

Tuttnauer Lab

TIVA LAB

High-End Glassware Washer for Laboratories

Bringing **over 95 years of Professionalism**
into your laboratory



MEDIPLAN

— Equipements, Conseil, Services —



Made with Over 95 Years of Experience

Tuttnauer's sterilization and infection control solutions are trusted by **laboratories**, hospitals, and clinics in more than 140 countries. For over 95 years Tuttnauer has been passionate about delivering a complete

sterilization solution to the healthcare and life science industries. We are proud to have installed over 350,000 sterilization and infection control products around the world.



Welcome to the **TIVA** Lab Washer Series

Complete sterile processing solutions

The TIVA product line corresponds with Tuttnauer's vision, to provide complete end-to-end solutions for reprocessing needs to all the industries it serves, in particular for laboratories. Incorporating a glassware washer in your lab provides for maximum flexibility, sustainability, and an efficient driven solution for glassware treatment.

Safe and efficient **cleaning, decontamination** and **drying** of laboratory glassware.

Tuttnauer high disinfection thermal washers provide effective decontamination, washing and drying for a wide range of different glassware and other materials which are commonly used in laboratories.

Supported by a wide range of racks, nozzles, spindles and accessories.

Designed to simplify your work by eliminating manual washing and reducing your manpower. Ensuring the safety of your patients by providing consistent quality washing cycles at all time and ensuring the safety of your staff by eliminating risks of exposure to potentially harmful aerosols.



Intuitive User Experience

- A full control and all-in-one operation from a single touch panel with color display
- Alarm-check system for quick and easy operation
- Washer RePortal SW
- User PIN access management (optional)
- Graphical report of washing phases including time and temperature
- Spray Arm monitoring for continuous washing validation (optional)



Advanced Control and Warning System

- Microcontroller manages data from multiple sensors to support smooth, efficient and reliable operation
- Chemical dosing control
- Real-time indication of water level and quality



Easy to Clean and Maintain Process Monitoring

- The only washer with a water-emptying total system (ETS)
- Easy-to-remove and easy-to-wash spray arms
- Long-lasting components require minimal servicing



Premium Performance

- Up to 40 washing programs. Preset and customized
- Water quality monitoring
- Validation of every cycle using continuous water pressure monitoring
- Quick drying phases due to a steam condenser system
- Uniform forced air drying, dust blocking (HEPA filter is optional)
- Accelerated heating time by using an integrated boiler (optional)
- Reduced program times and electricity consumption using hybrid heating system (optional)
- Water softener system (optional)
- Conductivity probe (optional)



Highest Design Standards

State of the art quality

- Chemical-resistant double-layered glass
- AISI 316L Stainless Steel
- Double-layered tempered glass door for visual monitoring

TIVA10-1ML

MANUAL DOOR

Machine equipped with a manual opening and closing door made of double tempered glass, for laboratory glassware with 4 independent levels. The upper levels are removable for washing large materials. Is equipped with a system that filters, electrically heats and forces, with a powerful blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result. A wide range of racks, nozzles and accessories complete these machines, suitable to wash and dry a wide variety of laboratory glassware.



Touchpad keyboard with graphical display

Thanks to the LCD graphic touch display, it is possible to choose the desired program or to enter the device programming menu. The LCD display also shows the current state of the machine, using animated graphics that appear on it.



