



WASHER DISINFECTORS



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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 m² 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 97/23/EEC 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 97/23/EEC 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.

Washer Disinfector

Our washer disinfectors 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

NO	PROGRAM	SET TEMPERATURE (°C)	TIME	
			SET (s)	
P3	P1	1 Pre-washing	45	120
		2 Washing	60	600
	P2	3 Drying 1	60	300
		4 Drying 2	60	300
	5 Disinfection	93	600	
	6 Drying	90	900	

P1: WASHING
P2: WASHING + DISINFECTION
P3: WASHING + DISINFECTION + DRYING
P4: DRYING

PROGRAM	SET TEMPERATURE (°C)	TIME SET (s)
Drying	90	900

P5: SELF-DISINFECTION OF THE DEVICE

PROGRAM	SET TEMPERATURE (°C)	TIME SET (s)
Disinfection	93	600

General Characteristics

Control System	PLC
Way of use	Full automatic/ buttons and touch screen
Screen Type	Color TFT, Touch LCD
Screen Dimensions	4,5" (7" Optional)
Keypad	Touch Screen
Printer	Optional (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 stabilization legs with adjustable heights according to the inclination of the floor
Water Consumption	~120 L /cycle

Structural characteristics

Body	1,5 mm, AISI 304 Stainless Steel
Cabin	1,5 mm, AISI 316L Stainless Steel
Door	Tempered Glass or Stainless Steel
Panel Coating	AISI 304 Stainless 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 135-200 L	~ 35kW, 1 Phase, 220 VAC ±10
Installed Power 200-500 L	~ 35kW, 3 Phase, 380 VAC ±10
Instant Power 135-250 L	~ 10kW
Instant Power 360-500 L	~ 15kW

Relevant Directives and Standards

Medical Device Directive	MDD 93/42/EEC - 2007/47/EC
Medical Device Class	Class 2b, acc. to EC MDD 93/42/EEC 2007/47/EC (Annex IX)
Low-voltage Directive	2006/95/EC EN 61010-2-40
Electromagnetic Compliance Directive	2004/108/EC EN 61326-1
Washing and Disinfection Devices	EN 15883-1 Series Standards
Quality Management System Requirements	ISO 9001
Medical Devices Regulatory Requirements	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 °C – 110 °C
Measurement 3xPT100 (DIN A Class) Sensor
Sensor Positions Cabin (2), Water (1)

Pressure

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



**AUTOMATIC SLIDING DOOR
WASHER DISINFECTOR**



**MANUAL DOOR
WASHER DISINFECTOR**



**UNDER THE-DESK
WASHER DISINFECTOR**

Under-the-Desk Washer Disinfector

- Cabin of the washer disinfector is manufactured from high-quality chromium-nickel in compliance with national and international standards, and the required leakage test have been carried out.
- Immersion-type stainless steel heaters have been used to ensure the temperature in the washing and disinfection device cabin reach the set temperature value.
- The cabin has been insulated with mineral wool cabin 10-30 mm in thickness. A stable protective coating have been provided outside the insulation.

