



Sterilization  
Devices



Washer  
Disinfectors



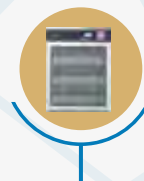
Medical PSA Oxygen  
Generator



General Surgery  
Operation Tables



Warming  
Cabinets



Blood Bank  
Refrigerators



Stainless  
Hospital Equipments





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## About us

Sümer A.Ş. was established in 1981 in Ankara to provide services in the medical device sector. It has aimed advancement since the day of its establishment by also taking growth and compliance with the contemporary technologies and protecting the environmental conditions. Our manufacturing takes place in an area of 25.000 m<sup>2</sup> in Ankara Organized Industrial Zone.

Our Firm is following the innovations in its sector and in abroad through its research and development unit and its application staff with a strong infrastructure of engineers, and is continuing to produce devices it had developed in computer environment based on such innovations with high technology and to contribute their development so as to be most beneficial for the Turkish medicine.

With this purpose, our Firm is strictly following the "Quality Management" principles and rules from design of the products to the after sale servicing.

Our Firm has been currently certificated for compliance with ISO 9001 quality management system, ISO 13485 medical device quality management system certificate and ISO 14001 environment management system certificate and with product certificates under MDD 93/42/EEC Medical Devices Directive and PED 2014/68/EU Pressurized Equipment certificate. Furthermore, our steam sterilizers, and disinfection and washing devices have been certificated by the German accredited body.

Our Firm is successfully implementing several projects supported by Tübitak, KOSGEB, and Ankara Development Agency. SÜMER A.Ş. has been awarded with the following:  
Ankara Industry Chamber Award for 2012,  
2011 R&D Award,  
2012 Success Award.

Our Firm possesses the following certificates;  
CE Certificates under the following directives:  
ISO 9001,  
ISO 13485,  
ISO 14001 Quality Management System,  
MDD 93/42/EEC Medical Devices,  
PED 2014/68/EU Pressurized Equipment



## **Our Vision**

To make the Sümer brand a global brand to make our Firm remembered first in the sector.

## **Our Mission**

Our main task is to create designs with competition power in the global sense by taking the priorities of the sector into consideration and being respectful to the environment and people and giving the first priority to the wishes and expectations of customers, and also to produce innovative technological medical products by meeting all the national and international legal requirements.

## **Our Basic Values**

- We are bound up with the Medical Ethical Rules,
- We are people-oriented,
- We respect environment,
- We are creative,
- We are customer-oriented,
- We are innovative,
- We are pro-active,
- We believe in the team spirit.







# STERILIZATION DEVICES



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## I. Central Sterilization Units

Our Firm implements turn-key sterilization projects designed by taking the hospital sizes into consideration, and gives services for the installation and commissioning of turn-key Central Sterilization Units.

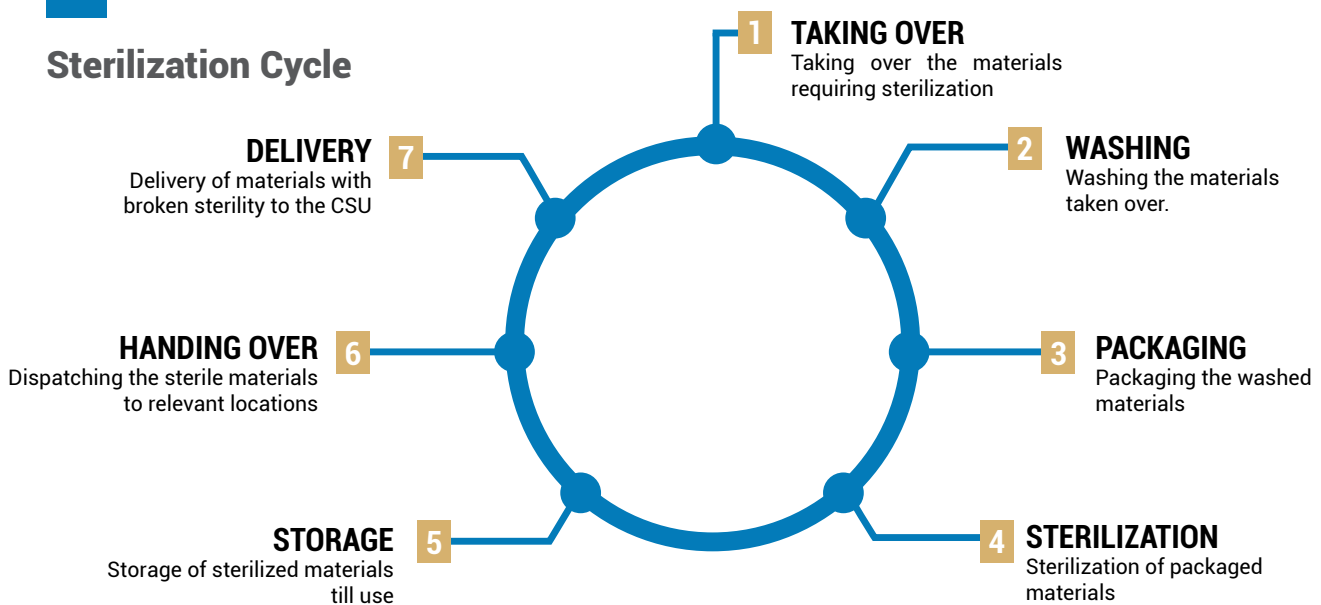
"It is essential for Central Sterilization Units (CSU) to eliminate the microorganisms existing in hospitals."

Sümer A.Ş. offers the following turn-key services for you, our valuable customers, in relation with the Central Sterilization Units;

- Design,
- Central construction,
- Installation of products,
- Commissioning,
- Control and similar.



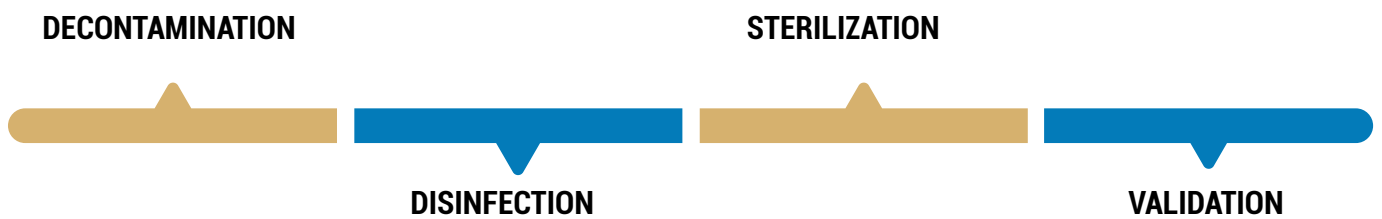
### Sterilization Cycle



Central Sterilization Units are indispensable dynamic centers with great responsibility in ensuring the sterilization safety and prevention of infections, collecting the contaminated materials from various locations in the hospital to process and redelivering them to users and providing continuous services throughout 24 hours during 365 days of the year.



## Sterilization Process



*Sterilization must not be taken as a simple procedure; it must be considered as providing new materials suitable for medical purposes, or a process of novel production.*

## II. Prismatic Steam Sterilizer

ADELA-OT series steam sterilizers are designed and manufactured regarding the manufacturing and product standards.

### General Characteristics

Control System	PLC CPU
Operation Mod	Fully Automatic / Button Command
Screen Type	Multi-Color TFT, LCD Touch Screen
Screen Size	7,0" (10,0" optional)
Keypad	Touch Screen
Printer	40 Character /Line , Thermal Printer
Remote Control and Communication	RS 232 Port / USB , Ethernet (optional)
Warning Sytem	Visual & Audio & Printed
Data Storage	Up to 200 Cycles
Monitoring	Touch Screen, Anaolgue Gauges for Chamber, Jacket, Generator and Air Pressure (Manometer)
Mobility	4 Easy positioning on 4 swivel castors and firm fixing on legs
Steam Generator	with pneumatic valves



### Standard Programs

Medical & Surgical Instruments	134°C	~ 60 dk
Textile Materials	134°C	~ 60 dk
Rubber Articles	121°C	~ 80 dk
Liquids in Glass Container	121°C	~ 60 dk
Liquids in Glass Container	125°C	~ 60 dk
Flash	134°C	~ 20 dk
Prion	134°C	~ 90 dk
Bowie & Dick Test	134°C	~ 45 dk
Vacuum Leak Test	-	~ 25 dk
Customizable Program Capacity	-	99



#### Safety and Quality

- Protects operator from electrical current leaks.
- Short circuit protection.
- Safety valve.
- Hepa filter for air filtration.
- Water level control via buoy in generator.
- Pneumatic Valves for precise exhausting.
- Leak test.
- Password protection.
- Sensors against obstructions on the doors pathway.
- Doors locks under pressure.
- Emergency stop button.
- Unable to open both doors at once double door models.

#### Relevant Directives and Standards

Medical Device Directive	MDD 93/42/EEC / 2007/47/EC
Medical Device Class	Class IIb, MDD 93/42/EEC, 2007/47/EC (Annex IX)
Low Voltage Directive	2014/35/EU - EN 61010-2-040 – EN 61010-1 – EN 60601-1
EMC Directive	2014/30/EU EN 60601-1-2 – EN 61326-1
Pressure Equipments Directive	PED 2014/68/EU : EN 13445-1, -2, -3, -4, -5
Steam Sterilizer Directive	EN285
Quality Mangement System	ISO 9001
Medical Devices Quality Mangement System	ISO 13485
Enviromental Management Systems	ISO 14001

**®"Type tests" of Sümer A.S. Steam sterilizers are performed and certified according to the directives of EN 285 and TS EN 17665-1-2 by The German accreditation company HYGCEN GmbH.**



## Technical Data Sheet

CHAMBER VOLUME (LITER) AND DIMENSIONS													
MODELS	SINGLE DOOR						DOUBLE DOOR						
	100 L	150 L	250 L	325 L	425 L	580 L	150 L	250 L	325 L	425 L	580 L	718 L	900 L
Height (mm)	390	390	500	500	670	670	390	500	500	670	670	670	670
Width (mm)	390	390	500	500	670	670	390	500	500	670	670	670	670
Depth (mm)	700	1000	1000	1300	1000	1300	1000	1000	1300	1000	1300	1600	2000
STU Capacity	1	1,5	1,5	2	6	8	1,5	1,5	2	6	8	10	12

DEVICE DIMENSION													
MODELS	SINGLE DOOR						DOUBLE DOOR						
	100 L	150 L	250 L	325 L	425 L	580 L	150 L	250 L	325 L	425 L	580 L	718 L	900 L
Height (mm)	1655	1655	1765	1765	1935	1935	1655	1765	1765	1935	1935	1935	1935
Width (mm)	885	885	995	995	1165	1165	885	995	995	1165	1165	1165	1165
Depth (mm)	1125	1325	1325	1625	1325	1625	1325	1325	1625	1325	1625	1925	2325

PACKING DIMENSION													
MODELS	SINGLE DOOR						DOUBLE DOOR						
	100 L	150 L	250 L	325 L	425 L	580 L	150 L	250 L	325 L	425 L	580 L	718 L	900 L
Height (mm)	1920	1920	2030	2030	2200	2200	1920	2030	2200	2200	2200	2200	2200
Width (mm)	1070	1070	1180	1180	1350	1350	1070	1180	1180	1350	1350	1350	1350
Depth (mm)	1280	1580	1580	1880	1580	1880	1580	1580	1880	1580	1880	2175	2575