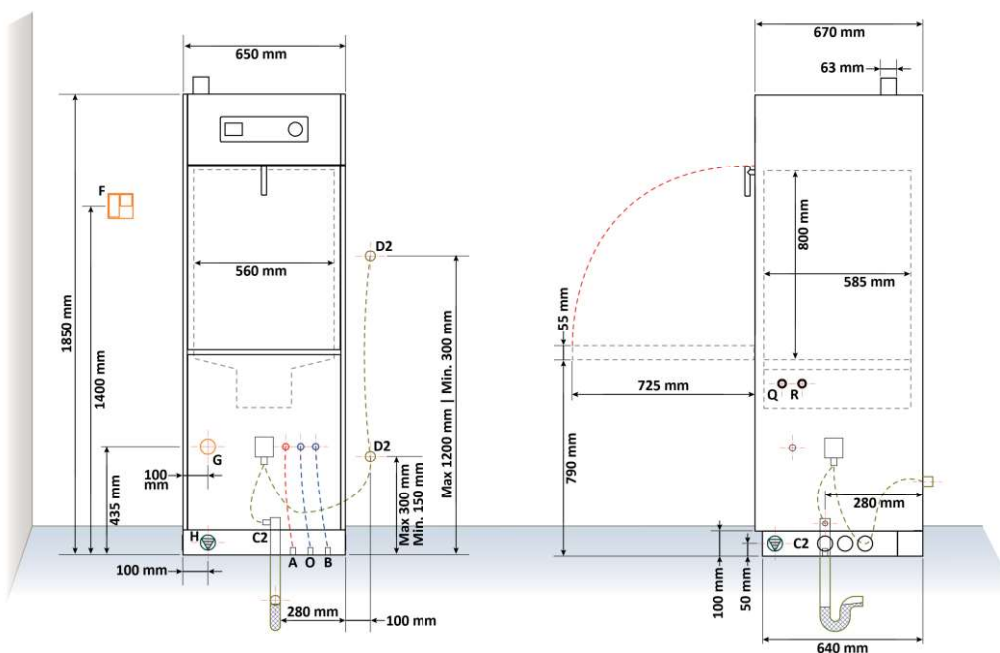
Dosing pumps

Up to 4 dosing pumps with level control sensors and flow meters for monitoring the detergent quantity can be mounted (2 dosing pumps are already mounted in the standard machine).



Liquid detergent canisters

5 Liter liquid detergent canisters are placed inside the base of the device (max. 4 canisters).



LEGEND

A	Hot water connection - male-thread G $\frac{3}{4}$ " (tube G $\frac{1}{2}$ ")
B	Cold water connection - male-thread G $\frac{3}{4}$ " (tube G $\frac{1}{2}$ ")
C2	Drain $\varnothing 1\frac{1}{2}$ " (DN40) - hose connection 1" (25mm) (at floor)
D2	Drain $\varnothing 1\frac{1}{2}$ " (DN40) - hose connection 1" (25mm) (at wall)
F	Omnipolar magneto switch with a circuit breaker
G	Electrical connection box
H	Equipotential clamp
O	Deionized water connection - male-thread G $\frac{3}{4}$ " (tube G $\frac{1}{2}$ ")
Q	Steam connection G da $\frac{1}{2}$ " (inlet)
S	Steam connection G da $\frac{1}{2}$ " (outlet)

TIVA10-1VL

AUTOMATIC DOOR

Machine equipped with an automatic sliding door, of double tempered glass, for laboratory glassware with 4 independent levels. The upper levels are removable for washing large items. Is equipped with a system that filters, electrically heats and forces, with a powerful blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result. A wide range of racks, nozzles and accessories complete these machines, suitable to wash and dry a wide variety of laboratory glassware.



Touchpad keyboard with graphical display

Thanks to the LCD graphic touch display, it is possible to choose the desired program or to enter the device programming menu. The LCD display also shows the current state of the machine, using animated graphics that appear on it.