Technical Data Table

	Under-The-Desk Washer Disinfector					Washer Disinfector				
Chamber Volume (L)	100	135	150	175	200	225	230	250	360	500
Chamber Width (mm)	500	590	530	540	630	650	660	610	760	860
Chamber Height (mm)	450	570	480	490	580	590	600	760	760	760
Chamber Depth (mm)	480	520	520	530	565	630	630	630	640	800
Width of Device (mm)	1000	1040	1040	1040	1080	1100	1150	1210	1290	1400
Height of Device (mm)	900	930	930	930	1950	1950	1950	2160	2250	2250
Depth of Device (mm)	720	750	780	780	800	80	820	830	820	980
Width of Packaging (mm)	1010	1050	1050	1050	1090	1110	1160	1220	1300	1410
Height of Packaging (mm)	910	940	94	940	1960	1960	1960	2170	2260	2260
Depth of Packaging (mm)	730	760	790	780	810	820	830	840	830	990
Single Door	+	+	+	+	+	+	+	+	+	+
Double Door	+	+	+	+	+	+	+	+	+	+
Touch Screen	+	+	+	+	+	+	+	+	+	+
RS232 Outlet	+	+	+	+	+	+	+	+	+	+
Water-heating Resistance (kW)	7	7	7	7	7	7	7	7	7	7
Drying Resistance (kW)	2	2	2	2	2	2	2	2	2	2
Drying Motor Fan Blowing Flow Rate (m3/h)	750	750	750	750	1000	1000	1000	1000	1000	1000
Electric Jeating Power (kW)	14	14	14	14	18	18	18	18	18	18
Circulation Pump Power (kW)	0,6	0,6	0,6	0,6	1,37	1,37	1,37	1,37	1,37	1,37
Electrical connection characteristics of the circulation pump	220 V 50 Hz	220 V 50 Hz	220 V 50 Hz	220 V 50 Hz	220 V 50 Hz	220 V 50 Hz	220 V 50 Hz	380 V 50 Hz	380 V 50 Hz	380 V 50 Hz
Circulation Pump Flow Rate (d/d)	2800	2800	2800	2800	2500	2500	2500	2500	2500	2500
Detergent Dosage Pump	+	+	+	+	+	+	+	+	+	+
Neutralizing Agent Dosage Pump	+	+	+	+	+	+	+	+	+	+
Electric Connection	1P+N 50 Hz, 230 VAC	1P+N 50 Hz, 230 VAC	1P+N 50 Hz, 230 VAC	1P+N 50 Hz, 230 VAC	1P+N 50 Hz, 230 VAC	3N+1 50 Hz, 380 VAC	3N+1 50 Hz, 380 VAC	3N+1 50 Hz, 380 VAC	3N+1 50 Hz, 380VAC	3N+1 50 Hz, 380 VAC
Water Draining Pipe Diameter (mm)	25	25	25	25	25	25	25	25	25	25
Number of Racks in the Basket	3	3	3	3	4-5	4-5	4-5	4-5	5	5
DIN Basket (piece)	6	6	6	6	8-10	8-10	8-10	8-10	15	15
HEPA Filter	H14, Particle Holding Ratio %99,999									

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



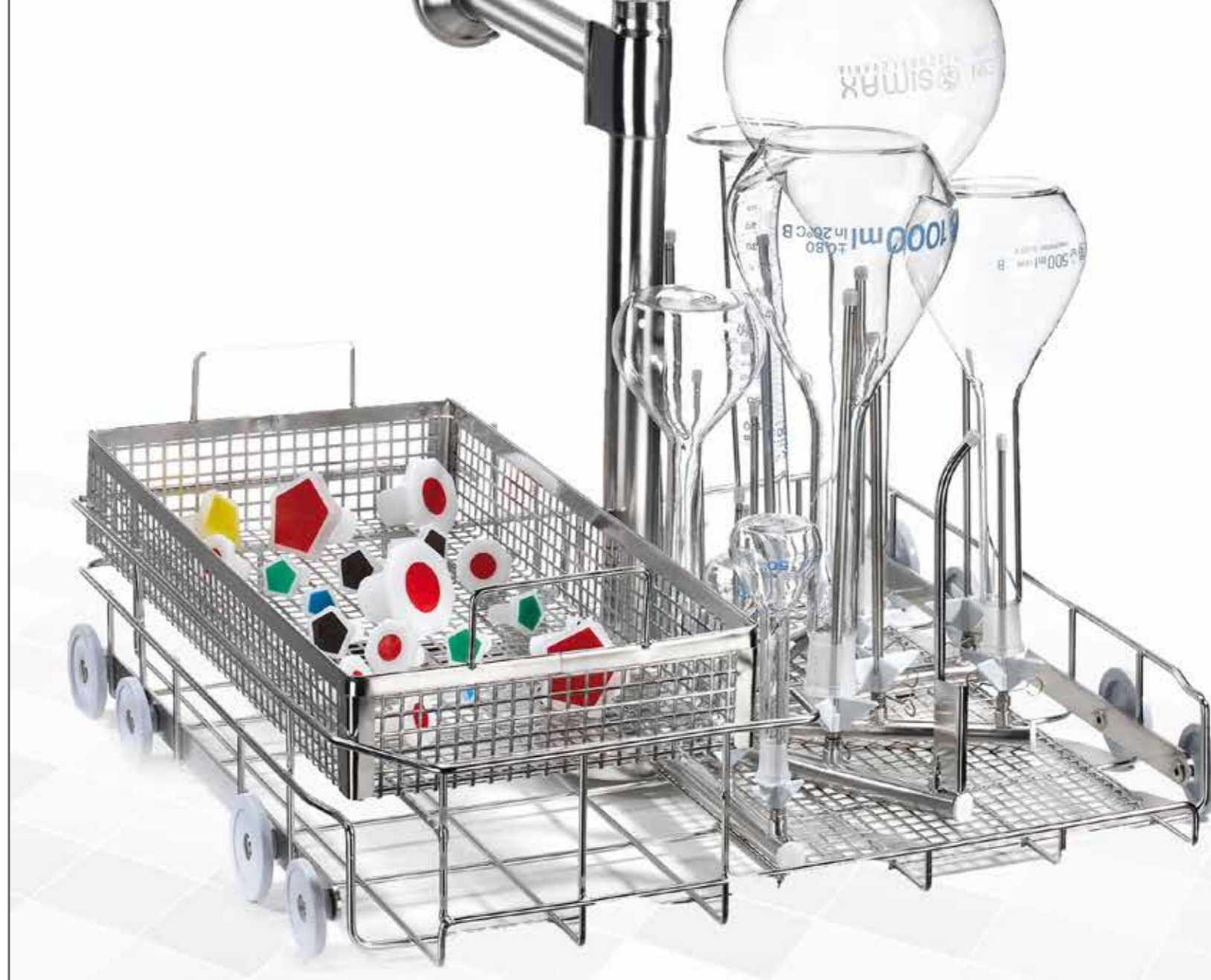
Materials/tools must not be placed one over another or stuffed together when placing them within suitable baskets. Irregular placement of materials will prevent proper cleaning. As a result, sterilization quality will be affected also.

