



[www.teknox.net](http://www.teknox.net)

YouTube

TEKNOX ITALY

**ADDRESS**

Via Mori, 6  
40054 Prunaro di Budrio  
Bologna - Italy

**PHONE**

+ 39 051 800862

**FAX**

+ 39 051 803769

**EMAIL**

[info@teknox.net](mailto:info@teknox.net)

THIS CATALOGUE REPLACES ANY PREVIOUS PUBLICATION. THE INFORMATION PROVIDED IS APPROXIMATE AND WE RESERVE THE RIGHT TO CHANGE IT WITHOUT NOTICE.  
v. 11 - Copyright © 2016 TEKNOX s.r.l.

[www.gattomatto.biz](http://www.gattomatto.biz)

2016 - REV.01 - INGLESE



METAL CLEANING

EVOLUTION

Teknox

PRODUCT CATALOG  
**INDUSTRY SECTOR**







## THE COMPANY

**3**

### QUALITY

CONTROL AND SAFETY  
TESTING

**4**

### TECHNOLOGIES

ELECTRICAL SWITCHBOARD

**5**

### CLEANLINESS

QUALITY CONTROL REPORT



## SYSTEMS

**6**

### UNIX SZD

**10**

### UNIX 2B

**14**

### ROBUR 1B

**18**

### ROBUR 2B

**22**

### ROTOR

**26**

### LINEARJET

**28**

### ROBOCLEAN

**32**

### ROUNDJET

**34**

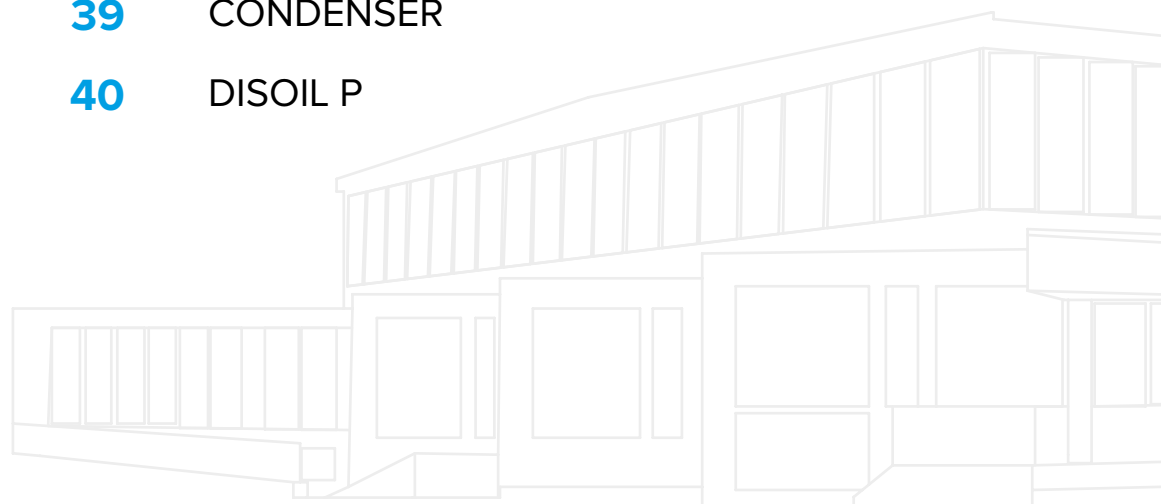
### TUNNEL

**39**

### CONDENSER

**40**

### DISOIL P



# THE COMPANY

## SPECIALISTS IN METAL CLEANING MACHINES FOR SURFACE TREATMENT AND WASHING

TEKNOX carries out its business with the aim of providing innovative technologies that are able to offer effective solutions to the problems associated with surface treatment and that meet the specifications of standards regarding the quality of washing processes.

TEKNOX specialises in consulting and the design and manufacture of metal cleaning systems

- MECHANICAL ENGINEERING
- PLASTICS
- WOOD
- SCREEN PRINTING AND PRINTING
- FOOD AND BEVERAGES
- PHARMACEUTICALS



TEKNOX invests continuously in its production department, technical research and staff training.

The premises in which the production department, engineering department and administrative offices are located covers an area of approximately 5000 square metres.

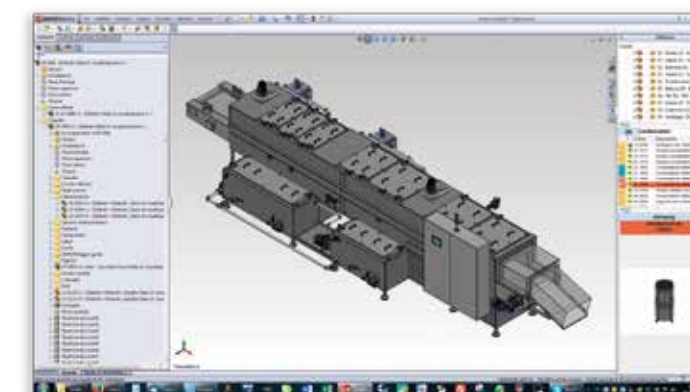


The sheet metal processing department produces most of the sheet metal products that are used to make the washing systems.

The company has its own facilities for laser cutting, punching, bending, welding and finishing the sheet metal products. For some of its parts, the company relies on other businesses that are specialised in processing stainless steel.

The warehouse covers an area of approximately 1,000 square metres and handles approximately 12,000 product codes.

Both commercial components and the internally produced semi-finished products are stored in the warehouse. The computerized warehouse management system enables the components to be accurately identified and stocks to be checked quickly. The quality control system for the semi-finished products and the purchased materials ensures that there are no non-compliant items in storage.



The assembly area that accounts for approximately 3,000 square metres is the largest in the production department. The highly qualified staff have several tasks: to assemble the components (electrical, mechanical and hydraulic) to the highest manufacturing standards, to test the systems and to answer requests for technical assistance.

