uSonic with ANRC technology

the new concept of cleaning

Multimethod cleaning for complex-shaped equipment, developed for decontamination units, laboratories and R&D units

aseptium.com
uSonic, what is it?

uSonic is an innovative medical and laboratory complex equipment washer. It is built with aseptium’s patent pending Adaptive Non-Recirculating (NRA) cleaning technology.

uSonic, who is it for?

- **Decontamination units**
  reprocessing large variety of equipment, including: complex medical and laboratory instruments, such as robotic, semi-automated instrumentation, rigid endoscopes and complex box-joint instrumentation, fine and delicate instruments.

- **Laboratories**
  reprocessing complex-shaped equipment, with internal elements like apertures and cavities requiring internal cleaning.

- **Research and development units**
  responsible for creating and testing new equipment.

uSonic, why should you want one?

- Any combination of spray cleaning, ultrasonic cleaning, flow-through cleaning

<table>
<thead>
<tr>
<th>model</th>
<th>uSonic 12</th>
<th>uSonic 24</th>
<th>uSonic 36</th>
</tr>
</thead>
<tbody>
<tr>
<td>chamber volume</td>
<td>12l</td>
<td>24l</td>
<td>36l</td>
</tr>
<tr>
<td>ultrasonic power (max)</td>
<td>300W</td>
<td>600W</td>
<td>1200W</td>
</tr>
<tr>
<td>loading volume</td>
<td>252mm, 252mm, 140mm</td>
<td>5044mm, 252mm, 140mm</td>
<td>756mm, 252mm, 140mm</td>
</tr>
<tr>
<td>dimensions</td>
<td>W398mm, H500mm, D550mm</td>
<td>W698mm, H500mm, D550mm</td>
<td>W898mm, H500mm, D550mm</td>
</tr>
<tr>
<td>water supply (Hot, Cold, RO*)</td>
<td>¾&quot; BSP</td>
<td>¾&quot; BSP</td>
<td>¾&quot; BSP</td>
</tr>
<tr>
<td>drain connection</td>
<td>22mm standard, 1.5m hose</td>
<td>22mm standard, 1.5m hose</td>
<td>22mm standard, 1.5m hose</td>
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<tr>
<td>Internet of Things ready</td>
<td>Ethernet Connectivity, Data logging, Fault Reporting</td>
<td>Ethernet Connectivity, Data logging, Fault Reporting</td>
<td>Ethernet Connectivity, Data logging, Fault Reporting</td>
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</tbody>
</table>

uSonic, the power of multimethod cleaning

- No time waste for filling and draining (shorter cycles-same efficiency)
- **Non-Recirculation Adaptive Cleaning (ANRO) technology**
  - No Recirculation
  - No time wasted for filling and draining
  - Reduced cross-contamination
  - Independent chemical dosing for spray cleaning and flow through
  - Independent lubrication through flow through channels
- Reduced cross-contamination
- Modular instrument loading system
- Independent chemical dosing for spray cleaning and flow-through
- Independent lubrication through flow through channels
- Thermal disinfection cycle for the chamber and internal plumbing
- Chemical disinfection option
- Adjustable ultrasonic density
- Touch screen control
- Internet of Things ready (Ethernet, Bluetooth, USB)
- ISO 15883 compatible

PATENT PENDING
Adaptive Non-Recirculation Cleaning (ANRC) technology

You can be sure of the outcome: no contamination is reintroduced to the system.

Looking at the fundamentals of recirculation within conventional washers, we noticed that a considerable amount of contamination gets reintroduced to the system.

This happens because all contamination removed from the load gets dissolved in the fluid in the system.

Furthermore, this contaminated fluid gets delivered to the inside of instruments through flushing or flow through systems exposing particular instruments with contamination they were never exposed to – cross-contaminating it.

While in most cases this contamination is gradually removed, sometimes – especially in equipment with very fine lumens, channels and intricate elements – remaining contamination may get trapped and not be removed from the instrument in the cleaning process.

In ANRC cleaning technology contaminated fluid is not reintroduced to the system, therefore the risk of cross-contamination is greatly reduced, ensuring you can clean all types of complex and fine loads with peace of mind.

Adaptive, the power of multimethod cleaning.

With Adaptive cleaning each method can be individually optimised to reprocess instruments and equipment of different types giving you the confidence that you will be able to ensure cleanliness of your loads today and tomorrow.