DEVICE WEIGHT													
MODELS	SINGLE DOOR						DOUBLE DOOR						
	100 L	150 L	250 L	325 L	425 L	580 L	150 L	250 L	325 L	425 L	580 L	718 L	900 L
Weight (Kg)	500	600	670	770	850	1000	700	800	900	1050	1200	1450	1680

GENERATOR DIMENSION													
MODELS	SINGLE DOOR						DOUBLE DOOR						
	100 L	150 L	250 L	325 L	425 L	580 L	150 L	250 L	325 L	425 L	580 L	718 L	900 L
Generator Power (3 Phase/400± 10VAC)	20	20	30	30	40	40	20	30	30	40	40	60	60
Installation Power (kW)	25	25	35	35	45	45	25	35	35	45	45	65	65
Generator Volume(L)	25	25	50	50	75	75	25	50	50	75	75	100	100

TRANSPORT TROLLEY DIMENSION													
MODELS	SINGLE DOOR						DOUBLE DOOR						
	100 L	150 L	250 L	325 L	425 L	580 L	150 L	250 L	325 L	425 L	580 L	718 L	900 L
Width (mm)	480	480	590	590	660	660	480	590	590	660	660	660	660
Height (mm)	1000	1000	1100	1100	1100	1100	1000	1100	1100	1100	1100	1100	1100
Depth (mm)	880	1180	1180	1480	1180	1480	1180	1180	1480	1180	1480	1780	1780

LOADING CART DIMENSION													
MODELS	SINGLE DOOR						DOUBLE DOOR						
	100 L	150 L	250 L	325 L	425 L	580 L	150 L	250 L	325 L	425 L	580 L	718 L	900 L
Width (mm)	380	380	490	490	660	660	380	490	490	660	660	660	660
Height (mm)	365	365	430	430	530	530	365	430	430	530	530	530	530
Depth (mm)	660	960	960	1260	960	1260	960	960	1260	960	1260	1560	960

# Technical Data Sheet



TEMPERATURE	
Range	115°C - 137°C (Chamber)
Measurement	PT 100 (DIN A Class)
Sensor Position	Chamber (1)

PRESSURE	
Measurement	Pressure Sensors (4)
Sensor Position	Chamber (1), Jacket(1), Generator (1), Gasket(1)

VACUUM	
Source	Pump, Water Ring (2.2kW)
Pre-Vacuum	Yes

DEVICE CONSTRUCTION	
Body	AISI 304 Stainless Steel
Chamber	6mm, AISI 316 L Stainless Steel
Chamber	6mm, AISI 316 L Stainless Steel
Jacket	3mm, AISI 316L Stainless Steel
Door	10mm, AISI 304 Stainless Steel
Panel Cover	1-1,5 mm AISI 304 Stainless Steel
Pipes	Brass, AISI 304 Stainless Steel
Chamber Polishing	Sandblasting, Electropolishing (Optional)

DRAINAGE	
Water	Inclined pipe to be installed onsite with at least 2 m of length (Diameter: 2"-3")
Steam	Pneumatic valve, software controlled
Air	Vacuum Motor ( Built-in)

**INSTALLATION CONDITIONS:** At least 60 cm. space is needed on both lateral sides of the device to provide an effective technical service. Exhaust fan or ventilation funnel needs to be placed above the device for an effective evacuation of heat.





# Technical Data Sheet



JACKET	
Test Pressure	3,75 Bar
Test Temperature	140 °C
Working Temperature	134 °C
Working Pressure	2,5 Bar

GENERATOR	
Test Pressure	5,25 Bar
Test Temperature	150 °C
Working Temperature	144 °C
Working Pressure	3,5 Bar
Water Level Protection	*CRES / AISI 304 SS

\* CRES: Anti Corrosive Stainless Steel

ENERGY CONSUMPTION	
Electric	20 kW/Loop
Water	~120 Lt/Loop

### III. Laboratory Type Vertical And Horizontal Steam Sterilizer

Adela range provides a single solution for the multiples sterilization needs on laboratories including instruments, hollowware elements, glassware and other laboratory items that need a final drying to avoid contamination.

Load has to be placed into the vessel's baskets and after automatic filling with distilled water, device starts to heat up and purge until set temperature is reached. In case of solid objects, discharge is automatically

#### Operating Principal

Vertical and table-top range provides a single solution for the multiples sterilization needs on laboratories including instruments, hollowware elements, glassware and other laboratory items that need a final drying to avoid contamination.

Load has to be placed into the vessel's baskets and, after automatic filling with distilled water, device starts to heat up and purge until set temperature is reached. In case of solid objects, discharge is automatically forced during cooling stage to reduce cycle time.

**Digital Microprocessor:** Digital microprocessor for an easy programming and parameters selection for sterilization process.

**Water Filling:** Pure water for sterilization can be added manually into the water pan. Automatic filling is also available by connecting the device to pure mains water.

Adela Rotary Sealers with built-in printer are specially designed to meet the demand of high-volume operations in hospitals and medical device industries.

Common sterilization packaging processes require traceability of sealed pouches to ensure patient/medical device safety and control all time. The built-in printer of Rotary Sealers ensures the end-user that all essentials data needed for traceability can be printed on the back side of the pouch.

#### Communications and Documentation

- RS-232 Port For live monitoring of sterilization cycle directly to PC. It is needed the customized software SOFT-S7000W.
- Integrated Printer for quality printouts after each cycle. Intervals can be adjustable. Printer has to be requested before ordering.





## Sterilization Process

Pre-vacuum and Filling Stage	Integrated vacuum pump for initial pre-vacuum and subsequent automatic water filling.
Heating Stage	Fast saturated steam production by means of powerful heating elements.
Sterilization Control	A PT-100 temperature probe controls the chamber temperature, with the possibility of installing another flexible PT-100 temperature probe for liquid programs.
Cooling and Drying Stage	In solid program, discharge is automatically forced during cooling stage to reduce the cycle time. Then, integrated heating jacket together with pre-vacuum pulses is activated for a fast and intense drying.
Security	All safety standards are covered with safety valve, safety thermostat and safety pressure switch, door opening prevention system in case of overpressure, open door sensor and water level detector. EU Directive and Standards:
2014/35/EU	Low Voltage
2014/30/EU	Electromagnetic Compatibility
2014/68/EU	Pressure Equipment
EN-61010-1	
EN-61010-2-040	
EN-61326-1	



## Programs

Microprocessor has 10 programs, from P0 to P9, and the first four are pre-defined and protected.

Program N°	Temperature (°C)	Pressure (bar)	Sterilization Time (min.)	Sterilization Mode	Drying Time (min.)
P0	115	0,6	60	SOLIDS-1	12
P1	121	1,1	30	SOLIDS-1	25
P2	133	2,1	20	SOLIDS-1	30
P3	121	1,1	20	LIQUIDS-1	-

The rest of the programs are user-defined with the following parameters setting:

- Sterilization temperature
- Sterilization time
- Drying time
- Heart probe selection

## Technical Data

### Laboratory Type Horizontal Autoclaves

MODEL	USEFUL CAPACITY (L)	CELL (ØxH) (mm)	DEVICE (FxAxH) (mm)	TEMP. (°C)	MAX. PRESSUR (bar)	POWER (W)	WEIGHT (Kg)
ADELA 40	40	Ø400 x 320	780 x 665 x 660	100 - 134	2,1	4000	105
ADELA 60	60	Ø400 x 525	780 x 870 x 660	100 - 134	2,1	4000	135

### Laboratory Type Vertical Autoclaves

MODEL	USEFUL CAPACITY (L)	CELL (ØxH) (mm)	DEVICE (FxAxH) (mm)	TEMP. (°C)	MAX. PRESSUR (bar)	POWER (W)	WEIGHT (Kg)
ADELA 75	75	Ø400 x 600	670 x 740 x 1140	100 - 134	2,1	5000	75
ADELA 90	90	Ø500 x 700	670 x 740 x 1260	100 - 134	2,1	6000	80
ADELA 115	115	Ø400 x 910	670 x 740 x 1450	100 - 134	2,1	7500	175



## IV. Prismatic Steam Sterilizer

This is produced for the sterilization of surgical and wound dressing tools, plastic and glass materials and bottled fluids by trained, certificated and officially assigned hospital staff.



### General Characteristics

Control System	PLC processor
Way of use	Full automatic / buttons and touch screen
Screen Type	Color TFT, Touch LCD
Screen Dimensions	7,0" (10,0" Optional)
Keypad	Touch Screen
Printer	40 Characters / lines, integrated thermal printer
Communication	RS232 /485 Port - USB (Ethernet Optional)
Warning system	Warnings with audiovisual and written messages
Data Storage	200 cycles
Procedure follow-up/tracing	Analog indicators for the follow-up of Cell, Jacket, Generator and Air pressure in addition to the Touch Screen
Motility	Easy orientation on 4 swivel castors and stabilization legs adjustable according to inclination of the floor
Vapor control	Through pneumatic valves

### Standard Programs

Medical and Surgical Tool (134°C)	~ 60 min
Textile Materials (134°C)	~ 60 min
Heavy Materials (134°C)	~ 65 min
Plastic/Rubber Materials (121°C)	~ 80 min
Rubber/Glass (125°C)	~ 60 min
Fluids (121°C)	~ 90 min
Flash (134°C)	~ 20 min
Prion (134°C)	~ 60 min
Bowie & Dick Test (134°C)	~ 35 min
Vacuum Leakage Test	~ 25 min
Number of optional programs	99

Body	AISI 304 Stainless steel
Cell	6 mm, AISI 316 L Stainless steel
Jacked	3mm, AISI 316 L Stainless steel
Cover	6 mm, AISI 304 Stainless steel
Panel Coating	AISI 304 Stainless steel
Piping	Brass, AISI 304 Stainless steel

***The entire piping can be made from AISI 304 stainless steel optionally.***



## Chamber Dimensions

Chamber volume (L)	125	175	200	225	250	325	425	470	490	538	580	628	670	718	760	800	900	1000	1200
Height (mm)	500	500	500	500	500	670	670	670	670	670	670	670	670	670	670	670	670	670	670
Width (mm)	500	500	500	500	500	670	670	670	670	670	670	670	670	670	670	670	670	670	670
Depth (mm)	500	700	800	900	1000	750	950	1050	1100	1200	1300	1400	1500	1600	1700	1800	2020	2250	2675
STU Capacity	-	1	1	1	1	2-4	6	6	6	6-8	8	8	8-10	10	10	10-12	12	14	16



## Dimensions – Single Sliding Door Steam Sterilizer

Chamber volume (L)	125	175	200	225	250	325	425	470	490	538	580	628	670	718	760	800	900	1000	1200
Height (mm)	1800	1800	1800	1800	1800	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
Width (mm)	890	890	890	890	890	1120	1120	1120	1120	1120	1120	1120	1120	1120	1120	1120	1120	1120	1120
Depth (mm)	1250	1300	1350	1400	1500	1100	1450	1550	1600	1700	1800	1900	2000	2100	2200	2300	2500	2750	2900