The engineering department is responsible for the 3D design of all the systems, from the individual components up to the finished product. This department also assesses customer requirements together with the cleaning and technical specifications. The department is also responsible for programming the PLCs and drafting technical documentation such as production drawings, wiring, pneumatic and hydraulic diagrams and the operation and maintenance manuals.

The sales and administration department is responsible for national and international marketing and the administrative management of the company, customer support and logistics.

# SOLUTIONS

# QUALITY

# INNOVATIONS



### TECHNOLOGICAL INNOVATIONS

Over the last few years, TEKNOX has continued the process of renewal and technological improvement. Innovations include:

**LASER-CUT NOZZLES:** this technology, which involves the perforation of pipes using lasers, has enabled pressure losses to be reduced and nozzle maintenance times lowered.

**DRYING:** The redesign of the hot air drying system installed on some models has enabled the operating temperature, and therefore the overall energy consumption, to be reduced and performance to be increased by 30%.

**CENTRIFUGAL CONDENSER** The new centrifugal condensation system, specially designed and patented by TEKNOX for water-based washing systems, has enabled the amount of steam that is generated to be significantly reduced and therefore also the cost of condensation equipment.

### ELECTRICAL SWITCHBOARD DGT V4

The new DGT V4 control system, which is standard on TEKNOX models, is composed of:

- a **PLC** that manages the input and output signals and controls the activation of heating resistances and motors.
- a **touch-screen operator panel** with a 4.3" or 7" backlit TFT LCD, 65536 colours display
- Siemens **electromechanical components**

The control software enables you to:

- customize the main machine functions such as times, temperatures and work cycles
- define up to 16 operating programs, each of which can include up to 48 different stages (apart from continuous operation systems) via an easy to use graphical system
- check the status of the various components of the machine in real time via a mimic diagram display
- set up the weekly schedule to turn on the heating of the treatment fluids
- set up the weekly schedule to turn on the oil separator (if installed)
- set the language in which to display information
- manage the minimum, maximum and safety temperatures for the liquids
- manage warning signals and machine alarms
- obtain information regarding the total machine cycle time (hour meter, cycle counter)
- automatically manage maintenance
- enable advanced functions such as energy saving (to optimise the overall power consumption of the machine).

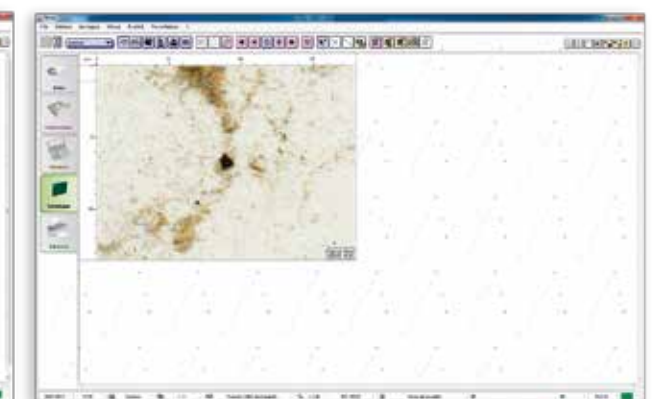
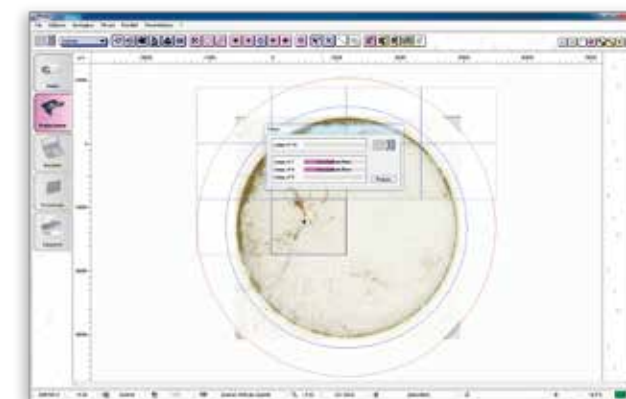
## TECHNOLOGIES

### WASHING QUALITY CONTROL SYSTEM

Today, the cleaning standard required in an increasing number of manufacturing industries must meet regulatory requirements in terms of the maximum size and weight of the residual contaminant. "Cleanliness" control is extremely important in the mechanical engineering, motor vehicle, aeronautical, aerospace and instrumentation industries.

TEKNOX provides expertise and equipment to carry out independent laboratory tests.

The filter containing the residues left on the treated component are scanned in a single pass. The software analyses the residues according to the reference parameters that have been entered and calculates and classifies them in just a few minutes.



### REPORTS AND RESULTS

The full report function can be run automatically and the data exported to Excel.

The results are displayed in a predefined order in accordance with the reference standards and are indicated according to the residue indices and classification categories.

## RESULTS



UNIX SZD

ROTATING BASKET METAL PARTS WASHER  
WITH LIQUID DECONTAMINATION SYSTEM

A range of machines for automatically washing small and medium sized parts.

Excellent quality cleaning is achieved through the slow rotation of the basket and special washing nozzles.

The PLC enables the treatment to be customized



UNIX SZD  
80 | 100 | 120

LOW TEMPERATURE **LT**  
Maximum temperature setting 60°C.

HIGH TEMPERATURE **HT**  
Maximum temperature setting 80°C.

