

Tethys H10

The Evolution of Disinfection



easy, it's Mocom



Via Saliceto, 22 - 40013 Castel Maggiore (BO) Italy • Tel. (+39) 051.703168 • Fax (+39) 051.700949
e-mail: infomocom@mocom.it • www.mocom.it





H10

The H10 Revolution.

The world of disinfection will never be the same again.



Simply revolutionary.

Mocom's first Hybrid Disinfection Device.

Tethys H10 combines, in a single exclusive process, the power of water, the energy of heat and the force of ultrasound to maximise safety, process speed and user-friendliness.

One process. One step.

Decontamination, washing, disinfection and drying all in one single step, ensuring simpler, faster, more effective workflows.

Tethys H10 is the new **Hybrid Disinfection Device (H2D)** that makes the instrument reconditioning process simple and practical. This innovative device carries out many of the numerous manual tasks typically encountered prior to sterilization, thus reducing personnel workloads. With the Tethys H10 decontamination, washing, disinfection and drying are compacted into one fast automated process.



Power, energy and force.

Thermal disinfection and deep-acting ultrasound in one single device.

The combination of deep ultrasound washing and thermal disinfection provides effective rationalisation of reconditioning protocols, ensuring absolute protection for the user. The EN ISO 15883-1/2-certified Tethys H10 offers instrument treatment characterised by homogeneous cleaning and a drying phase that removes every last trace of moisture. In short, Mocom's first **Hybrid Disinfection Device** combines the power of water, the energy of heat and the force of ultrasound.



The power of water

The cradle of life and a symbol of purity, water is a powerful sanitising tool that ensures instruments undergo a thorough, deep cleansing process.



The energy of heat

Fire is one of man's oldest, strongest allies. Thanks to heat energy, the Tethys H10 ensures maximum safety and optimal disinfection.



The force of ultrasound

Invisible, powerful waves used to execute deep, uniform cleaning: strong yet silent, they know no boundaries or shadow zones, ensuring all-round effectiveness.



Tethys H10 is a true
EN ISO 15883-1/2-compliant
thermal disinfecter that incorporates
the full force of ultrasound.

A CERTIFIED
REVOLUTION

Simpler.

User-friendliness, revolutionary results.

Innovating means improving performance and reducing the time and effort needed for task completion. Tethys H10 does this by combining deep-reaching ultrasound washing, the effectiveness of thermal disinfection and the practicality of forced-draught drying – all in one single device. Just a few simple steps, configurable according to requirements, make the washing and disinfection process simpler than ever.



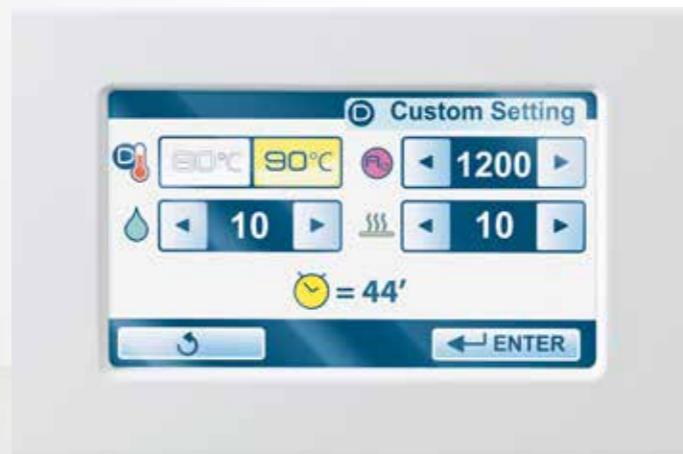
"Touchscreen" generation

The **LCD colour touchscreen and multi-lingual icon menu** provide users with clear, easy-to-understand controls that can be fully personalised according to their specific professional needs. Just select the desired programme and the cycle will run autonomously.



Everything under control

Tethys H10 has an **internal memory** that records all disinfection cycle data directly in pdf format. Users are periodically informed of the need to download files onto a USB memory stick so they can be saved on a PC. The built-in USB port also allows user-friendly upgrading of device firmware. This ensures that the latest release is always available.



Personalised workflow

Tethys H10 provides users with **personalised washing and disinfection cycles** in which it is possible to set the required washing and thermal disinfection temperatures and the duration of the process phases, including the drying stage. There is also a delayed start function, allowing users to run the selected cycle at the desired time, even outside normal working hours (e.g. at night) in order to cut electricity costs.

Faster.