WD series

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:

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- Laboratory tools
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- Rubber materials
- Plastic materials

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			SET (s)		
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		2	Washing	60	600
	P2	3	Drying 1	60	300
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	5	Disinfection	93	600	
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P4: DRYING

PROGRAM	SET TEMPERATURE (°C)	TIME SET (s)
Drying	90	900

P5: SELF-DISINFECTION OF THE DEVICE

PROGRAM	SET TEMPERATURE (°C)	TIME SET (s)
Disinfection	93	600

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

Kurulum Gereksinimi

Supply Water	Deionized water processed with Reverse Osmosis is recommended for high performance.
Installed Power 135 L	~ 20kW, 1 Faz, 230 VAC ±10
Installed Power 200-500 L	~ 35kW, 3 Faz, 380 VAC ±10
Instant Power 135-250 L	~ 10kW
Instant Power 360-500 L	~ 15kW

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	2006/95/EC EN 60601-1
Electromagnetic Compliance Directive	2004/108/EC 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)



For detailed information please contact us

Washing Solutions



NEUTRALIZING AGENT



ALKALINE



LUBRICANT

Technical Data Table

Chamber Volume (L)	200	225	250	360	500
Chamber Width (mm)	620	650	620	620	620
Chamber Height (mm)	580	590	720	720	860
Chamber Depth (mm)	580	630	580	830	830
Width of Device (mm)	855	1100	855	855	855
Height of Device (mm)	1950	1950	2090	2090	2230
Depth of Device (mm)	825	825	825	1075	1075
Width of Packaging (mm)	1005	1110	1005	1005	1005
Height of Packaging (mm)	2140	1960	2280	2280	2440
Depth of Packaging (mm)	975	820	975	1225	1225
Single Door	+	+	+	+	+
Double Door	+	+	+	+	+
Touch Screen	7"	7"	7"	7"	7"
RS232 Outlet	+	+	+	+	+
Water-heating Resistance (kW)	7,5 kW	7,5 kW	7,5 kW	10 kW	10 kW
Drying Resistance (kW)	6 kW	6 kW	6 kW	8 kW	10 kW
Drying Motor Fan Blowing Flow Rate (m ³ /h)	150 m ³ /h	150 m ³ /h	150 m ³ /h	250 m ³ /h	250 m ³ /h
Electric Heating Power (kW)	7,5 kW	7,5 kW	7,5 kW	12.5 kW	15 kW
Circulation Pump Power (kW)	0.9 kW	1.1 kW	1.1 kW	2.4 kW	2.2 kW
Electrical connection characteristic of The circulation pump	1 Faz, 230 VAC ±10 3 Faz, 380 VAC ±10	1 Faz, 230 VAC ±10 3 Faz, 380 VAC ±10	3 Faz, 380 VAC ±10	3 Faz, 380 VAC ±10	3 Faz, 380 VAC ±10
Circulation Pump Flow Rate (L/min)	650 L/dk	650 L/dk	650 L/dk	880 L/dk	650x2=1300 L/dk
Detergent Dosage Pump	+	+	+	+	+
Neutralizing Agent Dosage Pump	+	+	+	+	+
Electric Connection	3N+1 50 Hz, 380 VAC	3N+1 50 Hz, 380 VAC	3N+1 50 Hz, 380 VAC	3N+1 50 Hz, 380 VAC	3N+1 50 Hz, 380 VAC
Water Draining Pipe Diameter (mm)	1" AISI 304	1" AISI 304	1" AISI 304	1" AISI 304	1" AISI 304
Number of Racks in the Basket	4	4	5	5	6
DIN Basket (piece)	8	8	10	15	18
HEPA Filter	H14, Particle holding ratio %99,999				

