTD. is an innovative provider of Low Temperature Plasma Sterilizer, infection prevention, microbial reduction and strives to develop various medical devices using own well-experienced high-tech plasma applications and reliable brand recognition. RENOSEM CO., LTD. has been distributing state-of-the-art medical products through business partner’s globally.

RENO Plasma sterilizer prevent patients and users from infection by means of sterilizing surgical devices 100 percent such as most types of surgical endoscopes, catheters, cannula, etc. Low Temperature Plasma Sterilizer is rapidly emerging as an essential low Temperature sterilizer which can sterilize humid sensitive and heat sensitive medical devices in OR and CSSD in General hospital as well as Ophthalmology, Biolab, Veterinary clinic [hospital], Dental clinic, and Pharmaceutical Aseptic industry.

Not being satisfied with these achievements, we will focus on our endeavor to come up to customer’s needs and market situations.

RENOSEM CO., LTD strives to become the World’s Best Brand in the Healthcare industry by providing the highest levels of technology, service and standards compliance.

Thanks!
How RENO system works?

The process is Environmentally Friendly, Safe, Reliable!

More Powerful sterilization

- User Friendly interface
  - Colored wide touch screen
  - Display cycle information (sterilization time, Temperature, Pressure, etc.)
  - Customized cycle-mode selection (Short cycle, Long cycle)
  - Applicable customizable languages (English, German, Spanish, Arabic, French, others)

- User friendly chamber design
  - Spacious rectangular chamber (usable volume more than 90%)
  - Removable & sliding shelves
  - Easy-to-clean chamber wall
  - Freely controllable chamber wall
  - Solid & acid-proof stainless steel chamber
  - Sterilant residual-free using vaporizing filter system

- Easy-to-use sterilization cassette
  - Easy-to-load simple-use cassette
  - Safe-to-load & waste (Push & Pull)
  - Reliable quantitative injection system using full vacuum system only
  - Microscopic error system

- Thermal Printer
  - Reporting complete cycle information

- Universal data acquisition system
  - Data backup using Memory Card or Stick

- Mobile wheel
  - Easy relocation wherever user need

- Radical plasma
  - Using DBD (Dielectric barrier discharge) plasma technology
  - Maximizing H2O2 radical effect and sterilization efficacy
  - Durable & effective plasma (radical) generating system

- Abatement Plasma
  - AC plasma discharge
  - Break down H2O2 gas into Water (H2O) vapor and Oxygen (O2)
  - Durable & Reliable finishing system

- Maintenance mode
  - Service diagnostic mode for maintenance and calibration
  - Easy-to-diagnosis engineer interface

- Peripheral devices
  - Biological indicator for verification of biological test
**RENO-S30**

“More reliable sterilization”

**RENO-D50**

“More economic sterilization”

### RENO-S30 Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>RENO-S30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External dimension</strong></td>
<td>1,020(H) × 570(W) × 840(D) mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>190 Kg</td>
</tr>
<tr>
<td><strong>Volume &amp; Type</strong></td>
<td>34 L, Rectangular</td>
</tr>
<tr>
<td><strong>Dose</strong></td>
<td>4 mL (50%)</td>
</tr>
<tr>
<td><strong>Cassette</strong></td>
<td>1 cycle/cassette</td>
</tr>
<tr>
<td><strong>Processing temperature</strong></td>
<td>Below 55°C</td>
</tr>
<tr>
<td><strong>Total cycle Time</strong></td>
<td>About 45 min.</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>2.5kVA</td>
</tr>
<tr>
<td><strong>Electricity</strong></td>
<td>220V – Single Phase, 50/60Hz</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>Micro Processor</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>Touch Panel</td>
</tr>
<tr>
<td><strong>Printer</strong></td>
<td>Thermal Printer</td>
</tr>
<tr>
<td><strong>Mobility</strong></td>
<td>4 wheels</td>
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### RENO-D50 Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>RENO-D50</th>
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<tbody>
<tr>
<td><strong>External dimension</strong></td>
<td>1,310(H) × 530(W) × 780(D)</td>
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<tr>
<td><strong>Weight</strong></td>
<td>290 Kg</td>
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<tr>
<td><strong>Volume &amp; Type</strong></td>
<td>60L, 2 × Chamber(30L), Rectangular</td>
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<tr>
<td><strong>Dose</strong></td>
<td>4 mL × 3 chambers (50%)</td>
</tr>
<tr>
<td><strong>Cassette</strong></td>
<td>3 cycle/cassettes</td>
</tr>
<tr>
<td><strong>Processing temperature</strong></td>
<td>Below 55°C</td>
</tr>
<tr>
<td><strong>Total cycle Time</strong></td>
<td>About 45 min.</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>2.5kVA</td>
</tr>
<tr>
<td><strong>Electricity</strong></td>
<td>220V – Single Phase, 50/60Hz</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>Micro Processor</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>Touch Panel</td>
</tr>
<tr>
<td><strong>Printer</strong></td>
<td>Thermal Printer</td>
</tr>
<tr>
<td><strong>Mobility</strong></td>
<td>4 wheels</td>
</tr>
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</table>
“More effective sterilization”