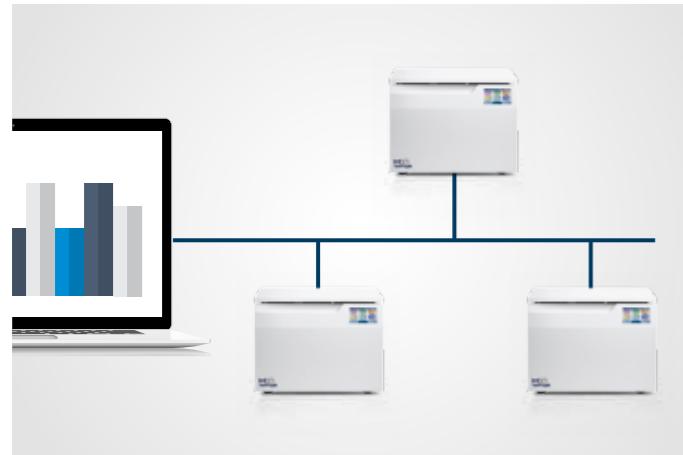
Everything you need, as fast as you need it.

Tethys H10 reduces washing and disinfection times drastically, halving them with respect to traditional processes. Integrating the various phases on one device speeds up the work cycle and considerably reduces the number of manual tasks, allowing you to use your time to maximum effect.



A complete cycle in just 35 minutes

35 minutes for a complete process, consisting of prewashing, ultrasound washing, rinse, thermal disinfection and forced-draught drying. Tethys H10, thanks to revolutionary patented technical design, reduces cycle times to a previously unattainable minimum.



Cutting-edge connectivity

Tethys H10 makes the operating data available via a **standard Ethernet**. This allows incoming data from several devices to be stored on a single computer without having to physically transfer it. Via the dedicated web server, incorporated in the machine firmware, users can connect up to every individual device on the network and check its status without having to move from their workstations.



More effective.

Combined ultrasound-heat action.

No compromising, only maximum safety and efficiency, with guaranteed results under all working conditions. Tethys H10 is an EN ISO 15883-1/2 compliant medical device featuring a spray washing function that works in conjunction with an ultrasound action and a 90°C thermal disinfection stage (characterised by the high value of $A_0=3.000$).



The force of ultrasound

Ultrasound is a key feature on the Tethys H10, its power allowing the removal of every last clinging residue. Uniform ultrasound distribution inside the fluid allows cleaning even in "shadow" zones. The ultrasound washing phase is preceded by a cold prewash stage and followed by a triple spray rinse to remove every last deposit from the instruments.



Real thermal disinfection

Tethys H10 is a professional device featuring a **90°C thermal disinfection** process that complies with EN ISO 15883-1/2. A validated heat treatment process ensures the elimination of microorganisms. An exclusive water heater circuit ensures the machine is brought to the required temperature much faster than on traditional systems, maximising effectiveness and drastically reducing cycle times.



Forced-draught drying

At the end of the disinfection stage the steam in the tank and the residual moisture on the instruments are eliminated thanks to a **forced-draught drying phase that includes purification with a HEPA filter**. At the end of the process the instruments are perfectly dry and cooled, ready for the subsequent packaging stage.

Hi-Performance.

Protection and safety: the added value of Tethys H10.

The H10 revolution stems from its advanced washing and disinfection system, designed to make the process faster and more effective. Simpler and more user-friendly procedures, in synergy with a washing process that is unique of its kind and a state-of-the-art decalcification system.



Integrated decalcification system

Tethys H10 is the only device in its category to provide an integrated water softener with ion exchange resins. This model's outstanding action prevents build-up of limescale and other impurities in the water circuit.

The results of this innovation can be seen first of all in the instruments: always shining, with no stains or signs of oxidation. A set of instruments in perfect working condition suffers less wear over time and provides a better guarantee of safety.

Maintenance of the water softener is designed to meet the criteria of simplicity and practicality, by the introduction of plain cooking or dishwasher salt. The electronic control system handles the whole procedure and ensures maximum effectiveness at every moment.



Rotary nozzle

The innovative rotary nozzle solution, a system that is normally only found in industrial applications, ensures incredibly effective washing, and disinfection stages which remain effective and unaltered over the course of time.

What makes this nozzle so effective is its powerful, uniform jet, which ensures elimination of residues during the rinsing stages and perfectly even heating.



Hi-Tech.

Forward-thinking disinfection.

Tethys H10 encapsulates technological innovation and user-friendliness. The touchscreen has been designed to ensure full interaction by allowing users to select, quickly and intuitively, the most suitable programme from among the various pre-set or personalised options.



Comprehensive programming

Tethys H10 offers 6 washing and thermal disinfection cycles, of which 3 can be personalised according to the user's professional requirements and the type of load being processed. The intuitive touchscreen lets the user select the cycle, activate personalised parameters (delayed start, extra drying etc.) and choose other options on the configuration menu (language, date/time, unit of measure, user management etc.).



Advanced multi-user management

Tethys H10 has a comprehensive, advanced user management system that can be used to enable numerous members of personnel, each provided with their own PIN; this allows the application of user-specific parameters and accurate association of executed cycles with operators.