UNIX SZD

EQUIPMENT

Standard

- Timed vapour extraction.
- Reinforced basket made of electro-welded Aisi 304 stainless steel mesh with external edge.
- Minimum level probe of liquid in the tank to protect the pump and resistance.
- Maximum level probe of liquid in the tank and automatic water filling solenoid valve.
- Electric pump made of Aisi 304 Stainless Steel with special gaskets.
- Box filter with 6 hat filters made of Aisi 304 Stainless Steel for pre-filtering the liquid returning to the tank.
- Pump intake filter made of Aisi 304 Stainless Steel
- Safety limit switch on cover opening
- Tank edge gasket made of EPDM
- Electrical system IP65, touch-screen control PLC (DGT V4)
- Weekly schedule to turn on the heating and the oil separator (if installed)

- Electrical resistance made of Incoloy Stainless Steel
- Electrical rotation of the basket via gearmotor
- Tank accessible from the outside with sludge settling partitions
- Structure and sheet metalwork made of Aisi 304 Stainless Steel
- Laser machined washing pipes made of Aisi 304 Stainless Steel

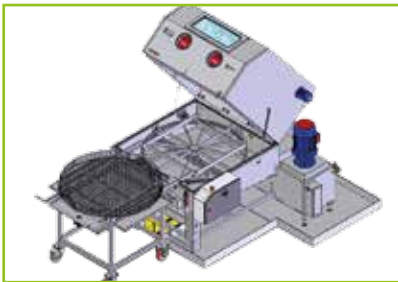
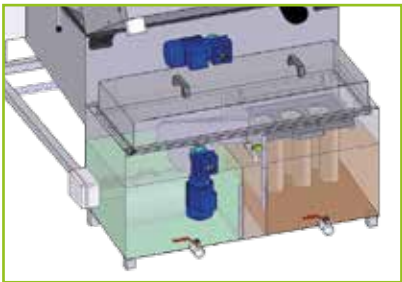
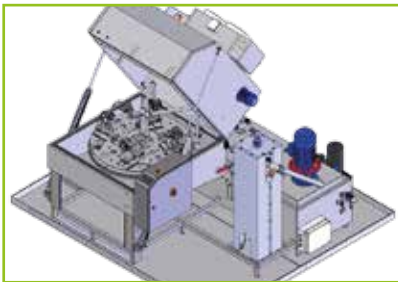
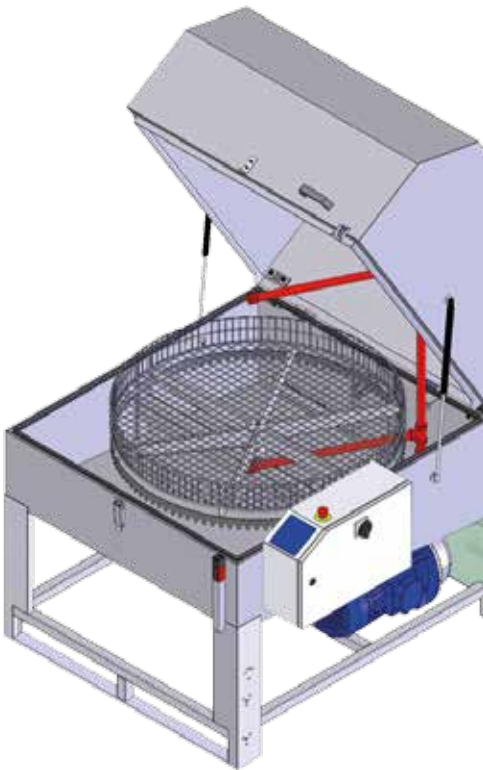
HT model

- Compliant thermal insulation with Stainless Steel panels
- Compliant safety limit switch with cover opening lock during the operating cycle

FLEXIBILITY  
FLEXIBILITY

TECHNICAL DATA

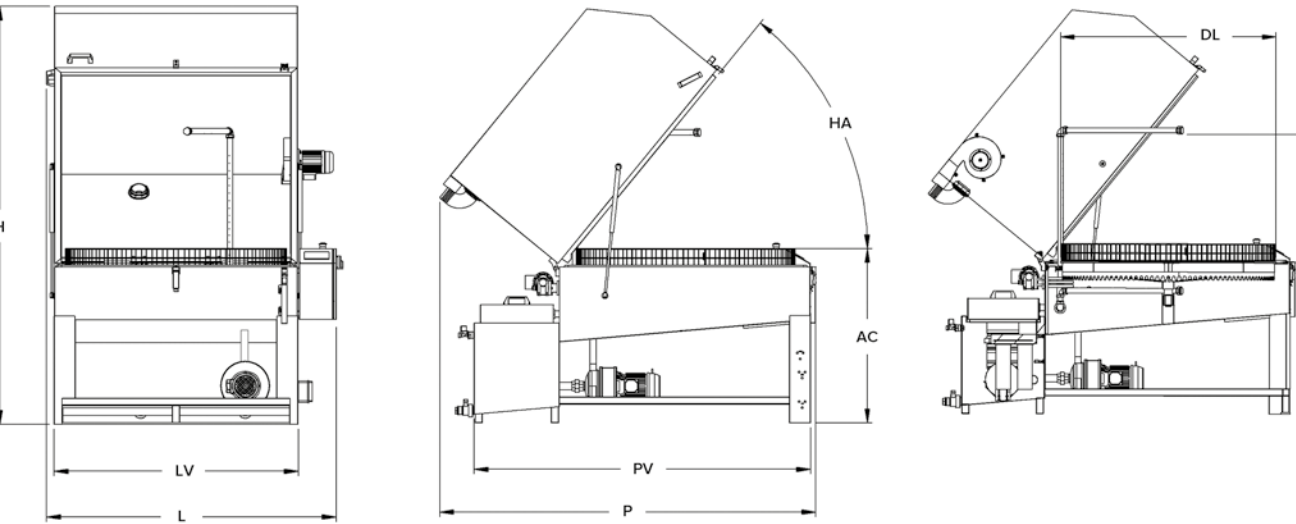
TECHNICAL DATA	UNIX 80 SZD	UNIX 100 SZD	UNIX 120 SZD
Overall dimensions when closed ( L x P x H )	125 x 173 x 140 cm	142 x 190 x 140 cm	157 x 205 x 160 cm
Overall dimensions when open ( L x P x H )	125 x 173 x 192 cm	142 x 190 x 210 cm	157 x 205 x 230 cm
Washing capacity ( Ø x HL )	Ø 78 x 54 cm	Ø 98 x 54 cm	Ø 117 x 70 cm
Loading capacity	100 Kg	200 Kg	300 Kg
Washing tank capacity	240 l	240 l	300 l
Washing pump	0,55 kw 2,5 bar 200 l/min	1,5 kw 2,5 bar 250 l/min	1,5 kw 2,5 bar 300 l/min
High pressure washing pump	2,2 kw 6 bar 200 l/min	3 kw 6 bar 250 l/min	3 kw 6 bar 300 l/min
Washing heating	8,0 kw	8,0 kw	10,0 kw
Mechanical rotation	0,09 kw	0,09 kw	0,09 kw
Vapour extractor	0,25 kw 320 m³/h	0,25 kw 320 m³/h	0,25 kw 320 m³/h
Disc oil separator	0,09 kw	0,09 kw	0,09 kw
Vapour condenser	0,20 kw	0,20 kw	0,20 kw
Tank emptying pump	0.37 kW	0.37 kW	0.37 kW
Drying	4.5 kW	4.5 kW	4.5 kW
Blowing (compressed air, 6 bar)	300 m³/h	300 m³/h	300 m³/h
Power Supply	3Ph + N + PE	3Ph + N + PE	3Ph + N + PE
Supply voltage	400V 50Hz	400V 50Hz	400V 50Hz