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



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.

Product Lists, Reference Numbers And GMDN Codes

Washer Disinfectors

SM Series Under The Desk Washer Disinfectors

REFERENCE NUMBER	PRODUCT NAME	MODEL	GMDN CODE
8698918581067	SM-YKD 1 Single Door Washer Disinfectors 100 L	SM-YKD 1 100 L	35424 - Surgical utensil washer/disinfector
8698918581173	SM-YKD 1 Single Door Washer Disinfectors 135 L	SM-YKD 1 135 L	35424 - Surgical utensil washer/disinfector
8698918581180	SM-YKD 1 Single Door Washer Disinfectors 150 L	SM-YKD 1 150 L	35424 - Surgical utensil washer/disinfector
8698918581104	SM-YKD 1 Single Door Washer Disinfectors 175 L	SM-YKD 1 175 L	35424 - Surgical utensil washer/disinfector
8698918581098	SM-YKD 1 Single Door Washer Disinfectors 200 L	SM-YKD 1 200 L	35424 - Surgical utensil washer/disinfector

SM Series Washer Disinfectors

REFERENCE NUMBER	PRODUCT NAME	MODEL	GMDN CODE
8698918581074	SM-YKD 1 Single Door Washer Disinfectors 225 L	SM-YKD 1 225 L	35424 - Surgical utensil washer/disinfector
8698918581050	SM-YKD 1 Single Door Washer Disinfectors 250 L	SM-YKD 1 250 L	35424 - Surgical utensil washer/disinfector
8698918581043	SM-YKD 1 Single Door Washer Disinfectors 360 L	SM-YKD 1 360 L	35424 - Surgical utensil washer/disinfector
8698918581036	SM-YKD 1 Single Door Washer Disinfectors 500 L	SM-YKD 1 500 L	35424 - Surgical utensil washer/disinfector
8698918589377	SM-YKD 2 Double Door Washer Disinfectors 100 L	SM-YKD 2 100 L	35424 - Surgical utensil washer/disinfector
8698918589384	SM-YKD 2 Double Door Washer Disinfectors 135 L	SM-YKD 2 135 L	35424 - Surgical utensil washer/disinfector
8698918589391	SM-YKD 2 Double Door Washer Disinfectors 150 L	SM-YKD 2 150 L	35424 - Surgical utensil washer/disinfector
8698918589117	SM-YKD 2 Double Door Washer Disinfectors 200 L	SM-YKD 2 200 L	35424 - Surgical utensil washer/disinfector
8698918589124	SM-YKD 2 Double Door Washer Disinfectors 225 L	SM-YKD 2 225 L	35424 - Surgical utensil washer/disinfector
8698918589148	SM-YKD 2 Double Door Washer Disinfectors 250 L	SM-YKD 2 250 L	35424 - Surgical utensil washer/disinfector
8698918589155	SM-YKD 2 Double Door Washer Disinfectors 360 L	SM-YKD 2 360 L	35424 - Surgical utensil washer/disinfector
8698918589162	SM-YKD 2 Double Door Washer Disinfectors 500 L	SM-YKD 2 500 L	35424 - Surgical utensil washer/disinfector