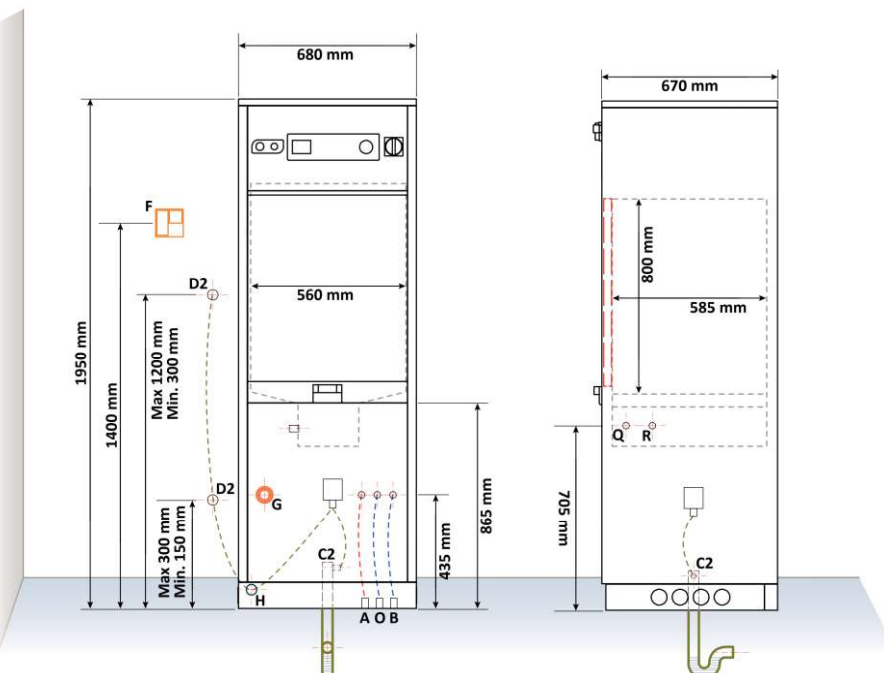
Dosing pumps

Up to 4 dosing pumps with level control sensors and flow meters for monitoring the detergent quantity can be mounted (2 dosing pumps are already mounted in the standard machine).



Liquid detergent canisters

5 Liter liquid detergent canisters are placed inside the base of the device (max. 4 canisters).



LEGEND

A	Hot water connection- male-thread G ¾" (tube G ½")
B	Cold water connection- male-thread G ¾" (tube G ½")
C2	Drain Ø1" ½ (DN40)- hose connection 1" (25mm) (at floor)
D2	Drain Ø1" ½ (DN40)- hose connection 1" (25mm) (at wall)
F	Omnipolar magneto switch with a circuit breaker
G	Electrical connection box
H	Equipotential clamp
O	Deionized water connection- male-thread G ¾" (tube G ½")
Q	Steam connection G da ½" (inlet)
S	Steam connection G da ½" (outlet)

● Standard + Optional / Not available

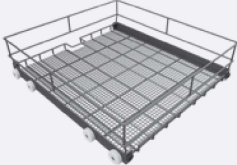


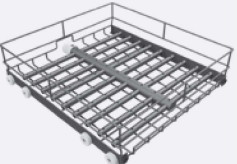
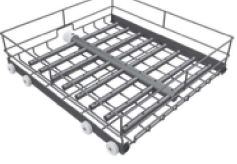
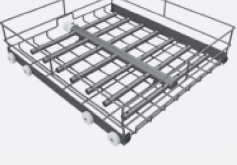

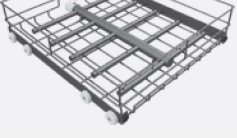
Technical features	TIVA10-1ML	TIVA10-1VL
External dimension (WxDxH):	650x700x1850 mm	680x700x1950 mm
Chamber dimension (WxDxH):	560x585x800 mm	560x585x800 mm
Max pump flow rate:	626 l/mn	626 l/mn
Max drying fan flow rate with filter:	150 m ³ /h	150 m ³ /h
Max absorbed power:	11,4 kW	11,4 kW
Max number of dosing pumps for chemicals with flowmeters:	4	4
Chemical tank capacity:	5 Liter	5 Liter
Device configuration options		
USB SLAVE interface for PC:	●	●
USB HOST interface for FLASH DRIVE:	●	●
Interface for external printer or data connection exchange:	●	●
Touch panel with color graphic display:	●	●
Certificated plumbing system, designed to isolate the potable water pipeline system (water gap) as prescribed by European Standard EN 1717:	●	●
Automatic door:	●	●
Forced air drying:	●	●
Wash chamber made of high quality stainless steel, AISI 316L (EN 1.4404):	●	●
Hot water connection:	●	●
Cold water connection:	●	●
Deionized water connection:	●	●
HEPA H14 filter:	+	+
Main switch ON/OFF. In accordance with the electrical connection:	+	+
(E.T.S.) Empty Total System:	+	+
Hybrid heating system: electric steam:	+	+
Deionized water heating with boiler:	+	+
Drain pump:	+	+
Conductivity probe:	+	+
Water softener system:	+	+
Wash chamber LED light:	+	+
Spray arm monitor:	+	+
Built-in printer frontally installed:	+	+