## Dimensions – Double Sliding Door Steam Sterilizer

Chamber volume (L)	200	225	250	325	425	470	490	538	580	628	670	718	760	800	900	1000	1200
Height (mm)	1800	1800	1800	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
Width (mm)	940	940	940	1170	1170	1170	1170	1170	1170	1170	1170	1170	1120	1120	1120	1120	1120
Depth (mm)	1150	1250	1350	1100	1300	1400	1450	1550	1650	1750	1850	1950	2050	2150	2350	2600	2750





## Weights – Single Sliding Door

Chamber volume (L)	125	175	200	225	250	325	425	470	490	538	580	628	670	718	760	800	900	1000	1200
Weight of the Device (kg)	590	630	670	710	750	800	850	900	945	1010	1060	1120	1200	1270	1330	1390	1450	1510	1570
Packaging Weight (kg)	730	750	810	800	850	900	990	1040	1060	1150	1210	1290	1360	1430	1520	1590	1660	1700	1770



## Weights – Double Sliding Door

Chamber volume (L)	200	225	250	325	425	470	490	538	580	628	670	718	760	800	900	1000	1200
Weight of the Device (kg)	710	760	810	850	900	950	985	1050	1110	1170	1230	1310	1390	1450	1510	1580	1650
Packaging Weight (kg)	850	870	940	980	1070	1090	1110	1190	1250	1330	1400	1470	1560	1630	1700	1780	1900



## Volume and Power

Chamber volume (L)	125	175	200	225	250	325	425	470	490	538	580	628	670	718	760	800	900	1000	1200
Generator Power (3Phase/400±10VAC)	20 kW		30 kW				40 kW					50 kW				60 kW			
Installed Power	25 kW, 3 Phase / 400 VAC ±10		35 kW, 3 Phase / 400 VAC ±10				45 kW, 3 Phase / 400 VAC ±10					55 kW, 3 Phase / 400 VAC ±10				65 kW, 3 Phase / 400 VAC ±10			
EQUIPMENT-RELATED CHARACTERISTICS	Main Supply Vapor	4-6 Bars																	
	Generator Volume (L)	60	60	60	60	60	60	70	70	70	70	70	75	75	80	80	80	80	100



## V. Washer and Steam Sterilizer

### General Characteristics

Control System	PLC processor
Way of use	Full automatic/ buttons and touch screen
Screen Type	Color TFT, Touch LCD
Screen Dimensions	7,0"
Keypad	Touch Screen
Printer	40 characters/lines, integrated thermal printer
Communication	RS232/RS485 Port/USB (Ethernet Optional)
Warning system	Warnings with audiovisual and written messages
Data Storage	200 cycles
Procedure follow-up/tracing	Analog indicators for the follow-up of Cell, Jacket, Generator and Air pressure in addition to the Touch Screen
Motility	Easy orientation on 4 swivel castors and stabilization legs adjustable according to inclination of the floor
Vapor control	through pneumatic valves
Body	AISI 304 Stainless Steel
Cell	6 mm, AISI 316 L Stainless Steel
Jacket	6 mm, AISI 316 L Stainless Steel
Door	20 mm, AISI 316 Stainless Steel
Panel Coating	AISI 304 Stainless Steel
Piping	PTFE Hose, AISI 304 Stainless Steel



### Dimensions of the Device

### Chamber Dimensions

Chamber volume (L)	96	125	175	250
Height (mm)	1800	1800	1800	1800
Width (mm)	870	870	870	870
Depth (mm)	1030	1155	1355	1755

Steam Sterilizer Chamber Dimensions

Chamber volume (L)	96	125	175	250
Height (mm)	500	500	500	500
Width (mm)	500	500	500	500
Depth (mm)	385	500	700	1000
STU Capacity	-	-	1	1

Washing Chamber Dimensions

Chamber volume (L)	Height (mm)	Width (mm)	Depth (mm)	Number of Basket Racks	STU Capacity	For Feeding-bottle Washing
100	565	595	550	3	6	2 Shelves 4 STU









**WASHER  
DISINFECTORS**

**ULTRASONIC  
CLEANER**

**AUTOMATIC  
CUTTING &  
SEALING  
DEVICE**





## I. Washer and Disinfectors

### Automatic and Manual Door

Our product has been designed to be used for washing and disinfection of heat-resistant and reusable medical devices tools. It is used in the following:

- ─ Hospitals,
- ─ Outpatient clinics,
- ─ Rehabilitation centers,
- ─ It is used in laboratories.

It must be used by the expert technical personnel who have completed the required training for washing and disinfection process.



## Packaging and Loading

Packaging material must not be used in washing and disinfection procedure. Instead, a cart and a basket suitable for the materials to be washed.

Materials/tools must not be placed one over another or stuffed together when placing them within suitable baskets. Same types of materials must be placed together to the extent possible, and loading cart or racks must be used.

## Materials that can be subjected to washing and disinfection

### Programs Used and Times

- ─ Surgical tools
- ─ Operating room containers
- ─ Laboratory tools
- ─ Glass containers
- ─ Rubber materials
- ─ Plastic materials

	USED PROGRAMS AND TIMES									
	SHORT CYCLE		STANDARD CYCLE		LONG CYCLE		DRYING CYCLE		SELF DISINFECTION CYCLE	
	Temp (°C)	Time (S)	Temp (°C)	Time (S)	Temp (°C)	Time (S)	Temp (°C)	Time (S)	Temp (°C)	Time (S)
Pre-washing-1	-	-	30	120	30	120	-	-	-	-
Pre-washing-2	-	-	-	-	-	-	-	-	-	-
Washing	50	300	50	300	50	300	-	-	-	-
Rising-1	40	300	40	300	40	300	-	-	-	-
Rising-2	-	-	-	-	40	180	-	-	-	-
Rising-3	-	-	-	-	-	-	-	-	-	-
Disinfection	93	300	93	300	93	300	-	-	93	300
Drying	60	1500	60	1500	60	1500	50	600	60	1500



## General Characteristics

Control System	PLC
Way of use	Full automatic/ buttons and touch screen
Screen Type	Color TFT, Touch LCD
Screen Dimensions	7"
Keypad	Touch Screen
Printer	Thermal printer with 40 characters/ lines
Communication	RS 232 Port / USB , Ethernet
Warning System	Warning with audiovisual and written messages
Data Storage	200 cycles
Procedure Follow-up/ Tracing	Touch screen
Mobility	Easy orientation with 4 swivel castors and with adjustable heights According to the inclination of the floor
Water Consumption	~120 L /cycle

## Structural Characteristics

Body	2,5 mm, AISI 304 Stainless Steel
Cabin	1,5 mm, AISI 316L Stainless Steel
Door	Tempered Glass
Panel Coating	1,5 mm, AISI 304 tainless Steel
Piping	Silicone Hose, 1,5 mm, AISI 304 Stainless Steel
Chamber Polishing	Electro-polishing

## Installation Requirements

Water	De-ionized water with Reverse Osmosis is recommended for high performance.
Installation Power for 200L	~ 20kW, 3 Phase, 380 VAC ±10
Installation Power for 250L-360L	~ 25kW, 3 Phase, 380 VAC ±10
Installation Power for 500 L	~ 27,5kW, 3 Phase, 380 VAC ±10

#### Relevant Directives and Standards

Medical Device Directive	MDD 93/42/EEC - 2007/47/EC
Medical Device Class	Class IIb, acc. to EC MDD 93/42/EEC 2007/47/EC (Annex IX)
Low-voltage Directive	2014/35/EU EN 60601-1
Electromagnetic Compliance Directive	2014/30/EU EN 60601-1-2
Washing and Disinfection Devices	EN 15883-1 Series Standards
Quality Management System Requirements	ISO 9001
Medical Devices Regulatory	ISO 13485
Environment Management System	ISO 14001

#### Safety and Quality

It protects the user against current leaks.  
 It has short circuit protection.  
 It is equipped with safety valve protection.  
 HEPA filter is used for fresh air.  
 It has password protection.  
 A system preventing the opening of both doors simultaneously is used in models with double doors.  
 An emergency button is provided.

#### Temperature

Operation Range	15 oC – 110 oC
Measurement	3xPT100 (DIN A Class) Sensor
Sensor Positions	Cabin (2), Water (1)

#### Pressure

Measurement	2 Pressure Sensors
Sensor Positions	Cabin (1), Air (1)



AUTOMATIC SLIDING DOOR



MANUAL DOOR

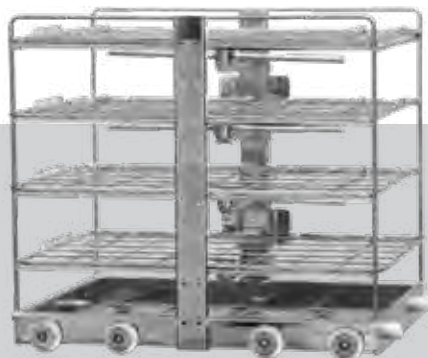


*Materials/tools must not be placed one over another or stuffed together when placing them within suitable baskets. Irregular placement of materials will prevent proper cleaning. As a result, sterilization quality will be affected also.*

## Technical Data Table

MODELS	ADELA-WD 200	ADELA-WD 250	ADELA-WD 360	ADELA-WD 500	ADELA-WD 200	ADELA-WD 250
	Large Automatic Sliding Door Capacity				Large Manual Door Capacity	
Chamber Volume (L)	200	250	360	500	200	250
Chamber Depth (mm)	600	600	835	835	735	735
Chamber Height (mm)	582	720	720	870	585	725
Chamber Width (mm)	618	618	618	618	625	625
Device Depth (mm)	825	825	1060	1060	1000	1000
Device Height (mm)	1860	1960	1960	2010	1870	2010
Device Width (mm)	855	855	855	1100	885	885
Packing Depth (mm)	1025	1025	1260	1260	1200	1200
Packing Height (mm)	2060	2160	2160	2190	2070	2190
Packing Width (mm)	1055	1055	1055	1300	1085	1085
Single Door	+	+	+	+	+	+
Double Door	+	+	+	+	+	+
Touchscreen	7"	7"	7"	7"	7"	7"
RS232	+	+	+	+	+	+
Water Heat Resistance (KW)	9	9	12,5	12,5	12,5	12,5
Drying Resistance (KW)	5,7	5,7	5,7	5,7	6	6
Drying Engine Fan Blowing Flow (m3/h)	150	150	150	150	150	150
Circulation Power Pump (KW)	1,4	1,4	2,4	2,2	1,4	1,4
Circulation Pump Electrical Connection Features	380V±10	380V±10	380V±10	380V±10	380V±10	380V±10
Circulation Pump Flow (d/d)	600	600	800	950	650	650
Detergent Dosage Pump	+	+	+	+	+	+
Neutralizing Dosing Pump	+	+	+	+	+	+
Electrical Connection	3N+1 50 Hz, 380 V	3N+1 50 Hz, 380 V	3N+1 50 Hz, 380 V	3N+1 50 Hz, 380 V	3N+1 50 Hz 380 V	3N+1 50 Hz 380 V
Water Drain Pipe Diameter (mm)	25	25	25	25	25	25
Basket Layer Quantity	4	5	5	6	4	5
DIN Basket	8	10	15	18	8	10
Hepa Filter	H14, Particle Retention Ratio %99,999					

***It is equipped with printer, oil dosage pump, disinfectant dosage pump and air spray optionally***



## II. Under-Bench Washer Disinfectors

Our product has been designed to be used for washing and disinfection of heat-resistant and reusable medical devices tools. It is used in the following:

- Hospitals,
- Outpatient clinics,
- Rehabilitation centers,
- It is used in laboratories.

