

AS

AV/L & AV/S

ICOS

**STEAM STERILIZING
AUTOCLAVES**



ICOS IS PRESENT ON WORLD MARKETS WITH A WIDE RANGE OF STEAM STERILIZING AUTOCLAVES WITH A WIDE FIELD OF APPLICATIONS, PARTICULARLY IN THE PHARMACEUTICAL INDUSTRY, HOSPITALS, RESEARCH LABORATORIES AND IN FOOD PROCESSING.

THE WIDE EXPERIENCE ACQUIRED AT ICOS IN ABOUT TWENTY YEARS OF ACTIVITY ENABLES US TO OFFER EXTREMELY DIVERSIFIED PRODUCTS CAPABLE OF MEETING THE REQUIREMENTS OF THE MOST VARIED APPLICATIONS.

FIELD OF APPLICATION

THIS RANGE OF MACHINES IS USED FOR STERILIZING STEAM-RESISTANT MATERIALS, SUCH AS PHIALS, BOTTLES, GLASS ITEMS, FABRIC MATERIALS, CLOSED AND OPEN VESSELS, RUBBER ARTICLES, MACHINE PARTS, SURGICAL INSTRUMENTS, FILTERS, FOOD PRODUCTS, ETC.

MAIN CHARACTERISTICS

- ICOS STERILIZING CHAMBERS MADE OF ROUND OR RECTANGULAR CROSS SECTION AND PROVIDED WITH FULL JACKET.
- CHAMBER BOTTOM FITTED WITH GUIDES FOR MOVING THE LOADING CARTS.
- MACHINE BODY INSULATED WITH CERAMIC MATERIAL AND WITH AN EXTERNAL OF SHEET STAINLESS STEEL.
- DOORS OF SLIDING TYPE. SWING OUT DOORS ARE SUPPLIED ON REQUEST.
- SLIDING DOORS DRIVEN BY AN ELECTROMECHANICAL SYSTEM MADE IN COMPLIANCE WITH THE REQUIREMENTS FOR STERILE ENVIRONMENTS.
- DISCHARGE-SIDE DOOR INTERFACED FOR STERILE ENVIRONMENTS.
- EXTERNAL SHEETING OF MACHINE WITH APPROPRIATE PANELLING.
- MACHINE SUPPORTED BY A FRAME DESIGNED FOR A SUITABLE LOAD DISTRIBUTION ON THE FLOOR.
- STERILIZER EQUIPPED WITH CONNECTIONS REQUIRED FOR THE VALIDATION TESTS.
- THE UNLOADING DOOR CAN BE INTERFACED WITH THE ISOLATOR.

CONSTRUCTION CHARACTERISTICS

THE MACHINE BODY AND ASSOCIATED SAFETY DEVICES ARE MANUFACTURED AND TESTED IN COMPLIANCE WITH THE STANDARDS REQUIRED IN THE COUNTRY OF DESTINATION. UNLESS THERE IS A SPECIFIC REQUEST, THE MACHINES AND SYSTEMS ARE MANUFACTURED IN COMPLIANCE WITH THE CE STANDARDS.

- MACHINE BODY COMPLETELY OF AISI 316L STAINLESS-STEEL CONSTRUCTION, WITH THE EXCEPTION OF THE JACKET, WHICH, IN THE STANDARD VERSION, IS MADE OF AISI 304 STAINLESS STEEL.
- SUPPORT FRAME OF AISI 304 STAINLESS STEEL.
- EXTERNAL PANELLING MADE OF AISI 304 STAINLESS STEEL.
- ALL THE MACHINE COMPONENTS ARE OF SANITARY TYPE.
- IN THE STANDARD VERSION, THE DOOR TIGHTNESS IS GUARANTEED BY A PNEUMATICALLY PRESSURIZED SILICONE GASKET.
- ON REQUEST, THE DOOR GASKET CAN BE MADE OF AN AUTOMATIC PRESSURE-SEALING TYPE. THIS SYSTEM GUARANTEES THE TIGHTNESS OF THE DOOR IN ANY CONDITION OF OPERATION.
- THE CHAMBER INSIDE SURFACE, THE PIPING AND ALL PARTS IN CONTACT WITH THE PRODUCT ARE POLISHED TO A DEGREE OF ROUGHNESS $\leq 0.5 \mu$.
- THE UNLOADING DOOR IS EQUIPPED WITH A SYSTEM OF INTERFACING WITH THE STERILE ZONE.





LOADING SIDE - Mod.: AV/L 914/A

CONTROL SYSTEM

THE STEAM STERILIZING MACHINES ARE PROVIDED WITH A CONTROL SYSTEM MADE UP OF A PROGRAMMABLE CONTROLLER, COMPUTER AND PRINTER.

THE CONTROL SYSTEM MANAGES THE MACHINE AND ITS BASIC PARAMETERS, SUCH AS TEMPERATURE, FO AND PRESSURE; IT ALLOWS AN EASY INTERFACING WITH THE OPERATOR AND MAKES IT POSSIBLE TO CUSTOMIZE THE WORK CYCLES AND MANUAL OPERATIONS. THE SYSTEM PROVIDES A COMPLETE PROCESS DOCUMENTATION AND ASSISTS IN THE CONVALIDATION PROCEDURES.

N.B.: A FULL DESCRIPTION OF THE CONTROL SYSTEM IS CONTAINED IN THE RELATIVE BOOKLET.

IN THE QUALITY OF THE MATERIALS USED, AND IN THEIR ACCURATE FINISH, CONSTRUCTION AND PROCESS CHARACTERISTICS, ALL THE ICOS MACHINES ARE IN COMPLIANCE WITH THE MOST UP-TO-DATE STANDARDS.