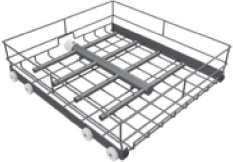
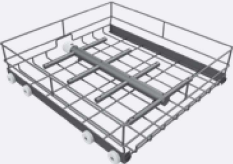
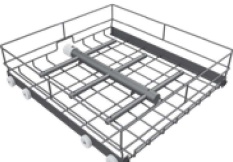
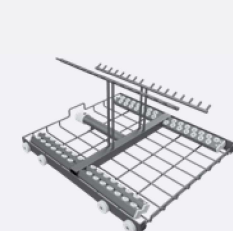
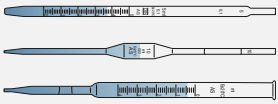

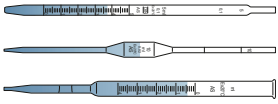

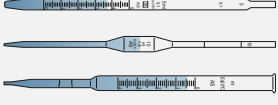
The reference values are based on a voltage of 230 V between Phase and Neutral (between Phase and Phase in three-phase versions without Neutral) with a possible variance between -5 and +10%.



TIVA10-1ML | TIVA10-1VL

RACKS

Code	Image	Description												
119905133		<p>TL133 LAB. LOWER RACK Washing rack positioned on the lower level, basic version Suitable for washing the following glassware:</p>  <p>Internal loading dimensions WxD: 495x545 mm. Rack external dimensions WxDxH: 530x568x148 mm.</p>												
119905127		<p>TL127 LAB. LOWER RACK 110 POS. Washing rack positioned at the lower level, max. nozzles positionable: 110 Rack external dimensions WxDxH: 530x568x148 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>110</td> <td>40</td> <td>Ø 2,5 mm</td> </tr> <tr> <td>81</td> <td>52 mm</td> <td>Ø 2,5/4 mm</td> </tr> <tr> <td>42</td> <td>70 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	110	40	Ø 2,5 mm	81	52 mm	Ø 2,5/4 mm	42	70 mm	All
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119911011		<p>TL011 LAB. LOWER RACK 81 POS. Washing rack positioned at the lower level, max. nozzles positionable: 81 Rack external dimensions WxDxH: 530x568x148 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>81</td> <td>52 mm</td> <td>Ø 2,5/4 mm</td> </tr> <tr> <td>42</td> <td>70 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	81	52 mm	Ø 2,5/4 mm	42	70 mm	All			
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119911012		<p>TL012 LAB. LOWER RACK 56 POS. Washing rack positioned at the lower level, max. nozzles positionable: 56 Rack external dimensions WxDxH: 530x568x148 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>56</td> <td>60 mm</td> <td>Ø 2,5/4 mm</td> </tr> <tr> <td>42</td> <td>70 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	56	60 mm	Ø 2,5/4 mm	42	70 mm	All			
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119911013		<p>TL013 LAB. LOWER RACK 42 POS. Washing rack positioned at the lower level, max. nozzles positionable: 42 Rack external dimensions WxDxH: 530x568x148 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>42</td> <td>70 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	42	70 mm	All						