It must be used by the expert technical personnel who have completed the required training for washing and disinfection process.



### General Characteristics

Control System	PLC & PCB Card
Way of use	Full automatic/ buttons and touch screen
Screen Type	Color TFT, Touch LCD
Screen Dimensions	4.3"
Keypad	Touch Screen
Printer	Thermal printer with 40 characters/lines
Communication	RS 232 Port / USB , Ethernet
Warning System	Warning with audiovisual and written messages
Data Storage	200 cycles
Procedure Follow-up/Tracing	Touch screen
Mobility	Easy orientation with 4 swivel castors and with adjustable heights According to the inclination of the floor
Water Consumption	~120 L /cycle

#### Structural Characteristics

Body	2,5 mm, AISI 304 Stainless Steel
Cabin	1,5 mm, AISI 316L Stainless Steel
Door	Tempered Glass
Panel Coating	1,5 mm, AISI 304 tainless Steel
Piping	Silicone Hose, 1,5 mm, AISI 304 Stainless Steel
Chamber Polishing	Electro-polishing

#### Installation Requirements

Supply Water	Deionized water processed with Reverse Osmosis is recommended for high performance.
Installed Power	~ 15kW, 1 Phase, 230 VAC ±10



## Technical Data Table

	Chamber Dimensions	Device Dimensions	Packing Dimensions
Depth (mm)	590	840	1010
Height (mm)	457	840	1150
Width (mm)	618	950	1150

MODELS	ADELA-WD 175
	Large Capacity
Touchscreen	4.3"
RS232	+
Water Heat Resistance (KW)	7.5
Drying Resistance (KW)	5
Drying Engine Fan Blowing Flow (m3/h)	50
Circulation Power Pump (KW)	0,4
Circulation Pump Flow (d/d)	325
Detergent Dosage Pump	+
Neutralizing Dosing Pump	+
Electrical Connection	1P+N 50 Hz, 230 V
Water Drain Pipe Diameter (mm)	25
Basket Layer Quantity	3
DIN Basket	6
Hepa Filter	H14, Particle Retention Ratio %99,999



### III. Dental Washer and Disinfectors

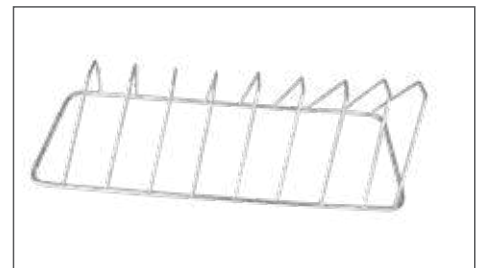
Adela offers a comprehensive range of thermal disinfectors and accessories for the automated cleaning and disinfection in dental practices. Our long experience in automated cleaning of surgical instruments in Central Sterile Supply Departments, in endoscopy centers and in private practices allows safe, efficient and cost-effective cleaning and disinfection procedures based on proven modern technologies.

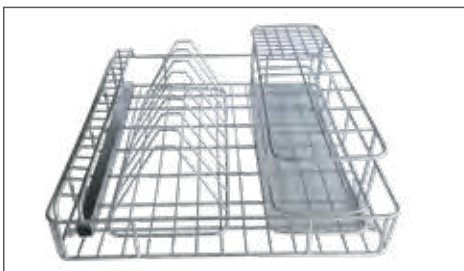
#### Technical Data Table

MODELS	ADELA-WD 40	ADELA-WD 60
	Dental Type	
Chamber Volume (L)	40 L	60 L
Chamber Depth (mm)	450	480
Chamber Height (mm)	270	270
Chamber Width (mm)	400	400
Device Depth (mm)	650	680
Device Height (mm)	685	685
Device Width (mm)	680	680
Packing Depth (mm)	950	980
Packing Height (mm)	985	985
Packing Width (mm)	980	980
Single Door	+	+
Double Door	-	-
Touchscreen	4.3"	4.3"
RS232	+	+
Water Heat Resistance (KW)	2	2
Drying Resistance (KW)	2	2
Drying Engine Fan Blowing Flow (m3/h)	50	50
Circulation Power Pump (KW)	0,4	0,4
Circulation Pump Electrical Connection Features	220V±10	220V±10
Circulation Pump Flow (d/d)	180	180
Detergent Dosage Pump	+	+
Neutralizing Dosing Pump	+	+
Electrical Connection	1P+N 50 Hz, 230 V	1P+N 50 Hz, 230 V
Water Drain Pipe Diameter (mm)	25	25
Basket Layer Quantity	1	1
DIN Basket	-	-
Hepa Filter	H14, Particle Retention Ratio %99,999	



#### Accessory





## IV. Ultrasonic Cleaner



### Features

- Stainless steel cover ■
- Stainless steel basket ■
- Digital Panel ■
- Digital Timer: 1-99 ■
- Heating: 0-100 ■
- Drain ■

MODELS	ADELA-2.8L	ADELA-4L-T	ADELA-4L	ADELA-6L	ADELA-12L	ADELA-18L	ADELA-28L
Tank volume and Machine Weight	2.8 liter, 3.6 kg	4 liter, 4.3 kg	4 liter, 4.4 kg	6 liter, 5 kg	12 liter, 7.5 kg	18 liter, 10 kg	28 liter, 14 kg
Ultrasound Power	80 W-1 Transducer	80 W-1 Transducer	160W-2 Transducer	160W-2 Transducer	240W-3 Transducer	320W-4 Transducer	480W-6 Transducer
Generator	1x80W-2 Amper	1x80W-2 Amper	1x80W-2 Amper	1x160W-4 Amper	1x240W-10 Amper	1x320W-10 Amper	1x480W-12 Amper
Inner Dimensions of tank (LxWxH)	240x138x100mm	240x138x150mm	240x138x150mm	240x138x200mm	300x240x200mm	330x300x200mm	500x300x200mm
Outer Dimensions (LxWxH)	265x162x342mm	265x180x315mm	265x180x315mm	270x180x330mm	325x265x365mm	350x325x410mm	530x325x405mm
Basket Dimension (LxWxH)	210x115x45mm	210x115x45mm	210x115x45mm	210x115x45mm	240x190x105mm	290x255x110mm	445x223x160mm
Frequency	40 KHz	40 KHz	40 KHz	40 KHz	40 KHz	40 KHz	40 KHz
Heating Power	250 W	500 W	500 W	500 W	750 W	750 W	1000 W
Power	220V/ 50-60 Hz	220/ 50-60 Hz	220 V/ 50-60	220 V/ 50-60 Hz	220 V/ 50-60 Hz	220 V/50-60 Hz	220V/ 50-60 Hz

## V. Automatic Cutting & Sealing Device

The patented Adela medical sealing device for hospital and industry applications is a combined self-cutting and sealing system that is contributing to your productivity and flexibility independence by providing an unparalleled blend of benefits.



ADELA C100

Adela can process reels made of medical grade paper/film and Tyvek packaging up to a width of 40cm and can be also used for manual sealing of filled pouches.

Mobility, efficiency and ergonomics reflect the accessories in a complete CSSD. The range of Adela rotary models is available in two versions; Plus and Premium, which are validatable, according to DIN EN ISO 11607-2. Both models have a new compact design and are easy to keep clean.



ADELA C200

All machines carrying the Adela brand are validated, calibrated and in compliance with international standards. The range contains sealers for high-end demands according to DIN EN ISO 11607-2, as well as a basic model for when you simply need to perform good, trouble-free seals.

The adela sealers are a part of a complete package station solution with ergonomically designed sealers, height adjustable packing tables, sealing table, inspection lamps and cutting devices with pouch roll holders. Two of the three sealer models are validatable according to DIN EN ISO 11607-2.



ADELA C300

DESCRIPTION	SIZE
ADELA C300	460 x 930 x 220 mm
Transfer Roller (For ADELA C300)	260 x 950 x 70 mm
ADELA C200	260 x 670 x 700 mm
Transfer Roller (For ADELA C200)	260 x 530 x 105 mm
ADELA C100	210 x 510 x 170 mm
Transfer Roller (For ADELA C100)	260 x 530 x 66 mm







# MEDICAL PSA OXYGEN GENERATOR



Our products are designed for producing 93±3% purity medical oxygen gas from air. Our devices are used in:

- Hospitals,
- Polyclinics,
- Rehabilitation centers.

Oxygen Generators should be used by technical staff who have successfully finished their training.



## General Specification

Product	93±3 Medical Oxygen Gas
Zeolite Type	High Efficiency Molecular Sieve 13X / Made in USA
Control Modes	SMART, 90%, 93%, 95%
Control System	Electronic Card
Use	Fully Automatic / Touch Screen
Screen Type	Color TFT, Touchscreen LCD
Real Time Operation Animation	Yes
Screen Dimensions	10.1"
Keypad	Touchscreen
Communication	MicroSD and Ethernet
Warning System	Visual, Audible, SD Card and Ethernet
Data Recording	At least 1 Year
Real Time Monitoring	Touchscreen and Remote Desktop
Security	1 Operator, 1 Service
Service Maintenance Reminder	Yes
Language	English, French, Arabic, Turkish (other languages are available upon request)
Sensors	4 x Pressure, 1 x Temperature, 1 x Humidity, 1 x Oxygen 1 x Flowmeter, 1 x CO (optional), 1 x CO2 (optional)
Filters	5 µm, 1 µm, 0.01 µm, Carbon Filter, Sterile Filter, Dust Filter







#### Related Directives and Standards

Medical Device Directive	MDD 93/42/EEC
Medical Device Class	Class 2b, acc. to EC MDD 93/42/EEC
Low Voltage Directives	EN 60601-1
Electromagnetic Compatibility Directives	EN 60601-1-2
Quality Management System Requirements	ISO 9001
Medical Devices Regulatory Requirements	ISO 13485
Environment Management System	ISO 14001
Electrical Connection	110-220V $\pm$ 10% - 50-60Hz 220-440V $\pm$ 10% - 50-60Hz

#### Working Conditions

Operating Temperature	5 °C- 40 °C
Max. Operating Pressure	10 bar(g)
Test Pressure	15 bar(g)

#### Safety and Quality

- Protection against current leaks
- Short circuit protection
- Password protection
- Emergency stop button
- Over pressure protection
- Low oxygen tank pressure warning
- Low oxygen purity warning
- UPS support for electricity failures

#### European Pharmacopoeia Requirements for Medical Oxygen 93

O <sub>2</sub>	93 $\pm$ 3
CO <sub>2</sub>	< 300 ppm
CO	< 5 ppm
NO <sub>x</sub>	< 2 ppm
SO <sub>2</sub>	< 1 ppm
Oil	< 0.1 mg/m <sup>3</sup>
Water	< 67 ppm