AUTOMATIC LOADING AND UNLOADING

WHEN SPECIAL CONDITIONS CALL FOR AUTOMATING THE LOADING AND UNLOADING OPERATIONS, ICOS CAN PROVIDE A RANGE OF SOLUTIONS COMPATIBLE WITH THE REQUIREMENTS OF THE CUSTOMER.

LOADING SIDE - Mod.: AV/S 601



PROCESS DATA

PROGRAMS AVAILABLE:

- VACUUM TEST: CHAMBER TIGHTNESS CONTROL PROGRAM.
- BOWIE DICK TEST: PROGRAM CONTROLLING STEAM DISTRIBUTION IN THE CHAMBER.
- FRACTIONED VACUUM: PROGRAM FOR PROCESSING POROUS LOADS, FABRICS, RUBBER STOPPERS, MACHINE PARTS, ETC.
- TYNDALLIZATION: PROGRAM FOR LOADS THAT DO NOT WITHSTAND HIGH TEMPERATURES.
- PHARMACY WITH SHOWER: PROGRAM FOR SEALED CONTAINERS, PHIALS, GLASS BOTTLES, POUCHES AND PLASTIC BOTTLES.
- INJECTION WITH GRAVITY COOLING: PROGRAM FOR LIQUIDS IN CONTAINERS THAT ARE NOT HERMETICALLY SEALED.
- PHARMACY WITH METHYLENE BLUE: PROGRAM FOR SEALED CONTAINERS WITH CALORIMETRIC TIGHTNESS CONTROL.
- PHARMACY WITH TIGHTNESS TEST WITH VACUUM: PROGRAM FOR VACUUM-TESTING SEALED PHIALS.
- AIR+STEAM MIXTURE: PROGRAM FOR PLASTIC CONTAINERS.
- SUPERHEATED WATER: PROGRAM FOR LARGE SEALED CONTAINERS.
- STERILIZATION OF FILTERS IN SITU: PROGRAM FOR STERILIZATION OF FILTERS IN SITU, WITH POSSIBILITY OF EXTENSION FOR INTEGRITY TESTS.

N.B.: THE ABOVE PROGRAMS ARE THE MOST WIDELY USED ONES. ICOS CAN ALSO CUSTOMIZE THE FUNCTIONS OF DIFFERENT PROGRAMS.

Mod. Serie AV-V RANGE OF LABORATORY VERTICAL AUTOCLAVES

	CAPACITY	CHAMBER DIMENSIONS (mm)		OVERALL DIMENSIONS (mm)		
	Lt.	Diameter	Depth	Width	Height	Depth
AV-VSP/AV-VDP 400	85	400	600	1000	1000	900
AV-VSP/AV-VDP 500	150	500	700	1100	1000	900

MOD. AV-VSP = WITHOUT JACKET
 MOD. AV-VDP = WITH JACKET
 ALL MODELS HAVE AN INDEPENDENT ELECTRICAL STEAM GENERATOR

LOADING & UNLOADING SIDE
 Mod.: AV-VDP 500



Mod. Serie AV-0 RANGE OF LABORATORY HORIZONTAL AUTOCLAVES

	CAPACITY	CHAMBER DIMENSIONS (mm)		OVERALL DIMENSIONS (mm)		
	Lt.	Diameter	Depth	Width	Height	Depth
AV-OSP/AV-ODP 400	85	400	600	900	850	730
AV-OSP/AV-ODP 500	150	500	700	1000	950	830

MOD. AV-OSP = WITHOUT JACKET
 MOD. AV-ODP = WITH JACKET
 ALL MODELS HAVE AN INDEPENDENT ELECTRICAL STEAM GENERATOR

LOADING & UNLOADING SIDE
 Mod.: AV-OSP 400

CONTROL BOARD



Mod. Serie AV/L RANGE OF STEAM AUTOCLAVES - WITH SWING OUT DOORS

	CAPACITY	CHAMBER DIMENSIONS (mm)				OVERALL DIMENSIONS (mm)		
	Lt.	Diameter	Width	Height	Depth	Width	Height	Depth
AV/L 500	196	500			1000	1200	2160	1285
AV/L 801	640		800	800	1050	1900	2160	1630
AV/L 802	800	1100	800	800	1250	1900	2160	1830
AV/L 811/A	1000		800	1100	1250	1900	2160	1830
AV/L 811/B	1360		800	1100	1550	1900	2160	2130
AV/L 913	1800		900	1310	1550	2100	2160	2130
AV/L 914/A	2000		900	1450	1550	2100	2160	2130
AV/L 914/B	2670		900	1450	2050	2100	2160	2630

Mod. Serie AV/S RANGE OF STEAM AUTOCLAVES - WITH V/H SLIDING DOORS

	CAPACITY	CHAMBER DIMENSIONS (mm)				OVERALL DIMENSIONS (mm)		
	Lt.	Diameter	Width	Height	Depth	Width	Height	Depth
AV/S 601	435	885	660	660	1000	1400	2160	1350
AV/S 603	825		660	1000	1250	1900	2160	1830
AV/S 801	640		800	800	1050	2200	2160	1630
AV/S 802	800	1100	800	800	1250	2200	2160	1830
AV/S 811/A	1000		800	1100	1250	2200	2160	1830
AV/S 811/B	1360		800	1100	1550	2200	2160	2130
AV/S 913	1800		900	1310	1550	2500	2160	2130
AV/S 914/A	2000		900	1450	1550	2500	2400	2130
AV/S 914/B	2670		900	1450	2050	2500	2400	2630
AV/S 1240	3840		1250	1450	2050	3200	2400	2630





ICOS

PROGETTO E STAMPA: CENTRO STAMPA - ODERZO (TV)

REV. C



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