DIMENSIONS

DIMENSIONS	UNIX 80 SZD	UNIX 100 SZD	UNIX 120 SZD
L (Width)	125 cm	142 cm	157 cm
P (Depth)	173 cm	190 cm	205 cm
H (Height)	192 cm	210 cm	230 cm
DL (Washing diameter)	78 cm	97 cm	117 cm
HL (Washing height)	54 cm	54 cm	70 cm
AC (Load height)	81 cm	81 cm	83 cm
HA (Opening angle)	60°	60°	60°

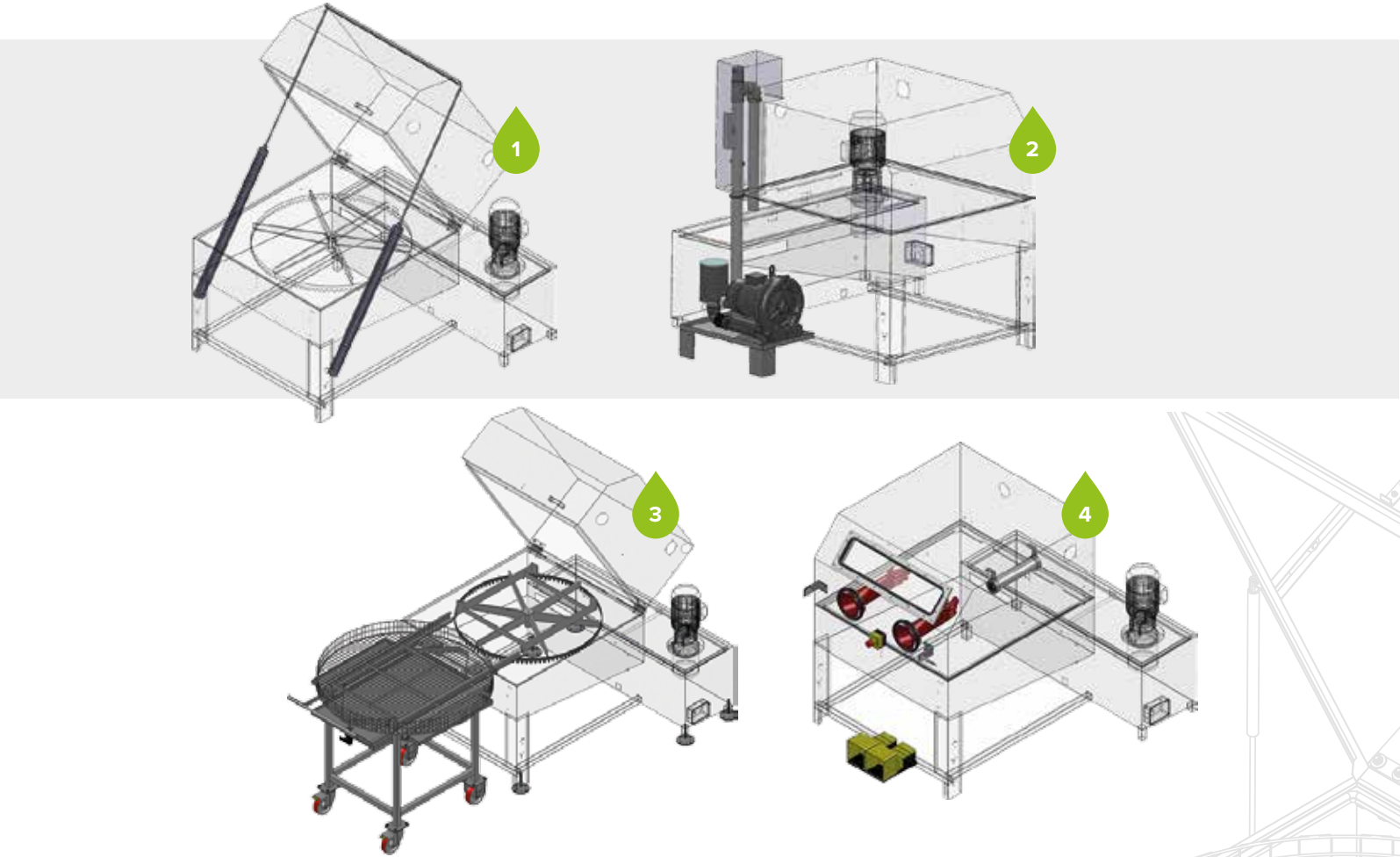


CONNECTIONS

CONNECTIONS	UNIX 80 SZD	UNIX 100 SZD	UNIX 120 SZD
Tank drainage outlet	F 1" gas	F 1" gas	F 1" gas
Oil separator drainage outlet	M 1/2" gas	M 1/2" gas	M 1/2" gas
Vapour extraction outlet	Ø 80 mm	Ø 80 mm	Ø 80 mm
Water filling solenoid valve	F 3/4" gas	F 3/4" gas	F 3/4" gas
Compressed air blowing solenoid valve	F 3/4" gas	F 3/4" gas	F 3/4" gas
Compressed air commands inlet	F 1/4" gas	F 1/4" gas	F 1/4" gas
Emptying pump	F 1 1/4 gas	F 1 1/4 gas	F 1 1/4 gas