## Key Features of Oxyfresh

- Medical Oxygen from 93% to 95% ( $93\pm 3\%$ )
- Fully Automatic 24/7
- Real time trends of process parameters
- Visual recommended service maintenance reminders
- Algorithm against electricity cuts-off (Purity does not drop after electricity cuts-off)
- Smart Algorithm (Generator automatically adjusts its purity regarding oxygen flow)
- Highest packing density of zeolites (specifically designed filling station)
- Uniform flow distribution design to maximize zeolite life
- Specifically designed Starting and Stopping points to protect purity from dropping
- Humid protection system (Humid air cannot enter the zeolite tanks)
- Medical Grade Oxygen Filtration
- High Efficiency Molecular Sieve+
- Real Time Monitoring
- Remotely Manageable via Ethernet
- Recording Capabilities and Data Logging
- Multi-level secured access for supervisory control
- Top quality SMC valves and flow meter
- Medical Device CE
- 10.1-inch-Wide Touch Panel
- User Friendly Interface
- Multi language



## Possible System Configuration

- According to ISO 7396-1:2016 Medical Gas Pipeline Systems Standard, the oxygen supply system should have 3 sources of supply which are; Primary, Secondary and Reserve.
- Configuration 1. 1 PSA System + 2 External Source such as cylinders
- Configuration 2. 2 PSA System + 1 External Source such as cylinders
- Configuration 3. 2 PSA System + 1 High Pressure Emergency back-up system

## Performance of Oxfresh Medical PSA Oxygen Generator

MODELS	93%		Air Cons.		95%		Air Cons.	
	Nm3/h	NL/min	SCFH	Nm3/h	Nm3/h	NL/min	SCFH	Nm3/h
OXYFRESH-30	1.8	30	64	20	1.6	27	57	20
OXYFRESH-50	3.0	50	106	34	2.7	45	95	34
OXYFRESH-70	4.2	70	148	46	3.7	62	131	46
OXYFRESH-100	6.0	100	212	66	5.3	88	187	66
OXYFRESH-150	9.0	150	318	99	7.9	132	279	99
OXYFRESH-200	12	200	424	126	10.5	175	371	126
OXYFRESH-250	15	250	530	162	13.6	227	480	162
OXYFRESH-300	18	300	636	192	15.9	265	562	192
OXYFRESH-400	24	400	848	286	21.0	350	742	286
OXYFRESH-500	30	500	1060	350	26.0	433	918	350
OXYFRESH-600	36	600	1271	425	32.1	535	1134	425
OXYFRESH-750	45	750	1589	519	40.1	668	1416	519
OXYFRESH-1000	60	1000	2119	668	52.0	867	1836	668
OXYFRESH-1250	75	1250	2649	870	65	1083	2295	870
OXYFRESH-1500	90	1500	3178	954	77	1283	2719	954
OXYFRESH-1800	108	1800	3814	1260	96	1600	3390	1260
OXYFRESH-2400	144	2400	5085	1512	124	2067	4379	1512

**Performance at 20 °C and 1 bar atmospheric conditions.**

**Required inlet compressed air quality is 1:4:1 according to ISO 8573-1.**

**Purity and Capacity values may slightly change during the life time of the generator.**

**Purity and Capacity values may slightly change depending on the atmospheric conditions.**









# GENERAL SURGERY OPERATION TABLES



## I. General Surgery Operation Table

Our Operation Tables; Have been designed to be used by trained, certificated and formally assigned hospital personnel or other authorized persons and have been produced to be used in in all the surgical operations on patients including orthopedic procedures, gynecologic or urologic procedures in healthcare facilities.



- Easy-to-use and ergonomic design suitable for General Surgery procedures
- Design to provide the safety of the patient and the operation team
- Possibility of ensuring the silent and no-vibration up and down, back piece, Trendelenburg and reverse Trendelenburg, right and left, lateral and horizontal back and forth (sliding) movements of the table using the hand control
- Possibility of manual foot piece movements with the help of gas spring
- Mechanical usage in head section
- Electro-hydraulic power control system
- Design suitable for various patient positions and movements of the X-Ray devices with C-arms
- A rail system for fixing and tightening of all the accessories
- Possibility of positioning the table parallel to the floor (except for the head and foot pieces) by pressing one key on the hand control
- Possibility of saving the required positions in the memory





- Radiographic tabletop set made from compact laminate material
- The spare control system on the table body
- Easy use under fluoroscopy
- Possibility of fixing the foot piece in place of the head piece
- The mattress on the table is made from multi-layer visco material and is antistatic, impermeable for fluids and antibacterial with a thickness of 60 mm
- It is impermeable against any and all fluids including blood
- Possibility of use for min 60 minutes (capability of 200 movements in the average) in case of power failure thanks to the rapidly charging and no-maintenance battery system (12 A/hr-24 VDC)
- Possibility of flex and re-flex movements with one key on the hand control
- The upper supporting panel is made from aluminum, body and lower coating is made from AISI 304 quality stainless steel, the lower panel and the bearing body is made from GGG 40 material
- A silent and no-vibration electro-hydraulic motor system has been provided to ensure movements allowing various patient positions.
- Featuring the fixation on the floor on four points with the help of electro-hydraulic pistons controlled by the hand control and the controls on the body
- Possibility of being lowered down to minimum 530 mm (mattress excluded) and being raised up to maximum 1000 mm
- Stand-by feature when the table is not in use.
- Possibility of showing the movements of the table on the LCD screen of the hand control
- In addition, backlighting for the keys on the hand control

## Weight and Dimensions

Table pieces	5 pieces
Head piece	236x520 mm
Back piece	480x520 mm
Kidney Elevator (optional)	120x620 mm
Seat	580x520 mm
Leg piece	240x605 mm
Length	2000 mm
Width (Rails included)	572 mm
Width (Rails excluded)	520 mm
Weight	280 Kg
Bearing Capacity in all Positions	400 Kg / 280 Kg
Floor Range	32 mm

## Positions and Limits

Height (min/max) no-mattress	530-1000 mm
Head piece (Up/down)	90°/ 90°
Back piece (Up/down)	75°/ 30°
Leg piece (Up/down)	30°/ 90°
Tilting of the Leg piece	90°
Flex/Reflex	210°/ 100°
Trendelenburg/Reverse Trendelenburg	30°/ 30°
Tilting of the upper panel (right/left)	22°/ 22°
Horizontal sliding feature (Sliding)	360 mm
Kidney Elevator, optional	120 mm
Thorax Elevator, optional	100 mm

## Electrical Characteristics

Protection Class	IPX4
Protection Class	230 VAC 50-60 Hz
Electrical Protection	Class 1
Insulation Class	Tip BF, IEC 60601-1
Battery	It is charged rapidly and required no maintenance Charging voltage 24 VDC Capacity 12 A/h Possibility of use for min. 60 minutes (200 movements)



## Ambient Conditions



- Ambient Temperature: must be in 10°C - 40 °C range.
- Humidity: must be in 30% - 5% range.
- Pressure: 0,7 – 1,06 bars

## Table Mattress

### Standard

The mattress is made from multi-layer visco material, and is antistatic, fluid-impermeable and antibacterial, and is 60mm thick.

### Optional

80 mm, soft upper panel made from visko material, polyurethane middle panel, rubber base, waterproof, antibacterial, antistatic, fixed onto the table with velcro bands.

## Model Characteristics

	ZEROING	OBESE	FOOT PIECE HYDRAULIC MOVEMENTS	SLIDING MOVEMENT	TRENDELENBURG	FLEX	TILT	HYDRAULIC LOCKING SYSTEM	BACK PIECE	DOWN UP	TRACTION SET
Adela 6M+	+	-	-	+	+	+	+	+	+	+	+
Adela 7M+	+	-	+	+	+	+	+	+	+	+	+
Adela 5M	-	-	-	-	+	+	+	+	+	+	+
Adela WIDE	+	+	-	+	+	+	+	+	+	+	+
Adela WIDE+	+	+	+	+	+	+	+	+	+	+	+

“ 53 cm lowering feature ”





**FLEX 210°**



**REFLEX 100°**



**FOOT PIECE DOWN 90°**



**FOOT PIECE UP 30°**



**BACK PIECE DOWN 30°**



**BACK PIECE UP 75°**



**LEFT 22°**



**RIGHT 22°**



# “ Maximum Movement Capability ”

Best performance



## Orthopedic Traction Set

It is used in orthopedic surgeries.



## Cranial Stabilization System

It is used in brain surgeries.







## Kidney Elevator

It is used in nephrology surgeries.







# WARMING CABINETS



## SM series

The warming cabinets have been designed to bring the surgical fluids and solutions and or blankets, bags, solutions in plastic and glass containers to the temperature levels required for the applications in the hospital and ambulatory treatment centers.



## General Characteristics

- The device consists of internal and external surfaces made from stainless steel
- The door consists of heat-resistant double glass, and can be made from stainless steel optionally
- Walls and doors of the device have double layers, and the wall thickness of walls vary between 20 and 25mm depending on the thickness of the material
- Air circulation is distributed homogeneously with a fan
- It is equipped with 4 types of user-friendly control systems selected within the ordering process
- The upper and single divisions contain the key for switching between I.V. fluids and IRA/Blankets and control to keep the temperature in the range of 32 -44°C or 32 – 71.1°C. The temperature selection for lower divisions is between 32 and 71.1°C
- Any error occurring in the device is shown on the digital screen
- The device will produce audiovisual warning when the set temperature exceeds 5.5°C ( $\pm 0.5$  ° C) and turns the heater off automatically
- The double cabin control system controls the cabins and the temperatures of both cabins. Upper and lower cabins can operate at different temperatures



*It is suitable for use where materials brought to predetermined temperatures must be used in some surgical, obstetrics, emergency or clinical instances. The internal structure of the device allows the simultaneous heating of blankets, linen, and solutions for irrigation and sterile surgical solutions. It can be used to heat pouches and solutions packaged in plastic or glass materials.*



## Indicators on the Control Panel

- Digital temperature indication
- The temperature adjustment buttons: buttons for selection of irrigation, blanket and solutions
- Off/on button for divisions
- Temperature error indicator, door status indicator
- Indicator that controls the temperatures of divisions actively
- Possibility of the required temperature through the control panel, selection of the required operation temperature program

*A fan is provided within the device to ensure homogeneous air circulation within the device. The ventilation channels and fan protection grids within the device are made from inflammable material.*



# Technical Data Table

General Features	
Control System	PLC processor, Electronic card
Usage	Full Automatic / button and touch screen (Monochrome screen optional)
Screen Type	Color TFT, Touch LCD
Screen Dimensions	4,3" and/or 7" (Screens in a different size may be installed on purpose.)
Keyboard	Touch
Printer	40 characters/lines, integrated thermal printer (optional)
Communication	RS485 Port/USB (Ethernet Optional)
Warning System	Visual, auditory and written message warning
Data Storage	30-day data
Process	Touch screen Monitoring/Tracking
Mobility	Easy direction on 4 rotating wheels
Door	Single door/Double door, heat insulated, non-vapor producing and non-moisture producing, tempered glass, magnetic sealed
Door Security System	Magnetic lock, open via the encoded/unencoded touchscreen
Fan Material	Provides homogenous air. Fan protective grating is made from non-flammable
	Both partitions can be set at different temperatures for single and double doors models. According to this;
	1.In IV Solution Mode : 32 OC - 44 OC (Only used for the upper cabinet.)
Operation Temperature Range	2.In Irrigation/Blanket Mode : 32 OC – 71,1 OC (Used both for the upper and the lower cabinet.)
	3.BLT Mode: 32 OC – 94 OC (Used both for the upper and the lower cabinet.)
	(Note: The upper cabinet is set in IV Solution Mode by default. )
Lighting	Resistant to high temperatures, LED type, automatically on upon door opening, turning on the light via the touchscreen when the door is closed
Wheel System	Four wheels, two of which are with brakeage
Alarm System	Both visual and auditory alarming
Shelves	Mobile, AISI 304 quality stainless steel drawers
Material	All parts of the device, both inner and outer, are made from AISI 304 quality stainless steel
Insulation	40 mm thick polyurethane material
Power Value	220 V/50 Hz