Spray cleaning or ultrasonic cleaning on their own are insufficient to deal with complex instrumentation and equipment. Spray cleaning does not have the capacity to clean internal elements or even heavily shadowed elements of the load.

Ultrasonication will detach contamination from surfaces in contact with the cleaning fluid but it may not remove them from the difficult to access areas within the instrument where it sediments and collects giving you false assurance that the load is clean.

However, combination of these two methods with flow through cleaning in uSonic technology is what makes the difference.

With ANRC cleaning technology your load gets adequately cleaned outside and inside and any remaining contamination gets washed away with the flow through method.

ANRC meets uSonic, a combination of advanced cleaning with modularity and ease of use

uSonic is a range of medical instrumentation and laboratory equipment washers that uniquely combine the ANRC cleaning technology with ultrasonic cleaning – giving you incomparable flexibility and performance.

uSonic – you can optimise the process

Creating uSonic we’ve taken into account that internal and external surfaces of instruments are exposed to different cleaning conditions during the wash. So, we have ensured that uSonic allows you to set them individually.

That includes the type and concentration of the chemicals so that your instruments and be washed outside with one type of cleaning chemistry and inside with the other during the same cycle.

This means you can optimise your processes to many different types of hollow and cannulated loads to the level never experienced before.

uSonic – disinfection on demand

uSonic washers were developed to provide chamber and internal plumbing thermal disinfection function helping you to keep the unit of internal bioburden at a minimum. uSonic is also ready for thermal and chemical disinfection options that will be available in washer-disinfector variants.

uSonic – you can develop short cycles to suit your needs

In conventional washers as much as a third of the cycle time is wasted for filling and draining of the chamber between different stages of the process.

ANRC cleaning technology does not recirculate, therefore it does not have to wait for the chamber to fill with fluid.

No time is wasted when chamber fills for ultrasonication as fluid is always supplied through spray arms or flow through channels cleaning equipment while filling.

Similarly while draining instruments can be sprayed and flushed with clean fluid. ANRC cleaning technology in uSonic fundamentally changes the way we think about decontamination processes allowing you to develop efficient and short cycles tailored to all your needs.

uSonic – reconfigurable though modular loading system to suit your equipment

Complex equipment and instrumentation come in a variety of shapes and sizes and we have made the uSonic adaptable and reconfigurable though our modular loading system.

It works well with standard DIN basket systems as well as our own dedicated accessories and ancillary devices that can be easily arranged within the loading carrier giving you all and only the elements that will match your requirements.
Philosophy behind uSonic

Aseptium was created to tackle the biggest challenges of the modern medical and laboratory decontamination environment in mind.

Complexity of instrumentation and equipment, robotics and automation are reaching levels never experienced before. At the same time, our understanding of science and best practices evolves allowing us to see the magnitude of the problem decontamination professionals must deal with.

Increasing complexity of instrumentation created a great challenge, especially for the cleaning part of the decontamination process.

At aseptium we believe that adequate cleaning is the key to truly reducing risk of contamination being transmitted to patients and staff alike when highly complex instrumentation and equipment are concerned.

Technologically, instrumentation with internal channels, mechanisms and intricate surfaces with holes and crevices is where we believe greater attention should be paid especially as we do not have robust enough process evaluation methods that could prove we get it right every time.

We also considered the cross-contamination of different instruments between themselves being a major issue especially if load of different levels of complexity is reprocessed together.

We have created the uSonic range to give you the right tool to challenge these problems.

Contact Aseptium for details at info@aseptium.com

uSonic is, in our opinion, the most versatile cleaning technology currently available.

uSonic – you are in control, you stay in control

The heart of uSonic is our state of the art control system. That makes this complex technology available to you in the same effortless and intuitive way as your smartphone. uSonic is the Internet of Things ready having data logging, machine status monitoring linked to the online world.

We understand that reprocessing of complex instrumentation requires knowledge and know-how so uSonic control system provides a comprehensive help and tutorial programme available directly on the screen of the washer – reducing user errors and giving you the helping hand just when you need it.

uSonic performs best for specialised decontamination units, laboratories and R&D units processing large variety of highly complex instruments.

uSonic with ANRC technology is, in our opinion, the best technology available. Especially when implemented in the context of aseptium’s philosophy.

uSonic – best solution for large variety of complex instruments

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uSonic is, in our opinion, the most versatile cleaning technology currently available.
uSonic, with ANRC technology, works best where large variety of highly complex instruments is reprocessed.

In this environment aseptium’s technology has the potential to make the biggest difference in efficiency, quality and ease of use.