ACCESSORIES

- Pneumatic opening and closing of the cover with two-hand safety control [ 1 ]
- Drying with resistance and air-blade side channel blower [ 2 ]
- External trolley made of Aisi 304 Stainless Steel [ 3 ]
- Thermal insulation of bag filter
- Thermal insulation of parallel mounted duplex bag filter
- Electric vapour condenser for lowering the quantity of vapour given off (page 39)
- Disoil P LT or HT (page 40)
- Disc oil separator with dedicated gearmotor
- Double upper piping at half height, can be excluded
- Chemical product doser
- Fine mesh box filters
- Stainless Steel bag filter on the pump delivery pipe
- Double Stainless Steel bag filter mounted in parallel on the pump delivery pipe
- Teflon and Viton gaskets
- Manual washing and blowing with hoses and washing gun [ 4 ]
- PLC Siemens S1200 - HMI Siemens KTP touch-screen
- High pressure washing pump
- Tank emptying pump
- Customizations for use with abrasive contaminants in the washing fluid
- Customizations for use with strongly caustic chemical products
- Rinsing with mains water with independent pipes and separate direct drain outlet
- Pickling of internal welding
- Blowing with compressed air and independent pipes
- System retention tank made of Aisi 304 Stainless Steel



FLEXIBILITY

# UNIX 2B

## ROTATING BASKET METAL PARTS WASHER WITH TWO OR MORE STAGES OF TREATMENT

A range of machines for automatically washing small and medium sized parts.

Excellent quality cleaning is achieved through the slow rotation of the basket and special washing nozzles. The two tanks with dedicated pumps enable washing and rinsing to be carried out automatically. The PLC enables the treatment to be customized.



UNIX 2B

### UNIX 2B 80 | 100 | 120

**LOW TEMPERATURE LT**  
Maximum temperature setting 60°C.

**HIGH TEMPERATURE HT**  
Maximum temperature setting 80°C.

### EQUIPMENT

#### Standard

- Timed vapour extraction.
- Reinforced basket made of electro-welded Aisi 304 stainless steel mesh with external edge.
- Minimum level probe of liquid in the tank to protect the pump and resistance.
- Maximum level probe of liquid in the tank and automatic water filling solenoid valve.
- Electric pump made of Aisi 304 Stainless Steel with special gaskets.
- Box filter with 6 hat filters made of Aisi 304 Stainless Steel for pre-filtering the liquid returning to the tank.
- Pump intake filter made of Aisi 304 Stainless Steel
- Safety limit switch on cover opening
- Tank edge gasket made of EPDM
- Electrical system IP65, touch-screen control PLC (DGT V4)

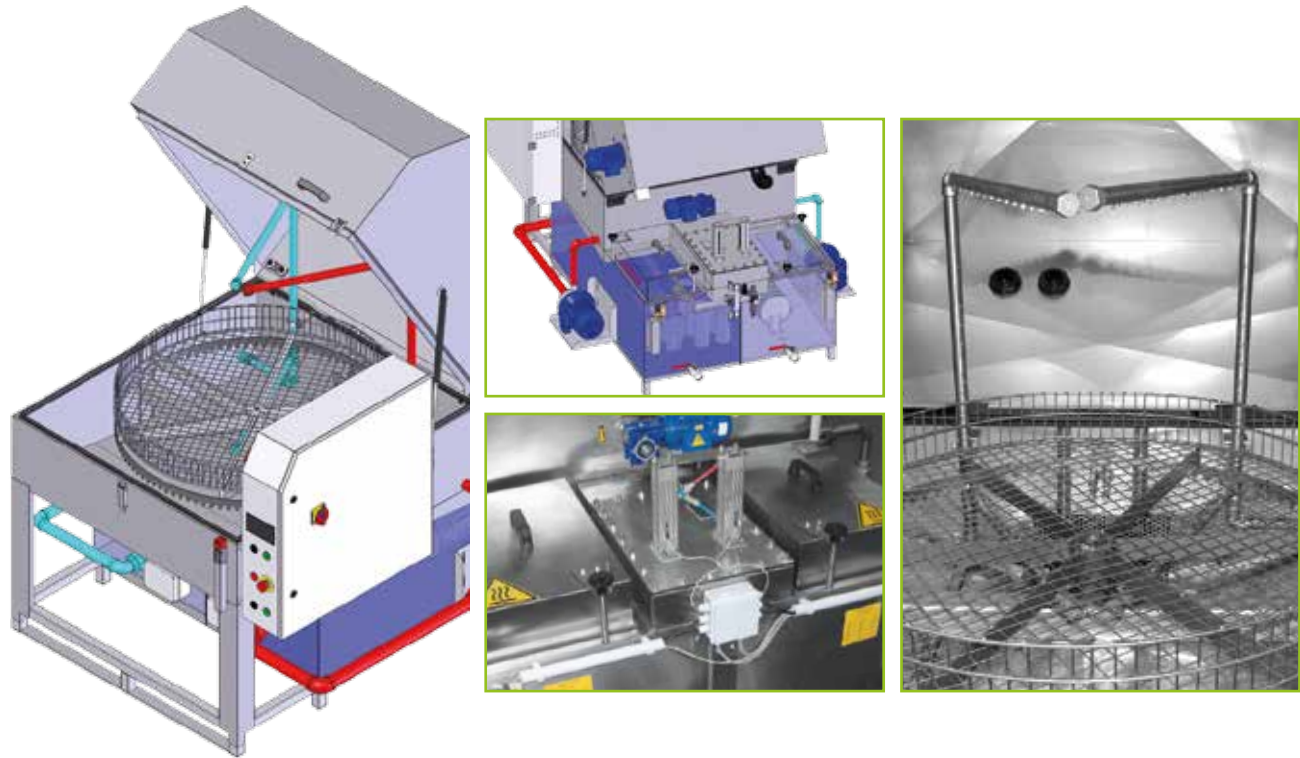
- Weekly schedule to turn on the heating and the oil separator (if installed)
- Electrical resistance made of Incoloy Stainless Steel
- Electrical rotation of the basket via gearmotor
- Structure and sheet metalwork made of Aisi 304 Stainless Steel
- Laser machined washing and rinsing pipes made of Aisi 304 Stainless Steel