## Technical Data Table

MODELS	SM SERIES WARMING CABINET																			
	50	100	150	200	250	350	450	550	650	750	850	950	1050							
Chamber Volume (L)	50	100	150	200	250	350	450	550	650	750	850	950	1050							
Chamber Width (cm)	45	45	55	44	59	59	67	67	67	77	77	77	77							
Chamber Height (cm)	30	54	54	107	Down	87	Down	87	Down	82	Down	108	Down	113	Down	113	Down	113	Down	113
					Up	30	Up	30	Up	30	Up	30	Up	30	Up	30	Up	30	Up	30
Chamber Depth (cm)	44	44	44	43	62	62	62	62	62	62	67	72	77							
Device Width (cm)	57	57	67	52	70	78	78	78	83	88	88	88	88							
Device Height (cm)	60	85	85	142	172	172	167	195	198	200	200	200	200							
Device Depth (cm)	56	56	56	59	87	87	87	87	87	87	92	92	92							
Packing Width (cm)	77	77	87	63	90	98	98	98	103	108	108	108	108							
Packing Height (cm)	77	102	102	159	185	185	186	214	214	219	219	219	219							
Packing Depth (cm)	76	97	97	79	107	107	107	107	107	107	112	112	112							
Single Door	+	+	+	+	+	+	+	+	+	+	+	+	+							
Double Door	-	-	-	-	+	+	+	+	+	+	+	+	+							
Touchscreen	4,3"	4,3"	4,3"	4,3"	4,3"	4,3"	7"	7"	7"	7"	7"	7"	7"							
RS232	+	+	+	+	+	+	+	+	+	+	+	+	+							
Electrical Connection	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz							
Device Weight (Kg)	50	75	100	125	150	200	250	300	350	400	450	500	550							

## Optional Control Systems

- Heating between 32°C and 94°C is possible
- Possibility of connection to a computer and recording the temperature values through the USB connection Membrane digital screen control system—silver
- Membrane digital screen control system— diamond (with keypad)
- Membrane digital screen control system— diamond (with keypad)
- Mechanical or electronic door locking system with single- or double-door cabin characteristics

## Relevant Standards and Directives

Medical Device Directive	MDD 93/42/EEC / 2007/47/EC
Medical Device Class	Class I
Low-voltage Directive	2014/35/EU - EN 60601 -1
Electromagnetic Compatibility Directive	2014/30/EU - EN 60601 -1 -2
2004/108/EC EN 60601 -1 -2	ISO 9001
Medical Devices Quality Management System	ISO 13485
Environment Management Quality System	ISO 14001





# NEONATAL PRODUCTS

- I. Mother Milk Refrigerators
- II. Mother Milk Freezers
- III. Mother Milk Refrigerator and Freezers
- IV. Baby Bottle
- V. Injector Heater
- VI. Baby Bottle and Injector Heater



## SM series

- I. Mother Milk Refrigerators
- II. Mother Milk Freezers
- III. Mother Milk Refrigerator and Freezers

This device produced by Sümer INC. ensures storage and freezing of breast milk without losing its nutritional value particularly in hospitals, neonatal intensive care units and gynecology and obstetrics units.



### General Characteristics

- PLC control system
- Stainless steel internal and external materials
- Three-layer glass door for perfect insulation
- Lockable door with magnetic gasket
- Alarm Systems: Low and high temperature, power failure and temperature sensor failure, audiovisual alarm system for the door left open
- Alarm system is fed by the battery that is charged automatically
- Lighting controlled with one single key on the indicator panel
- Insulation with injected high-density polyurethane
- Mobile rack system with special divisions made from stainless steel
- Housings for feeding bottles and milk pouches for storage on racks
- Special lighting system

#### Optional

- Optional RS 232 / RS 485 outlet
- Optional remote alarm system
- Optional remote control



**MOTHER MILK  
FREEZERS**  
-20°C



**MOTHER MILK  
REFRIGERATOR AND FREEZERS**  
-20°C +4°C



**MOTHER MILK  
REFRIGERATORS**  
+4°C

## Technical Data Table

MODELS	SM SERIES MOTHER MILK REFRIGERATORS (SM-ASM) / MOTHER MILK FREEZERS (SM-ASD) / MOTHER MILK REFRIGERATOR AND FREEZERS (SM-MD) /															
	150	250	350	450	550	650	750	850	950	1050	1250					
Chamber Volume (L)	150	200	350	450	550	650	750	850	950	1050	1250					
Chamber Width (cm)	55	44	52	52	58	85	85	95	95	95	105					
Chamber Height (cm)	70	107	135	135	Down	79	Down	113	Down	113	Down	113	Down	113	Down	113
					Up	58	Up	30	Up	30	Up	30	Up	30	Up	30
Chamber Depth (cm)	45	43	66	66	70	83	83	93	93	93	103					
Device Width (cm)	70	52	65	65	65	95	95	105	105	105	115					
Device Height (cm)	102	142	202	202	196	169	183	170	180	192	186					
Device Depth (cm)	62	59	75	75	75	95	95	105	105	105	115					
Single Door	+	+	+	+	+	+	+	+	+	+	+					
Double Door	-	-	-	-	+	+	+	+	+	+	+					
Touchscreen	4,3"	4,3"	7"	7"	7"	7"	7"	7"	7"	7"	7"					
RS232	+	+	+	+	+	+	+	+	+	+	+					
Electrical Connection	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz	220 V 50Hz					
Device Weight (Kg)	100	150	200	250	300	350	400	450	500	550	650					

### — MOTHER MILK REFRIGERATORS:

Operation in 0°C / 10°C range, and fixing at + 4°C

### — MOTHER MILK FREEZERS: Operation in

-25°C / 0°C range, and fixing at -20°C

### — MOTHER MILK REFRIGERATOR AND FREEZERS (COMBINED SYSTEM):

Operation in the range of 0°C / 10°C and fixing at + 4°C in the storage section, and operation in the range of -25°C / 0°C and fixing at, -20°C in the freezing section

## Relevant Standards and Directives

Low-voltage Directive	2014/35/EU - EN 60601-1
Electromagnetic Compatibility Directive	2014/30/EU - EN 60601-1-2
2004/108/EC EN 60601-1-2	ISO 9001
Medical Devices Quality Management System	ISO 13485
Environment Management Quality System	ISO 14001



#### IV. Baby Bottle Heater

#### V. Injector Heater

#### VI. Feeding Bottle and Injector Heater

The device ensures the safe heating of the breast milk and baby food taken out from the freezer or deep freezer or kept at room temperature or keeping them at the set temperature.

- Minimum energy consumption by cutting in and out with very short intervals during the operation
- Featuring operation with dry system
- Featuring continuous operation for 24 hours at the set ideal feeding temperature
- Featuring keeping the temperature fixed when the set temperature is reached
- Heating chamber made from aluminium
- Removable Baby Bottle divisions

For Baby Bottle with volumes between 80 ml and 150 ml

12 Baby Bottles,

24 Baby Bottles,

30 Baby Bottles,



BABY BOTTLE HEATER

#### Optional

- Optional 60 – 120 ml Feeding Bottle capacity,
- Optional digital temperature indicator and temperature setting button,
- Optional door addition feature.
- Optional production aüü Feeding Bottle size is possible.



BABY BOTTLE AND INJECTOR HEATER  
(COMBINED SYSTEM)



*It is designed for heating the mother milk or baby food taken out from the refrigerator to temperatures suitable for feeding the babies and keeping them at that temperature, and have been manufactured to buy time for personnel working in the unit.*

The device is designed for infants fed through injectors.

# “ Reliable Quality Cutting edge ”

- Minimum energy consumption by cutting in and out with very short intervals during the operation
- Featuring operation with dry system
- Featuring continuous operation for 24 hours at the set ideal feeding temperature
- Featuring keeping the temperature fixed when the set temperature is reached
- Heating chamber made from aluminum
- Removable Baby Bottle divisions

It is produced with 30 injector capacity. The standard injector volume distribution of the injector heater is as follows:

10 pieces 5-ml injectors

10 pieces 10-ml injectors

10 pieces 20-ml injectors

Injector volume distribution can be changed optionally



INJECTOR HEATER



*It is use with the purpose of heating the food stuff such as mother milk or baby food before feeding them to the baby to a certain temperature (36-38 °C) within injectors in neonatal units to babies without sucking function or in intensive care units where it is not possible to take babies out.*

## Technical Data Table

Bottle & Injector Warmers – General Features	
Control System	PID-Controlled
Usage	Full automatic / button screen
Screen Type	Color
Screen Size	3"
Keyboard	Push-button
Warning System	Visual error code
Process Monitoring/Tracking	Color, 3" screen
Mobility	4 fixed legs
Inner Material	Inner part of the device is made from anodized aluminum.
Outer Material	Outer part of the device is made from electrostatic powder painted scoured steel plate.
Insulation	With non-CFC (chlorofluorocarbon) fiberglass
Power Value	220 V/50 Hz

SM SERIES BOTTLE WARMER DIMENSIONS TABLE			
PRODUCT	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)
6 SLOT BOTTLE WARMER	205	350	150
12 SLOT BOTTLE WARMER	270	410	150
24 SLOT BOTTLE WARMER	335	540	150
30 SLOT BOTTLE WARMER	400	540	150
50 SLOT BOTTLE WARMER	415	820	150

SM SERIES INJECTOR WARMER DIMENSIONS TABLE			
PRODUCT	WIDTH (mm)	LENGTH (mm)	HEIGHT (mm)
20 SLOT BOTTLE WARMER	170	550	205
30 SLOT BOTTLE WARMER	160	550	205
50 SLOT BOTTLE WARMER	120	550	205

## Relevant Standards and Directives

Low-voltage Directive	2014/35/EU - EN 60601-1
Electromagnetic Compatibility Directive	2014/30/EU - EN 60601-1-2
2004/108/EC EN 60601-1-2	ISO 9001
Medical Devices Quality Management System	ISO 13485
Environment Management Quality System	ISO 14001





# BLOOD BANK REFRIGERATORS



## SM Series

Blood Bank Refrigerator have been designed so as to be compliant with standards related to production and products. It is used to keep blood at +4 °C ( $\pm 2$  °C) in hospitals And blood storage banks.

