Tethys washer-disinfectors.
A symphony in harmony.

Tethys: hygiene takes center stage

A correct reconditioning process for surgical instruments can only be achieved through successive stages of washing, disinfecting and drying.

To ensure the required standard of safety and efficiency, each step takes time, dedication and scrupulous attention.

Without doubt, the answer to obtaining the best results with least effort is provided by the latest series of Tethys washer-disinfectors. These completely automatic devices guarantee perfect cleaning of instruments and the highest standard of disinfection, while ensuring at the same time complete protection for operators and the elimination of any possible procedural errors.

Designed and constructed to best meet the needs of a market that is ever more mature and aware, Tethys washer-disinfectors represent a perfect synthesis of reliability, user-friendliness, leading-edge features and absolutely no loss of performance over time.

Efficiency

The large capacity washing chamber, twin trolleys, eco-slim steam condenser, extensive range of washing programs, handy control panel display and visual and acoustic end-of-cycle warnings all help to ensure easy operation and top quality performance.

Reliability

The washing chamber and door made from AISI 316L stainless steel, flow-meter control of detergent dosage, level sensors and timers, "soft start" function to avoid thermal shock in the chamber and a number of anti-impurity filters ensure that a Tethys device will give satisfaction.

· Safety · Traceability · Reliability

· Technology · Efficiency · Value

Safety

The latest Tethys series has been designed and created in compliance with the EN 15883 standard. That means having machines available that meet the most recent requirements in terms of washing and disinfection, to ensure washing cycles that can be controlled, verified and repeated.

Technology

Tethys washer-disinfectors feature an advanced operating system, which means the temperature of the water can be constantly checked and kept within required values. This is what guarantees the efficiency of the process, without neglecting in any way the material being treated.

Value

Automation of the washing and disinfection process, reduced risk of contamination, savings on time and resources and wide availability of accessories make Tethys a significant, worthwhile investment.

Traceability

The EN 15883 standard requires a complete check on the thermal-disinfection processes carried out. For this purpose, Tethys washer-disinfectors can interface with a printer (optional) or computer, to provide a fully detailed report on all parameters related to the washing cycle.
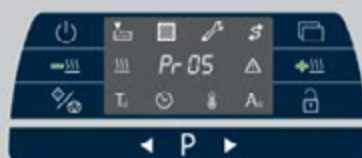
Tethys: "ouverture"

Door locking system

An automatically controlled electromagnetic device prevents the door being opened until a cycle has finished.

Steam condenser

The integrated steam condenser can swiftly eliminate the saturated steam generated inside the machine during the disinfection phase, so condensation cannot form during the cycle.

Printer

Traceability of washing and disinfection cycles is an indispensable requirement as evidence that a process has been carried out correctly. The optional printer therefore becomes a useful accessory for saving data in print-out form.

Process management

Tethys washer-disinfectors are fitted with two high-precision temperature sensors for the management of the washing and disinfection cycles. The A_0 parameter can also be checked in real time with the value shown on the display. If the machine is connected to a printer, this data is also printed on the report at the end of the cycle.

Peristaltic pumps

Tethys washer-disinfectors are fitted with two peristaltic pumps, for controlled detergent and neutralizing additive dosage, and high-precision level sensors. This set-up ensures total repeatability, without the need for staff intervention.

Dimensions

There are 45 cm (Tethys T45), and 60 cm (Tethys D60/T60) versions available, so these washer-disinfectors can be easily installed under a worktop, and will fit into various layouts in sterilization areas without difficulty.

Thorough drying

The Tethys D60 model is fitted with a highly efficient forced-air load drier.

The system comprises an efficient hot air generator and powerful fan, which circulates purified hot air in the washing chamber, ensuring quality and sterility through the use of an absolute HEPA filter.

Tethys: optional extras

Every professional environment is characterized by the type of instruments used in it and specific requirements concerning their handling. For this reason, Tethys washer-disinfectors have a wide range of accessories available, enabling an individual customized set-up in the washing room, in response to all the needs of the various medical sectors.

Washing of handpieces and cannulas

To meet the special need for injection washing and disinfection of hollow instruments, specific accessories are available, capable of both external washing and delicate, but thorough, washing of the internal ducts of handpieces, turbines and cannulas by forced injection of washing solution.

	M7E200034	8 position handpiece washing support for Tethys D60, to fix on the upper trolley
	M7E200035	8 position handpiece washing support for Tethys T60, to fix on the upper trolley
	M7E200036	6 position handpiece washing support for Tethys T45, to fix on the upper trolley
	M7E200037	4 position handpiece washing support for Tethys T60, to fix on the upper trolley
	M7E200038	3 position handpiece washing support for Tethys T45, to fix on the upper trolley
	M7E200039	Cannulas washing support (with set of 24 nozzles d=3 mm) for Tethys D60/T60, to fix on the upper trolley
	M7E200040	Cannulas washing support (with set of 16 nozzles d=3 mm) for Tethys T45, to fix on the upper trolley

Special trolleys

Tethys thermo-disinfectors can be fitted with optional trolleys, designed for handling special devices.

	M7E200030	Upper trolley for operating room shoes for Tethys D60/T60, capacity for 4 pairs of standard shoes
	M7E200031	Lower trolley for operating room shoes for Tethys D60/T60, capacity for 8 pairs of standard shoes
	M7E200032	Upper trolley for operating room shoes for Tethys T45, capacity for 3 pairs of standard shoes
	M7E200033	Lower trolley for operating room shoes for Tethys T45, capacity for 4 pairs of standard shoes

Other accessories

The right answer is available for every need.