#### HT model

- Compliant thermal insulation with Stainless Steel panels
- Compliant safety limit switch with cover opening lock during the operating cycle

### TECHNICAL DATA

TECHNICAL DATA	UNIX 80 2B	UNIX 100 2B	UNIX 120 2B
Overall dimensions when closed ( L x P x H )	158 x 178 x 152 cm	165 x 185 x 158 cm	185 x 208 x 165 cm
Overall dimensions when open ( L x P x H )	158 x 178 x 206 cm	165 x 185 x 216 cm	185 x 208 x 231 cm
Washing capacity ( Ø x HL )	Ø 78 x 54 cm	Ø 98 x 54 cm	Ø 117 x 70 cm
Loading capacity	100 Kg	200 Kg	300 Kg
Washing tank capacity	240 l	270 l	350 l
Rinsing tank capacity	180 l	270 l	350 l
Washing pump	0,55 kw 2,5 bar 200 l/min	1,5 kw 2,5 bar 200 l/min	1,5 kw 2,5 bar 200 l/min
High pressure washing pump	2,2 kw 6 bar 200 l/min	3 kw 6 bar 250 l/min	3 kw 6 bar 300 l/min
Rinsing pump	0,55 kw 2,5 bar 200 l/min	0,55 kw 2 bar 200 l/min	0,55 kw 2 bar 200 l/min
Washing heating	8,0 kw	8,0 kw	10,0 kw
Rinsing liquid heating	6,0 kw	8,0 kw	10,0 kw
Mechanical rotation	0,09 kw	0,09 kw	0,09 kw
Vapour extractor	0,25 kw 320 m³/h	0,25 kw 320 m³/h	0,25 kw 320 m³/h
Disc oil separator	0,09 kw	0,09 kw	0,09 kw
Vapour condenser	0,20 kw	0,20 kw	0,20 kw
Tank emptying pump	0,37 kw	0,37 kw	0,37 kw
Drying	4,5 kw	4,5 kw	4,5 kw
Blowing (compressed air, 6 bar)	300 m³/h	300 m³/h	300 m³/h
Power supply	3Ph + N + PE	3Ph + N + PE	3Ph + N + PE
Supply voltage	400V 50Hz	400V 50Hz	400V 50Hz



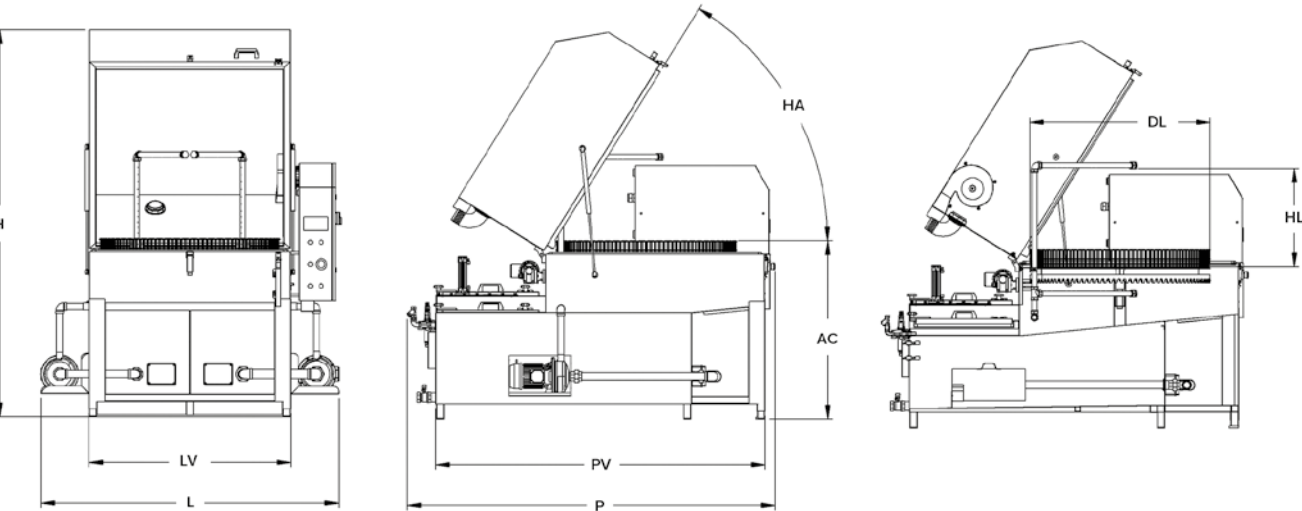


UNIX 2B

ROTATING BASKET METAL PARTS WASHER  
WITH TWO OR MORE STAGES OF TREATMENT

DIMENSIONS

DIMENSIONS	UNIX 80 2B	UNIX 100 2B	UNIX 120 2B
L (Width)	158 cm	178 cm	198 cm
P (Depth)	178 cm	195 cm	210 cm
H (Height)	206 cm	216 cm	237 cm
DL (Washing diameter)	78 cm	97 cm	117 cm
HL (Washing height)	54 cm	54 cm	70 cm
AC (Load height)	93 cm	93 cm	93 cm
HA (Opening angle)	60°	60°	60°