### General Characteristics

Control System	PLC processor, Electronic card
Way of use	Full automatic/ buttons and touch screen (Monochrome screen, optional)
Screen Type	Color TFT, Touch screen LCD
Screen Dimensions	4,3" (Optional screens with different dimensions are also possible.)
Keypad	Touch
Printer	40 characters/lines, integrated thermal printer (Optional)
Communication	RS485 Port/USB (Ethernet Optional)
Warning system	Warnings with audiovisual and written messages
Data Storage	Data of 30 days
Procedure follow-up/tracing	Touch Screen
Motility	Easy orientation on 4 swivel castors
Door characteristics	Single door, temperature-insulated, does not cause vaporization or humidity, contains tempered glass and magnetic gasket
Door Safety System	Magnetic lock system, featuring the possibility of opening through the touch screen with or without password
Fan characteristics	It provides homogeneous air. Fan protection grids are made from non-flammable material
Operation Range	4 °C $\pm$ 2 °C
Lighting	Automatic lightening upon opening of the door with LED-type bulbs resistant against wide ranges, featuring the possibility of turning the lights on also when the door is open through the touch screen
Castor System	It is equipped with four castors, out of which two have brakes
Alarm System	The device is capable of producing both audio and visual alarms
Rack characteristics	Mobile racks made from AISI 304 quality stainless steel
Material characteristics	All the internal and external fixtures of the device are made from AISI 304 quality stainless steel
Insulation	Polyurethane material 40 mm in thickness has been used
Power value	220 V/50 Hz



*All the racks are removable to ensure easy placement and removal of materials in and out the blood bank refrigerator. You can remove any of the divisions with the purpose of larger bottles.*





## Relevant Standards and Directives

Medical Device Directive	MDD 93/42/EEC / 2007/47/EC
Medical Device Class	Class IIa, MDD 93/42/EEC, 2007/47/EC (Encl. IX)
Low-voltage Directive	2014/35/EU - EN 60601-1
Electromagnetic Compatibility Directive	2014/30/EU - EN 60601-1-2
2004/108/EC EN 60601-1-2	ISO 9001
Medical Devices Quality Management System	ISO 13485
Environment Management Quality System	ISO 14001



## Internal Volume Dimensions

MODELS	SM SERIES BLOOD BANK REFRIGERATOR										
	150	250	350	450	550	650	750	850	950	1050	1250
Device Model	150	250	350	450	550	650	750	850	950	1050	1250
Cell Volume (L)	150	250	350	450	550	650	750	850	950	1050	1250
Height (mm)	590	800	1010	1220	1420	1110	1250	1120	1220	1340	1280
Width (mm)	700	700	700	700	700	850	850	950	950	950	1050
Depth (mm)	680	680	680	680	680	830	830	930	930	930	1030

## Device Dimensions

MODELS	SM SERIES BLOOD BANK REFRIGERATOR										
	150	250	350	450	550	650	750	850	950	1050	1250
Device Model	150	250	350	450	550	650	750	850	950	1050	1250
Cell Volume (L)	150	250	350	450	550	650	750	850	950	1050	1250
Height (mm)	1170	1380	1590	1800	2000	1690	1830	1700	1800	1920	1860
Width (mm)	800	800	800	800	800	950	950	1050	1050	1050	1150
Depth (mm)	800	800	800	800	800	950	950	1050	1050	1050	1150

CLASS	SYMBOL	MEAN AMBIENT TEMPERATURE (+°C)
Very Temperate	SN	10–32
Temperate	N	16–32
Subtropical	ST	16–38
Tropical	T	16–43

Ambient temperature for the operation of the device must be between 10°C and 40°C, and the ambient humidity must be maximum 70%.

## Placement of blood pouches

- You can place 24 pouches in each of the 24 divisions by placing with openings facing different directions in turn.
- You can place 120 bottles/pouches on 5 racks.
- Bottles with long necks must be placed in lower divisions to avoid obstacles on the door way.

## Tips and recommendations related to placement

- Bottles in the upper divisions right below the lights are exposed to temperatures very slightly higher when lights are on. Place blood pouches accordingly, and remember to turn the lights off the device will not be in use for long while.
- Place the blood pouches assigned for daily use in the front parts of divisions so that the labels will be read easily. Place the blood pouches assigned for use after a while at the back parts.
- Do not let children to climb on the divisions of the device, to step on them, or to hang on them. These can result in serious injuries or serious damage on the device.

- Glass screen with special design
- Touch screen keypad
- Audio alarm feature
- Special door system operating with a password
- Changeable screen color

“  
**High Technology**  
Superior performance  
”







# STAINLESS HOSPITAL EQUIPMENTS





### Ultrasonic Cleaner Counter SME 1052

- For entire sterilization required places
- Manufactured from 304 grade stainless steel
- Two instrument washing sinks and one ultrasonic cleaner
- Three spiral faucets with adjustable shower spout
- Two water drainage system
- Two pieces air-water gun rinser with 8 different tips
- All worktop edges are raised to prevent water drips
- Height adjustable stainless legs
- Custom made production in different sizes and designs
- Dimension (WxLxH): 2000x700x850 mm.

### Pre Washing Counter SMP 1051

- For entire sterilization required places
- Manufactured from 304 grade stainless steel
- One sink with triple manifold
- Two spiral faucets with adjustable shower spout
- Two water drainage system
- Extra drawer or cabinet options
- All worktop edges are raised to prevent water drips
- Height adjustable stainless legs
- Custom made production in different sizes and designs
- Dimension (WxLxH): 2000x700x850 mm.



Code	Product Name	Dimension (mm)
SMC 1050	Instrument Washing Sink (Double Sink)	700x1800x850
SMC 1051	Instrument Washing Sink (Triple Sink)	700x2300x850
SMC 1052	Instrument Washing Sink (Single sink-Cabinet)	600x1800x850
SMC 1053	Instrument Washing Sink (Double sink-Cabinet)	600x1800x850
SMC 1054	Instrument Washing Sink (Single Sink-Block Drawer)	600x1800x850



**SMC 1053**

### Instrument Washing Sinks SMC 1050

- For entire sterilization required centres
- Grade 304 stainless steel
- Tap with one point, spiral extension and douche (Optional)
- Barrier for liquid splashes
- Stainless steel adjustable feet
- Flexible production in different designs and dimensions
- Sink drainage control handle (Optional)



**Working Table**  
**SMB 1043**

- For entire sterilization required centers
- Grade 304 stainless steel
- Upon request 4 castors with 2 brakes or stainless steel adjustable feet
- Three block drawer and cabinet
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 600x1800x850 mm.



**Working Table**  
**SMB 1039**

- For entire sterilization required centers
- Grade 304 stainless steel
- Stainless steel adjustable feet
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 600/700x1300x850 mm.

**Working Table**  
**SMB 1040**

- For entire sterilization required centers
- Grade 304 stainless steel
- Stainless steel adjustable feet
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 600/700x1300x850 mm.





**Mobile Table with Water Filtration  
SMY 5080**

- For entire sterilization required centers
- Grade 304 stainless steel
- 4 wheels with 2 breaks
- Removable top tray and plastic water gathering container
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 600x600x900 mm.

**Air / Water Spray Gun Rinser  
SMR 9000**

- For entire sterilization required centers
- Made from stainless material
- 8 different tip option
- Compression control from trigger



**Working Table  
SMB 1041**

- For entire sterilization required centers
- Grade 304 stainless steel
- Three block drawer
- Stainless steel adjustable feet
- Flexible production in different designs and dimensions



Code	Product Name	Dimension (mm)
SMB 1041	Working Table(With Block Drawer)	600x1300x850
SMB 1042	Working Table(With Cabinet)	600x1300x850

### Working Table (Perforated Panel) SMB 1038

- For entire sterilization required centers,
- 304 quality stainless steel
- Suitable for laboratory use with perforated top panel
- Stand design suitable to sedentary working
- Dimensions (WxLxH): 550x860x900 mm.



### Work Table (Height Adjustable) SMCT 1045

- In all clinical and polyclinic environments that need to be sterile,
- 304 quality stainless steel,
- 400 mm. elevation through pedal system,
- Sedentary or on foot working opportunity through height adjustment,
- Dimensions (WxLxH): 700x1300x850/1250 mm.

### Packing Table SMF 4000

- For entire sterilization required centers
- Grade 304 stainless steel
- 2 shelves system with barrier and single drawer
- Optional Side basket for packed material
- Optional lighted up magnifying glass
- Flexible production in different designs and dimensions
- Dimension (WxLxH):700x1800x900 mm.





### Working Station SMCI 3655

- For entire sterilization required places
- Manufactured from 304 grade stainless steel
- Electric plug, lightening and magnifying glass with light
- Accessories for computer case and screen
- Flexible storage shelves and baskets for users comfortable
- Height adjustable rotary roller cutter
- Height and width adjustable pouch places
- Comfortable leg design not effecting sitting position of user
- Two drawers removable
- Dimension (WxLxH): 700x1800x900/1850 mm.

### Work Station (Height Adjustable) SMD 3656

- Complete large set: 2 synchronous motor, 1 control box, 1 hand controller, 1 controller holder apparatus  
In all clinical and polyclinic environments that need to be sterile,
- 304 quality stainless steel,
- Height of the table can be adjusted in compliance with sedentary or on foot operation through synchronized height adjusted motors,
- User friendly design with flexible storage shelves or baskets,
- Height adjustable Blester shelf,
- Height and size adjustable Blester holding apparatuses,
- Stand design that does not affect sitting position of the user,
- Plug-socket and electric group, internal illumination lamb and flexible lens table lamb,
- Computer screen and cabinet holder apparatus,
- Two block drawers,
- Dimensions (WxLxH): 700x1800x900/1850 mm.



### Work Station SMG 3654

- For entire sterilization required places
- 304 grade stainless steel, Removable side baskets
- Two pieces medical roll bars, Shelve with rotary roll cutter
- Shelves on sides for paper, drug, instrument, roll etc.
- Optional light with magnifying glass
- Flexible production in different designs and dimensions
- Dimension (WxLxH):700x1400x900/1800 mm.



### Linen Folding Table with Light SMK 2190

- For entire sterilization required centers
- Grade 304 Stainless Steel
- Illuminated transparent top surface
- Grounded socket with key
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 870x1370x 900 mm.

### Paper Trolley SMH 4050

- For entire sterilization required centers
- Grade 304 stainless steel
- 4 wheels with 2 breaks
- 4 hanger bars
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 600x1200x900 mm.





### Working Table (Mobile) SMM 1044

- For entire sterilization required centers
- Grade 304 stainless steel
- 4 wheels with 2 breaks
- Handle for easy movement
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 600x860x900 mm.

### Instrument Trolley With Barriers SMTA 2122

- For entire sterilization required centers
- Grade 304 stainless steel
- 2 tiers, sides are 10 cm high
- Pushing Handle for easy movement
- 4 castors with 2 breaks
- Dimensions (WxLxH): 550x860x900 mm.



### Material Trolley (2 Shelf) SMN 2118

- For entire sterilization required centers
- Grade 304 stainless steel
- 4 wheels with 2 breaks
- 2 Shelves
- Handle for easy movement
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 550x860x900 mm.



### Instrument Trolley (3 Shelve)

SMN 2119

- For entire sterilization required centers
- Grade 304 stainless steel
- 4 wheels with 2 breaks
- 3 shelves
- Handle for easy movement
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 550x860x900 mm.