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119911014		<p>TL014 LAB. LOWER RACK 36 POS. Washing rack positioned at the lower level, max. nozzles positionable: 36 Rack external dimensions WxDxH: 530x568x148 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>36</td> <td>80 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	36	80 mm	All						
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119911015		<p>TL015 LAB. LOWER RACK 20 POS. Washing rack positioned at the lower level, max. nozzles positionable: 20 Rack external dimensions WxDxH: 530x568x148 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>100 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	20	100 mm	All						
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Code	Image	Description			
119911016		TL016 LAB. LOWER RACK 16 POS. Washing rack positioned at the lower level, max. nozzles positionable: 16 Rack external dimensions WxDxH: 530x568x148 mm.	N° max positions	Ø max glassware	Usable nozzles
			16	110 mm	All
119911017		TL017 LAB. LOWER RACK 12 POS. Washing rack positioned at the lower level, max. nozzles positionable: 12 Rack external dimensions WxDxH: 530x568x148 mm.	N° max positions	Ø max glassware	Usable nozzles
			12	130 mm	All
119911018		TL018 LAB. LOWER RACK 9 POS. Washing rack positioned at the lower level, max. nozzles positionable: 9 Rack external dimensions WxDxH: 530x568x148 mm.	N° max positions	Ø max glassware	Usable nozzles
			9	160 mm	All
119911021		TL021 LAB. LOWER RACK 56 POS. PIP. Washing rack for pipettes positioned at the lower level, max pipettes can be positioned: 56 Suitable for washing the following glassware:  GRADUATED PIPETTES BULB PIPETTES PASTEUR PIPETTES Rack external dimensions WxDxH: 525x497x313 mm.	Min pipette length		
			250 mm	760 mm	
119911022		TL022 LAB. LOWER RACK 2 CASS. PIP. Pipettes washing rack positioned on the lower level, with 2 cassettes Suitable for washing the following glassware:  GRADUATED PIPETTES BULB PIPETTES PASTEUR PIPETTES Rack external dimensions WxDxH: 525x497x540 mm.	Min pipette length	Max pipette length	
			All	520 mm	
119911023		TL023 LAB. LOWER RACK 3 CASS. PIP. Pipettes washing rack positioned on the lower level, with 3 cassettes Suitable for washing the following glassware:  GRADUATED PIPETTES BULB PIPETTES PASTEUR PIPETTES Rack external dimensions WxDxH: 525x497x540 mm.	Min pipette length		
			All	520 mm	



Code	Image	Description
119905128		<p>TL128 LAB. INT. RACK W/S.ARM Washing rack positioned at intermediate level, with spray arm Suitable for washing the following glassware:</p> <p>BREAKERS JUGS MUGS BUCKETS CANS JARS FUNNELS POWDER FUNNELS IMHOFF CONES</p> <p>Internal loading dimensions WxD: 485x530 mm. Rack external dimensions WxDxH: 530x550x95 mm.</p>