RENO-S130 Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>RENO-S130</th>
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<tbody>
<tr>
<td>External dimension</td>
<td>1,547(H) × 1,220(W) × 778(D)mm</td>
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<tr>
<td>Weight</td>
<td>440 Kg</td>
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<tr>
<td>Volume &amp; Type</td>
<td>130L, Rectangular</td>
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<tr>
<td>Dose</td>
<td>10ml (50%)</td>
</tr>
<tr>
<td>Cassette</td>
<td>1 cycle / cassette</td>
</tr>
<tr>
<td>Processing temperature</td>
<td>Below 60°C</td>
</tr>
<tr>
<td>Total cycle Time</td>
<td>Short cycle: 45min / Long cycle: 65min</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>3.0kVA</td>
</tr>
<tr>
<td>Electricity</td>
<td>230V, Single Phase, 50/60Hz</td>
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<tr>
<td>Control</td>
<td>Micro Processor</td>
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<tr>
<td>Display</td>
<td>Wide Touch Panel</td>
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<tr>
<td>Printer</td>
<td>Thermal Printer</td>
</tr>
<tr>
<td>Data</td>
<td>Memory Card or Stick</td>
</tr>
<tr>
<td>Mobility</td>
<td>4 wheels</td>
</tr>
</tbody>
</table>

Complete line of RENO accessories

- Sterilization agent
- Chemical indicator tape
- Biological indicator
- Wrapping pouch
- Wrapping non-woven sheet
- Chemical indicator
- Wrapping tyvek™ pouch
- Instrument tray
- BI Incubator
What are the benefits from your best choice?

1. Rapid sterilization cycle time?
   - Yes □ No → Contribute to rapid turnaround time of instrument and minimized inventory cost

2. Proven strong sterilization efficacy?
   - Yes □ No → 2mm (inside diameter) x 1.5m (length) PCD (Process challenge device) tool, single-through lumen with an indicator at the closed end of the tube, is used to verify sterility assurance of complex hollow-type instruments.

3. Environmentally friendly byproducts?
   - Yes □ No → Water vapor & Oxygen only, it's safe to your staff and patient

4. No plumbing facility required?
   - Yes □ No → Easy-to-relocate everywhere user need in OR and CSSD

5. Economic operation cost & efficient?
   - Yes □ No → It relieves the financial burden.

6. Low processing temperature?
   - Yes □ No → it's less than 55°... and is suitable for most type of endoscope, heat-sensitive instrument.

7. Reliable & Durable system?
   - Yes □ No → It costs less for repairing and maintenance

8. Service activity?
   - Yes □ No → RENO engineer provide support PM (preventive maintenance), calibration, IQ/OQ.

What kinds of device can be sterilized in RENO Sterilizer?

- Cryo-probes
- Doppels
- Electrocautery instruments
- Cranial pressure transducer cables
- Defibrillator paddles
- Endoscopic instruments
- Rigid endoscopes (laryngoscope & blade, arthroscopes, laparoscopes & Trocar cannula and Trocar sheaths, resectoscope and sheaths, etc.)
- Flexible endoscopes (bronchoscopes, hysteroscopes, choledochoscopes, ureteroscopes, cystoscopes, etc.)
- Esophageal dilators
- Fiberoptic light cables
- Laser handpieces, fibers, accessories
- Shaver handpieces / Pigmentation handpieces
- Metal instruments
- Ophthalmic lenses (diagnostic, magnifying)
- Patient lead cables
- Radiation therapy equipment
- Surgical power equipment and batteries (Power drills)
- Ultrasound probes
- Video cameras and couplers
- All devices processed in RENO sterilizer must be within the claims of the sterilizer.

Suitable for minimally invasive surgery (MIS) endoscopes

- Laparoscope & Trocar cannula
- Bronchoscope
- Cystoscope
- Choledochoscope
- Laryngoscope

Heat sensitive instruments

- Power drills
- Micro-eye surgery instrument
- TUR Set
- Tube
- Light cords
Regulatory Approvals

Medical Device directive 93/42/EEC
ISO 13485:2003
Quality Management system-Medical devices-Requirements for regulatory purposes
ISO 9001:2008
Quality management system-design, development and manufacture of low-temperature plasma sterilizer in RENOSEM series.