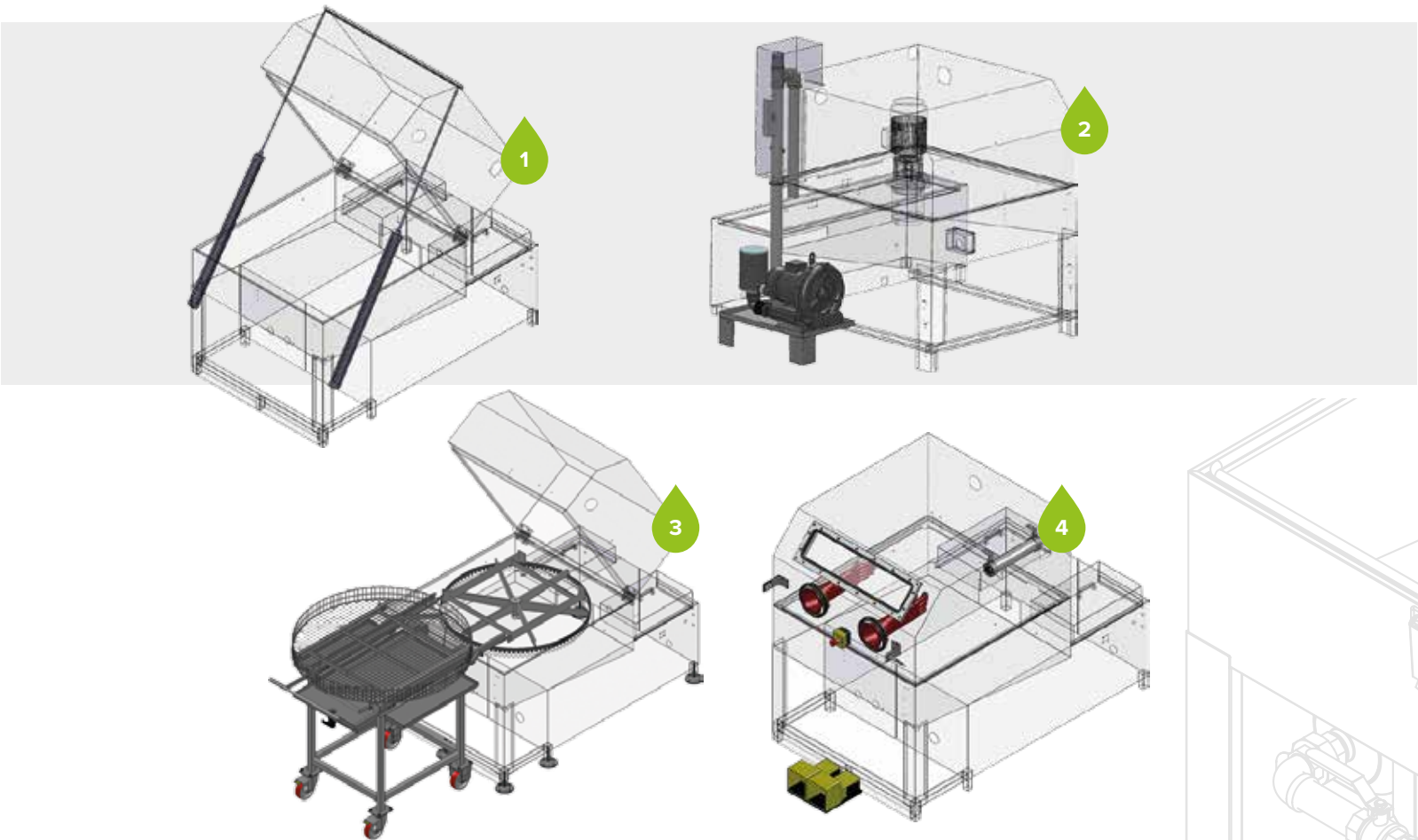


CONNECTIONS

CONNECTIONS	UNIX 80 2B	UNIX 100 2B	UNIX 120 2B
Tank drainage outlet	F 1" gas	F 1" gas	F 1" gas
Oil separator drainage outlet	M 1/2" gas	M 1/2" gas	M 1/2" gas
Vapour extraction outlet	Ø 80 mm	Ø 80 mm	Ø 80 mm
Water filling solenoid valve	F 3/4" gas	F 3/4" gas	F 3/4" gas
Compressed air blowing solenoid valve	F 3/4" gas	F 3/4" gas	F 3/4" gas
Compressed air commands inlet	F 1/4" gas	F 1/4" gas	F 1/4" gas
Emptying pump	F 1"1/4 gas	F 1"1/4 gas	F 1"1/4 gas

ACCESSORIES

- Pneumatic opening and closing of the cover with two-hand safety control [ 1 ]
- Drying with resistance and air-blade side channel blower [ 2 ]
- External trolley made of Aisi 304 Stainless Steel [ 3 ]
- Thermal insulation of bag filter
- Thermal insulation of parallel mounted duplex bag filter
- Electric vapour condenser for lowering the quantity of vapour given off (page 39)
- Disoil P LT or HT (page 40)
- Disc oil separator with dedicated gearmotor
- Double piping greater than half the height, can be excluded
- Chemical product doser
- Fine mesh box filters
- Stainless Steel bag filter on the pump delivery pipe
- Double Stainless Steel bag filter mounted in parallel on the pump delivery pipe
- Teflon and Viton gaskets
- Manual washing and blowing with hoses and washing gun [ 4 ]
- PLC Siemens S1200 - HMI Siemens KTP touch-screen
- High pressure washing pump
- Tank emptying pump
- Customizations for use with abrasive contaminants in the washing fluid
- Customizations for use with strongly caustic chemical products
- Rinsing with mains water with independent pipes and separate direct drain outlet
- Pickling of internal welding
- Blowing with compressed air and independent pipes
- System retention tank made of Aisi 304 Stainless Steel



FLEXIBILITY

# ROBUR 1B

## ROTATING BASKET METAL PARTS WASHER FOR VERY LARGE VOLUME AND HEAVY PARTS

A range of machines for automatically washing very large and heavy parts

Excellent quality cleaning is achieved through the slow rotation of the basket and special nozzles. The PLC enables the treatment to be customized.