119905129		<p>TL129 LAB. UPPER RACK W/S.ARM Washing rack positioned on the upper level, with spray arm Suitable for washing the following glassware:</p> <p>BREAKERS JUGS MUGS BUCKETS CANS JARS FUNNELS POWDER FUNNELS IMHOFF CONES</p> <p>Internal loading dimensions WxD: 485x530 mm. Rack external dimensions WxDxH: 530x550x124 mm.</p>
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119911003		<p>TL003 LAB. UPPER RACK 169 POS. Washing rack positioned at the upper level, max. nozzles positionable: 169 Rack external dimensions WxDxH: 530x550x124 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>169</td> <td>32 mm</td> <td>Ø 2,5 mm</td> </tr> <tr> <td>81</td> <td>52 mm</td> <td>Ø 2,5/4 mm</td> </tr> <tr> <td>42</td> <td>70 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	169	32 mm	Ø 2,5 mm	81	52 mm	Ø 2,5/4 mm	42	70 mm	All
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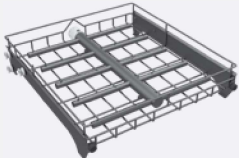
119911004		<p>TL004 LAB. UPPER RACK 110 POS. Washing rack positioned at the upper level, max. nozzles positionable: 110 Rack external dimensions WxDxH: 530x550x124 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>110</td> <td>40 mm</td> <td>Ø 2,5 mm</td> </tr> <tr> <td>81</td> <td>52 mm</td> <td>Ø 2,5/4 mm</td> </tr> <tr> <td>42</td> <td>70 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	110	40 mm	Ø 2,5 mm	81	52 mm	Ø 2,5/4 mm	42	70 mm	All
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119911005		<p>TL005 LAB. UPPER RACK 81 POS. Washing rack positioned at the upper level, max. nozzles positionable: 81 Rack external dimensions WxDxH: 530x550x124 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>81</td> <td>52 mm</td> <td>Ø 2,5/4 mm</td> </tr> <tr> <td>42</td> <td>70 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	81	52 mm	Ø 2,5/4 mm	42	70 mm	All
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119911006		<p>TL006 LAB. UPPER RACK 56 POS. Washing rack positioned at the upper level, max. nozzles positionable: 56 Rack external dimensions WxDxH: 530x550x124 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>56</td> <td>60 mm</td> <td>Ø 2,5/4 mm</td> </tr> <tr> <td>42</td> <td>70 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	56	60 mm	Ø 2,5/4 mm	42	70 mm	All
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119911007		<p>TL007 LAB. UPPER RACK 42 POS. Washing rack positioned at the upper level, max. nozzles positionable: 42 Rack external dimensions WxDxH: 530x550x124 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>36</td> <td>70 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	36	70 mm	All
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119911008		<p>TL008 LAB. UPPER RACK 36 POS. Washing rack positioned at the upper level, max. nozzles positionable: 36 Rack external dimensions WxDxH: 530x550x124 mm.</p> <table border="1"> <thead> <tr> <th>N° max positions</th> <th>Ø max glassware</th> <th>Usable nozzles</th> </tr> </thead> <tbody> <tr> <td>36</td> <td>80 mm</td> <td>All</td> </tr> </tbody> </table>	N° max positions	Ø max glassware	Usable nozzles	36	80 mm	All
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36	80 mm	All						

Code	Image	Description	N° max positions	Ø max glassware	Usable nozzles
119911009		TLO09 LAB. UPPER RACK 20 POS. Washing rack positioned at the upper level, max. nozzles positionable: 20 Rack external dimensions WxDxH: 530x550x124 mm.	20	100 mm	All

119911010		TLO10 LAB. UPPER RACK 16 POS. Washing rack positioned at the upper level, max. nozzles positionable: 16 Rack external dimensions WxDxH: 530x550x124 mm.	16	110 mm	All
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D00604800		A117 RAISING GRID Raising grid suitable for all washing racks Grid external dimensions WxDxH: 477x522x51 mm.			
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ATS238-0289		A049 FIX. H. TRANSF. TROLLEY AWD655-10 Loading trolley with block system to load washing material into the machine Rack external dimensions WxDxH: 750x628x880 mm.			
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ATS238-0290		A020 FIX. H. TRANSF. TROLLEY AWD655-10A Loading trolley with block system to load washing material into the machine Rack external dimensions WxDxH: 750x623x875 mm.			
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Le saviez-vous ?

Des laboratoires dans 142 pays du monde utilisent les autoclaves Tuttnauer. Fort de ses 95 ans d'expérience dans l'industrie, Tuttnauer propose des solutions de pointe pour tous les types de laboratoires, avec une gamme de produits disponibles dans un large éventail de tailles et des capacités de stérilisation précises et de haute qualité, couvrant toutes les exigences des laboratoires.



Gros Autoclaves de laboratoire



Autoclaves horizontaux de laboratoire



Autoclaves de laboratoire TLC



Ligne ELV - Autoclaves verticaux de laboratoire



Ligne EL - Autoclaves de paillasse de laboratoire

Laboratoire

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