WD Series Under The Desk Washer Disinfectors

REFERENCE NUMBER	PRODUCT NAME	MODEL	GMDN CODE
8698918589292	WD-1 Single Door Washer Disinfectors 135 L	WD-1 135 L	35424 - Surgical utensil washer/disinfector
8698918589186	WD-1 Single Door Washer Disinfectors 150 L	WD-1 150 L	35424 - Surgical utensil washer/disinfector
8698918589193	WD-1 Single Door Washer Disinfectors 175 L	WD-1 175 L	35424 - Surgical utensil washer/disinfector

WD Series Washer Disinfectors

REFERENCE NUMBER	PRODUCT NAME	MODEL	GMDN CODE
8698918589209	WD-1 Single Door Washer Disinfectors 200 L	WD-1 200 L	35424 - Surgical utensil washer/disinfector
8698918589216	WD-1 Single Door Washer Disinfectors 225 L	WD-1 225 L	35424 - Surgical utensil washer/disinfector
8698918589230	WD-1 Single Door Washer Disinfectors 250 L	WD-1 250 L	35424 - Surgical utensil washer/disinfector
8698918589247	WD-1 Single Door Washer Disinfectors 360 L	WD-1 360 L	35424 - Surgical utensil washer/disinfector
8698918589254	WD-1 Single Door Washer Disinfectors 500 L	WD-1 500 L	35424 - Surgical utensil washer/disinfector
8698918589261	WD-2 Double Door Washer Disinfectors 100 L	WD-2 100 L	35424 - Surgical utensil washer/disinfector
8698918589278	WD-2 Double Door Washer Disinfectors 135 L	WD-2 135 L	35424 - Surgical utensil washer/disinfector
8698918589285	WD-2 Double Door Washer Disinfectors 150 L	WD-2 150 L	35424 - Surgical utensil washer/disinfector
8698918589308	WD-2 Double Door Washer Disinfectors 175 L	WD-2 175 L	35424 - Surgical utensil washer/disinfector
8698918589315	WD-2 Double Door Washer Disinfectors 200 L	WD-2 200 L	35424 - Surgical utensil washer/disinfector
8698918589322	WD-2 Double Door Washer Disinfectors 225 L	WD-2 225 L	35424 - Surgical utensil washer/disinfector
8698918589346	WD-2 Double Door Washer Disinfectors 250 L	WD-2 250 L	35424 - Surgical utensil washer/disinfector
8698918589353	WD-2 Double Door Washer Disinfectors 360 L	WD-2 360 L	35424 - Surgical utensil washer/disinfector
8698918589360	WD-2 Double Door Washer Disinfectors 500 L	WD-2 500 L	35424 - Surgical utensil washer/disinfector

Adela Series Washer Disinfectors

REFERENCE NUMBER	PRODUCT NAME	MODEL	GMDN CODE
8698918581739	ADELA YKD2 Double Door Washer Disinfectors 200 L	ADELA YKD2 200 L	35424 - Surgical utensil washer/disinfector
8698918581753	ADELA YKD2 Double Door Washer Disinfectors 250 L	ADELA YKD2 250 L	35424 - Surgical utensil washer/disinfector
8698918581760	ADELA YKD2 Double Door Washer Disinfectors 360 L	ADELA YKD2 360 L	35424 - Surgical utensil washer/disinfector
8698918581432	ADELA YKD1 Single Door Washer Disinfectors 175 L	ADELA YKD1 175 L	35424 - Surgical utensil washer/disinfector
8698918581449	ADELA YKD1 Single Door Washer Disinfectors 200 L	ADELA YKD1 200 L	35424 - Surgical utensil washer/disinfector
8698918581463	ADELA YKD1 Single Door Washer Disinfectors 250 L	ADELA YKD1 250 L	35424 - Surgical utensil washer/disinfector
8698918581470	ADELA YKD1 Single Door Washer Disinfectors 360 L	ADELA YKD1 360 L	35424 - Surgical utensil washer/disinfector

Washer Disinfecter Device
Solution Partners

SIEMENS

Schneider
Electric

seko

HANNING

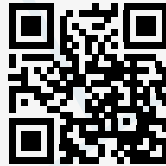
OSV

SKF

DIGI MESA

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 **sumer**
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Revision : Rev.1

HYGECEN

SZUTEST
NOTIFIED BODY 2192

kiwa
Partner for progress

CE 2195

ISO
13485

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14001

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9001