	M7D200012	Serial dot matrix thermal printer
	M7E200061	Stainless steel plinth with lockable door for Tethys D60/T60; fitted with detergent cabinet; raises loading level to 70 cm above the floor
	M7E200062	Top closure for built-in mounting solution for Tethys D60/T60 (h=825 mm)
	M7E200063	Top closure for built-in mounting solution for Tethys T45 (h=825 mm)
	M7E200064	AquaStop kit; detects water leaks from the machine and shuts off the system; available only for Tethys D60/T60

Containers and supports

A wide range of accessories to cater for the wide variety of demands and make best use of available space.

	M7E200041	Stainless steel basket with handles; dimensions 450 x 450 x 55 mm (5 x 5 mm mesh), available only for Tethys D60/T60
	M7E200042	Stainless steel basket with handles; dimensions 435 x 160 x 50 mm (5 x 5 mm mesh)
	M7E200043	Stainless steel basket with handles and lid; dimensions 130 x 225 x 50 mm (3 x 3 mm mesh; lid 5 x 5 mm)
	M7E200044	Stainless steel basket with handles; dimensions 450 x 225 x 50 mm (5 x 5 mm mesh)
	M7E200045	Stainless steel basket with handles; dimensions 435 x 310 x 50 mm (5 x 5 mm mesh)
	M7E200046	Stainless steel basket with handles; dimensions 480 x 225 x 50 mm (5 x 5 mm mesh), available only for Tethys D60/T60
	M7E200047	Stainless steel micro-mesh basket with lid, for small and/or thin instruments; dimensions 240 x 235 x 55 mm (2 x 2 mm mesh)
	M7E200048	Stainless steel micro-mesh basket with lid, for small and/or thin instruments; dimensions 100 x 80 x 45 mm (2 x 2 mm mesh)
	M7E200049	Stainless steel micro-mesh basket with lid, for small and/or thin instruments; dimensions 280 x 168 x 45 mm (2 x 2 mm mesh)
	M7E200050	Tall stainless steel basket with handles; dimensions 300 x 155 x 115 mm (3 x 3 mm mesh)
	M7E200051	Stainless steel support for 2 baskets / IMS unit; dimensions 415 x 130 x 150 mm; to be placed on upper trolley
	M7E200052	Stainless steel support for 3 basins/baskets/IMS unit; dimensions 300 x 130 x 145 mm, to be placed on lower trolley
	M7E200053	Stainless steel support for 8 tray covers; dimensions 385 x 310 x 115 mm
	M7E200054	Stainless steel support for 8 tray covers; dimensions 445 x 310 x 120 mm
	M7E200055	Stainless steel support for 6 IMS units / 12 IMS half-units; dimensions 445 x 230 x 155 mm
	M7E200056	Stainless steel support for 10 trays/containers; dimensions 440 x 170 x 175 mm, to be placed on lower trolley
	M7E200057	Stainless steel support for 11 trays; dimensions 335 x 305 x 115 mm
	M7E200058	Stainless steel support for 16 trays; dimensions 460 x 310 x 115 mm
	M7E200059	Stainless steel support for vertical instruments
	M7E200060	Stainless steel support for pliers; dimensions 305 x 150 x 135 mm, to be placed on upper trolley

Specifications	Tethys D60	Tethys T60	Tethys T45
Control system	Electronic with microprocessor		
Available programs	15 (including 6 personalizable)		
Instrumentation	Digital display with "soft-touch" keyboard		
In-chamber temperature	From room temperature up to 95˚C		
Temperature sensors (2x)	Resistance thermometers PT 1000 cl. B (IEC 60751)		
Dosing systems for detergent and neutralizer	Peristaltic pumps		
Detergent and neutralizer level sensors	Yes		
Door locking system	Yes, electromagnetic with automatic opening		
Traceability	Data storage on last 100 programs carried out		
RS232 serial port	Yes (to connect to PC and printer)		
Cycle archive	Yes, with dedicated program		
Washing chamber material	AISI 316L stainless steel		
Outside panels	AISI 304 stainless steel		
Drying system	Forced air, with hot air generator	Thermal	
Pre-filter	Yes (class C 98%)	NO	
HEPA filter	Yes (class S 99,999%)	NO	
Water supply	Normal cold water supply (1,5 - 5 bar) Distilled water		Normal cold water supply (1,5 - 5 bar)
Built-in water softener	Yes, automatic volumetric regeneration (up to 60˚F)		
Steam condenser	High-efficiency ECO SLIM system		
Water heater power (electronically controlled)	2,3 kW (single-phase version) 6,3 kW (three-phase version)		3,0 kW
External dimensions (W x D x H)	600x605x850 (830*) mm		450x620x850 (830*) mm
Chamber dimensions (W x D x H)	520x515x545 mm		380x480x590 mm
Weight	70 kg		50 kg
Voltage and rated power	1/N/PE 230V ~50Hz - 2,8 kW 3/N/PE 400V ~50Hz - 7,0 kW		1/N/PE 230V ~50Hz
Noise level	< 50 dB(A)		

* Built-in version, with optional top

A quality product, with the guarantee of stringent testing and certificates, including:

· ISO 9001/ISO 13485 Quality Management Systems for Medical Devices

· CE 0051 European Community Marking for Medical Regulation

Quality products meeting applicable standards:

· Directive no. 93/42/CEE electromagnetic compatibility for Medical Equipment
· Directive no. 2006/95/CE for Low Voltage
· Directive no. 2004/108/CE for Electromagnetic Compatibility
· EN 15883-1: General performance requirements for washer-disinfectors

· EN 15883-2: Washer-disinfectors: requirements and tests for washer-disinfectors using thermal disinfection
· EN 61010-1: Safety requirements for electrical equipment for laboratory use
· EN 61010-2-040: Special safety requirements for washer-disinfectors