H10 network

The configuration menu can be used to assign the Tethys H10 an IP address that allows its integration on a LAN (Local Area Network). Each connected device will then be visible from the facility manager's control station; he/she can then download cycle data and see how processes are progressing without having to leave the workstation.

A journey to the core of the Tethys H10.

Innovation, technology and passion: the driving forces behind the H10 revolution.

Tethys H10 revolutionises the world of ultrasound washing and disinfection by combining outstanding compactness with essential design, making it the perfect partner for any surgery or clinic.

1	2	3
Sensor control To obtain reliable results in every situation, Tethys H10 is fitted with an in-tank water level sensor; an electronic flow rate control to ensure that the detergent dosage is always correct; and back-up temperature sensors, for effective and safe disinfection processes.	Ultrasound The combination of ultrasound, used in the immersive washing stage, and the rotary nozzle, essential during rinsing and thermal disinfection, allows for fast, effective removal of dirt and reaches into even the most hidden recesses.	Continuous-circulation heater The advanced continuous-circulation water heating system avoids having to fit the tank with a traditional heating element, thus increasing operational efficiency and long term reliability.
4	5	6
Stainless steel tank Tethys H10 features a die formed AISI 316 stainless steel tank without any welds. This gives exceptional strength, eliminates any water leaks or corrosion and also makes cleaning much easier.	Door lock system Tethys H10 features an automatic door locking system, to prevent the door from being opened accidentally during the various stages of the process, therefore protecting the operator from any unpleasant or potentially dangerous situations.	Large detergent reservoir When filled, this built-in reservoir provides enough detergent for up to 12 cycles; a minimum indicator informs the user when a top-up is required.
7	8	9
Washing and drain pump To ensure consistent performance whatever the installation conditions, the Tethys H10 features a high pressure washing pump and drain pump.	Aqua-Stop The incorporated Aqua-Stop system (optional) prevents any water leaks.	Mocom: a sure sign Ever since it was founded, Mocom has always ensured strict compliance with product and process standards. The Mocom approach is a clear indicator of a flexible, innovative philosophy.



Tethys H10 technical specifications.



Technical data	
Power supply voltage	220/240 V - 50 Hz (other voltages on request)
Rated power	2300 W
External dimensions (LxHxD)	470 x 430 x 500 mm
Net weight	37 kg
Detergent reservoir capacity	0.7 litres (autonomy: up to 12 cycles)
Tank dimensions (LxHxD)	224 x 314 x 125 mm
Nominal tank volume	8 litres
Effective tank volume	6 litres
Max water consumption (per cycle)	15 litres
Max load	2 kg

Cycle description	°C	Effective time	A _o	Total cycle time
Disinfection D90	90	Washing 13' Disinfection 5'	3.000	35'
Washing W	45	13'	-	23'
Pre-washing	25	6'	-	7'
Custom disinfection D1	80 or 90	10' ÷ 20' (at 80 °C)	600 ÷ 1.200 (at 80 °C)	
Custom disinfection D2	90	1' ÷ 10' (at 90 °C)	600 ÷ 6.000 (at 90 °C)	
Custom washing W1	45	13' ÷ 20'	-	

Standard equipment and optional features	
USB port	●
Ethernet port (RJ 45)	●
Instrument holder basket	●
Water connection kit	●
Salt funnel	●
Detergent funnel	●
HEPA filter	●
Additional upper basket	○
Micro-mesh basket for burrs	○
Tethys Aqua-Stop (special model)	○

● = as standard

○ = optional

The “evolved” process with Tethys H10.

Three partners for perfect sterilization.

The three-stage reconditioning process with the Tethys H10 Hybrid Disinfection Device, Millseal+ Evo Thermal sealer and B Futura Sterilizer makes the user's work simpler, faster and safer. The process is a synergic one, is completed in a few steps and gives unprecedented results. Mocom has revolutionised sterilization by offering a compact, fully dedicated work line that provides unparalleled performance.



Tethys H10

Mocom's Hybrid Disinfection Device (H2D), which combines the power of water, the energy of heat and the force of ultrasound in a single exclusive process.



Millseal+ Evo

The efficient, easy-to-use thermosealer, designed to meet all your daily needs. Available in manual or automatic versions, Mocom thermosealers provide instrument sterility you can count on.



B Futura

The intelligent sterilizer that is an absolute must. This exceptional machine has been developed only through years of research and experience: a high performance, easy-to-use product.

Easy, it's Mocom.

Our vision.

For over twenty-five years, safety, reliability and cutting-edge technology have been the driving forces behind the exceptionally designed products and success of Mocom, a leading name in the world of sterilization. Careful attention to choice of materials, utilisation of innovative technology, adoption of strict manufacturing and quality control protocols plus an experienced, qualified, specialised team of sterilization system designers ensure we offer excellent skills and innovation. Mocom, sterilization first.