### Sterilized Product Trolley

SMS 2140

- For entire sterilization required centers
- Grade 304 Stainless Steel
- 4 wheels with 2 breaks
- Lockable doors and pushing handle
- Flexible production in different designs and dimensions

Code	Product Name	Dimension (mm)
SMS 2140	Sterilized Product Trolley	600x800x850
SMS 2150	Sterilized Product Trolley	650x1200x1100

### Sterilized Product, Basket and Container Trolley

SMV 1200

- For entire sterilization required places
- 304 grade stainless steel
- Doors sealed with gaskets
- Doors swing open up to 270° and give complete access to the trolley
- Optional adjustable container shelves
- Removable middle shelf
- Four swivel castors with two brakes
- Dimensions (WxLxH): 1260x680x1280 mm.





### Working Table (Mobile) SMST 9000

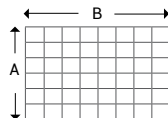
- For entire sterilization required centers
- Grade 304 stainless steel
- 4 wheels with 2 breaks
- Handle for easy movement
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 600x860x900 mm.

### Inox + Plastic Panel Shelf System SMU 5040

- In all clinical and polyclinic environments that need to be sterile,
- 304 quality stainless steel,
- Removable, washable plastic shelf plates,
- Modular structure, adjustable shelf gaps,
- Demounted.

cm

A	36	46	53	61				
B	61	76	91	107	122	137	152	183
h	15	36	86	150	160	183	216	244



SMU 5041



SMU 5031

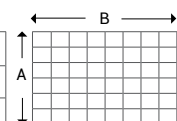


### Perforated Panel Shelf System SMU 5030

- In all clinical and polyclinic environments that need to be sterile,
- 304 quality stainless steel,
- Perforated panel plate shelf,
- Modular structure, adjustable shelf gaps,
- Demounted,

cm

A	36	46	53	61				
B	61	76	91	107	122	137	152	183
h	15	36	86	150	160	183	216	244

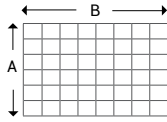


**Mobile Shelf Systems**  
**SMU 5020**

- For entire sterilization required centers
- Grade 304 Stainless Steel
- Optional mobile or fixed
- Solid or wire grid shelf options
- Modular construction, adjustable shelf intervals
- Dismountable shelves

cm

A	36	46	53	61				
B	61	76	91	107	122	137	152	183
h	15	36	86	150	160	183	216	244



SMU 5011

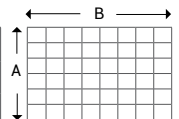


**Solid Shelf System**  
**SMU 5010**

- For entire sterilization required centers
- Grade 304 Stainless Steel
- 4 castors with two brakes
- Solid shelf
- Modular construction, adjustable shelf intervals
- Dismountable shelves

cm

A	36	46	53	61				
B	61	76	91	107	122	137	152	183
h	15	36	86	150	160	183	216	244



**Single Hand Wash Scrub Unit**  
**SMA 1010**

- For entire sterilization required places
- 304 grade stainless steel
- Knee and photocell operated water and soap flow system
- Optional photocell and knee control simultaneously
- Mixer to adjust water temperature
- Optional thermostatic valve and digital water flow timer
- Stainless steel adjustable feet





### Double Hand Wash Scrub Unit SMA 1020

- For entire sterilization required places
- 304 grade stainless steel
- Knee or photocell controlled water and soap
- Optional photocell and knee control simultaneously
- Mixer to adjust water temperature
- Optional thermostatic tap and digital water flow timer
- Adjustable stainless feet
- Dimensions (WxLxH): 1600x650x1200 mm.

### Triple Hand Wash Scrub Unit SMA 1030

- For entire sterilization required places
- 304 grade stainless steel
- Knee or photocell controlled water and soap
- Optional photocell and knee control simultaneously
- Mixer to adjust water temperature
- Optional thermostatic tap and digital water flow timer
- Adjustable stainless feet
- Dimensions (WxLxH): 2300x650x1200 m



### Doctor Hand Washing Unit Single (Mechanic) SMA 1011

- In all clinical and polyclinic environments that need to be sterile,
- Made of 304 quality stainless steel,
- Knee operated Water and soap mechanical flow system,
- No electricity need and no danger through mechanical water and soap flow,
- Mixer thermostatic valve for water temperature adjustment,
- Wall-mounted system,
- Dimensions (WxLxH) 800x650x1200 mm.

### Doctor Hand Washing Unit Double (Mechanic) SMA 1021

- In all clinical and polyclinic environments that need to be sterile,
- Made of 304 quality stainless steel,
- Knee operated Water and soap mechanical flow system,
- Mechanical water and soap flow,
- Mixer thermostatic valve for water temperature adjustment,
- Wall-mounted system,
- Dimensions (WxLxH) 1600x650x1200 mm.



### Doctor Hand Washing Unit Triple (Mechanic) SMA 1031

- In all clinical and polyclinic environments that need to be sterile,
- Made of 304 quality stainless steel,
- Knee operated Water and soap mechanical flow system,
- Mechanical water and soap flow,
- Mixer thermostatic valve for water temperature adjustment,
- Wall-mounted system,
- Dimensions (WxLxH) 2300x650x1200 mm.

### Instrument and Drug Cupboard SME 2080

- For entire sterilization required centers
- Grade 304 Stainless Steel
- Stainless steel adjustable feet
- Lockable glass doors and 3 shelves
- Dimensions (WxLxH): 450x900x1800 mm.





### Operating Theater Cupboard SMI 2090

- For entire sterilization required centers
- Grade 304 stainless steel
- Stainless steel adjustable feet
- Lockable glass doors and 2 shelves
- 2 drawers and a cupboard on the bottom
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 450x900x1800 mm.

### Instrument Cabinet SMMD 2082

- For entire sterilization required centers
- Grade 304 stainless steel
- Stainless adjustable feet
- Lockable doors
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 450x900x1800 mm.



### Mayo Table (Hydraulic) SMO 2175

- For entire sterilization required centers
- Grade 304 stainless steel
- 3 wheels with break and removable deck
- Height adjustment with hydraulic handle
- Flexible production in different designs and dimensions
- Dimension (WxLxH): 520x715x90/135 mm.



### Mayo Table (Hydraulic) SMO 2170

- For entire sterilization required centers
- Grade 304 stainless steel
- 3 wheels with 3 breaks and height adjustment with hydraulic handle
- Removable top tray
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 500x750x800/1150 mm.



### Mayo Table (Mechanic) SMU 2180

- For entire sterilization required centers
- Grade 304 stainless steel
- 3 wheels with break
- Height adjustment with mechanic handle
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 500x750x800 / 1150 mm.

### IV Stand SMU 4060

- For entire sterilization required places
- 304 grade stainless steel
- Five castors with two brakes
- ABS plastic or Aluminium injection cast foot system
- Optional push bar and wire basket





### IV Stand SMU 4061

- For entire sterilization required places
- 304 grade stainless steel
- Five castors with two brakes
- ABS plastic or Aluminium injection cast foot system
- Optional push bar and wire basket

### IV Stand (Telescopic) SMU 4062

- For entire sterilization required places
- 304 grade stainless steel
- Five rubber castors with two brakes
- Aluminium injection cast foot system
- Optional drip glass



### Serum Hanger (Telescopic) SMU 4063

- In all clinical and polyclinic environments that need to be sterile,
- 304 quality stainless steel,
- Five rubber wheels, two of them have breaking system.
- Infusion pump bearing through improved stand system.



**Falcate Table  
SML 2160**

- For entire sterilization required centers
- Grade 304 stainless steel
- 6 wheels with 2 breaks
- Flexible production in different designs and dimensions
- Dimensions (WxLxH): 450x1700x900 mm.



**Instrument Storage And Transport Trolley  
SMJ 2130**

- For entire sterilization required centers
- Grade 304 stainless steel
- 4 wheels with 2 breaks
- Flexible production in different designs and dimensions
- 2 Tub with covers for used or clean surgical instruments
- Dimensions (WxLxH): 400x900x900 mm.

**Instrument Trolley  
SML 2120**

- For entire sterilization required centers
- Grade 304 stainless steel
- 4 wheels with 2 breaks
- Flexible production in different designs and dimensions

Code	Product Name	Dimension (mm)
SML 2120	Instrument Trolley	550x860x900
SML 2121	Instrument Trolley	630x630x900
SML 2122	Instrument Trolley	630x880x900





### Multi Purpose Dressing Cart SMPA 7515

- For entire sterilization required places
- 304 grade stainless steel
- Push Handle
- Glass bottles, cotton jar, tweezers on top
- Removable side tray and bowl
- Easy to use side dust bin
- Four castors with two brakes
- Dimensions (WxLxH): 430x580x870 mm

### Autopsy Table SMOT 2010

- Entire inner and outer parts grade 304 stainless steel
- Shower hose with hand sprinkler
- Water/Air spray gun rinser
- Cabinet at the underside
- Dirty water outlet
- Sink and grid plates AISI 304 grade stainless steel
- Dimension (WxLxH): 900x2650x900 mm



### Body Washing Table SMGT 2011

- Entire inner and outer parts grade 304 stainless steel
- Inclined pooled top tray facilitating fluid flow
- Cabinet at the underside
- Dirty water outlet
- Dimension (WxLxH): 900x2150x900 mm.

## Drying Endoscopy Cabinet SKED 6500

This product is designed to dry and keep scopes sterile and safe until next usage that are being used in the gastroenterology clinics and medical areas where endoscopy, colonoscopy and bronchoscopy operations are carried out. Easy and rapid usage. User friendly.

### Technical Characteristics of the Product

- Stainless Steel (AISI 304 Quality) main body,
- 7 – 9 - 11 endoscope device storage capacity simultaneously,
- Interface that can be controlled through LCD graphical screen,
- Digital tracking opportunity for heat, humidity and time parameters,
- Operation order can be adjusted through time and heat options,
- 4 ready program for frequently used values,
- Internal temperature of cabinet can be fixed between 25°C - 40°C,
- Low energy, high heat, rapid drying through PTC system drying fan,
- 2 independent safety heat fuse in order to prevent heat increase,
- Replaceable and washable filter located at inlet of drying fan that holds environment dust,
- Silent and non-vibrating fan system,
- Light (LED) and UV system synchronous with door,
- UV system that operates throughout the most effective wave (254 NM),
- User friendly safety systems (UV does not operate when door is open),
- 6 mm. thick tempered glass door that prevent transmission of ultraviolet light,
- 4 anti bacterial and filtered air discharges that dries internal channels of scope,
- User friendly, silent operating and 360° rotating endoscope hanging system,
- Easily removable and clearable endoscope hanging housings,
- Bottom and middle parts adjustable suspended holding apparatuses,
- Step located at the front side in order to provide easy access to endoscopes,
- Two-part lockable front cover,
- Die pressed air discharge grills for humidity discharge,
- Drainage chamber for water accumulated under the cabinet,
- (Lockable) four wheels for easy transportation,
- 220 V, maximum 1,5 KW operating power,
- Dimensions (WxLxH): 700x870x2200 mm.
- CE and TSEK certificates and certificates of compliance.



## Certificates and Brand Registry Documents

We believe that the way to the summit passes through high-quality and reliable manufacturing.



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