**ROBUR 1B**  
**1000 | 1200 | 1400**  
**1800 | 2200**

**LOW TEMPERATURE LT**  
Maximum temperature setting 60°C

**ALTA TEMPERATURA HT**  
Maximum temperature setting 80°C

### EQUIPMENT

#### Standard

- Timed vapour extraction.
- External trolley made of Aisi 304 Stainless Steel with drip tray and wheels with safety brake
- ISO pneumatic cylinders and «anti-fall» pneumatic safety valves
- Minimum level probe of liquid in the tanks to protect the pump and heating resistances
- Maximum level probe of liquid in the tanks and solenoid valve for automatic water filling
- Two-hand control for closing the door with safety control unit
- Vertical multistage electric pump made of Aisi 304 Stainless Steel with special gaskets
- Box filter with 6 hat filters made of Aisi 304 Stainless Steel for pre-filtering the liquid returning to the tank.
- Double mesh pump intake filters made of Aisi 304 Stainless Steel
- Safety limit switch on door opening
- Electrical system IP65, touch-screen control PLC (DGT V4)

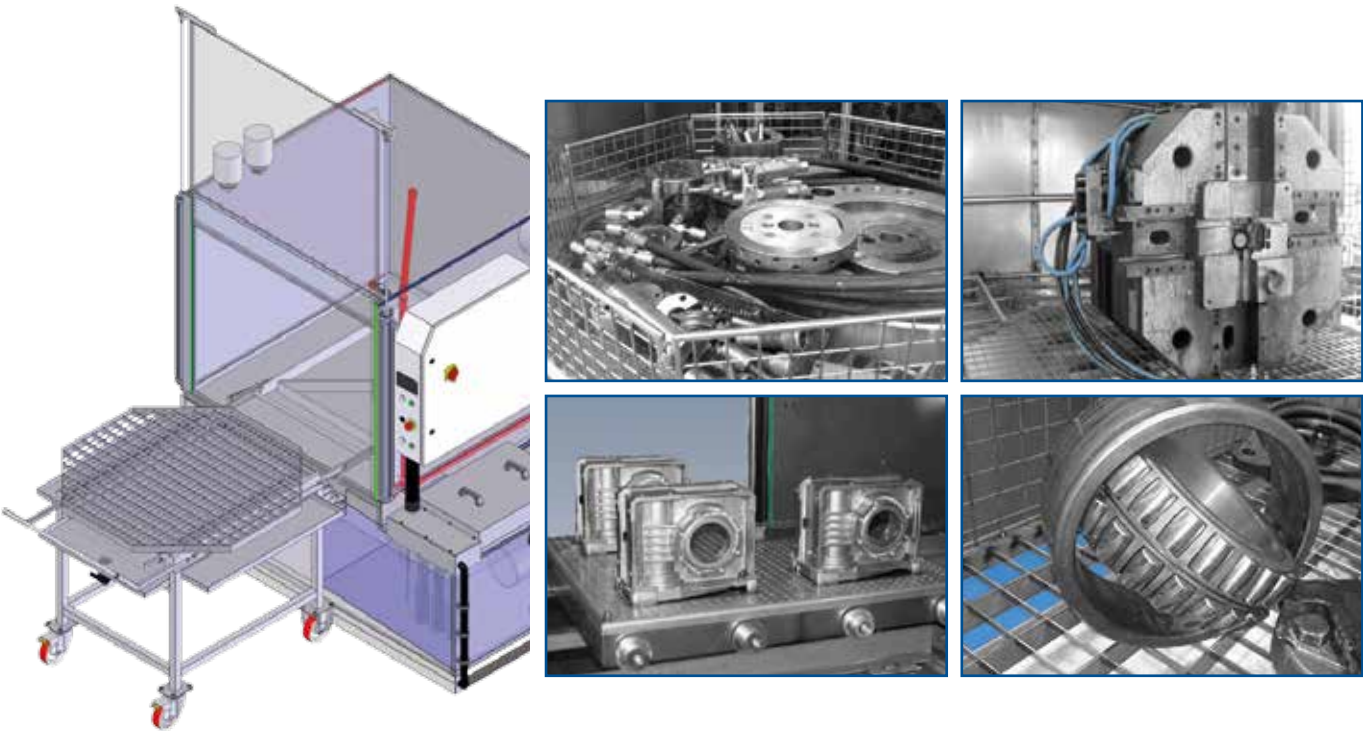
- Basket rotation gearmotor with torque limiter and centring sensor
- Reinforced platform in pressed grid made of galvanised iron with raised external edge
- Weekly schedule to turn on the heating and the oil separator (if installed)
- Vertical electrical heating resistances made of Incoloy Stainless Steel
- Tanks accessible from the outside and sludge discharge hatch for easy cleaning
- Structure and sheet metalwork in contact with liquid made of STAINLESS steel
- Lower support structure made of steel
- Triple door seal (lower, upper and side) and gaskets on all tank covers.
- Laser-machined washing/rinsing pipes made of Aisi 304 Stainless Steel

#### HT model

- Compliant thermal insulation with Stainless Steel panels

### TECHNICAL DATA

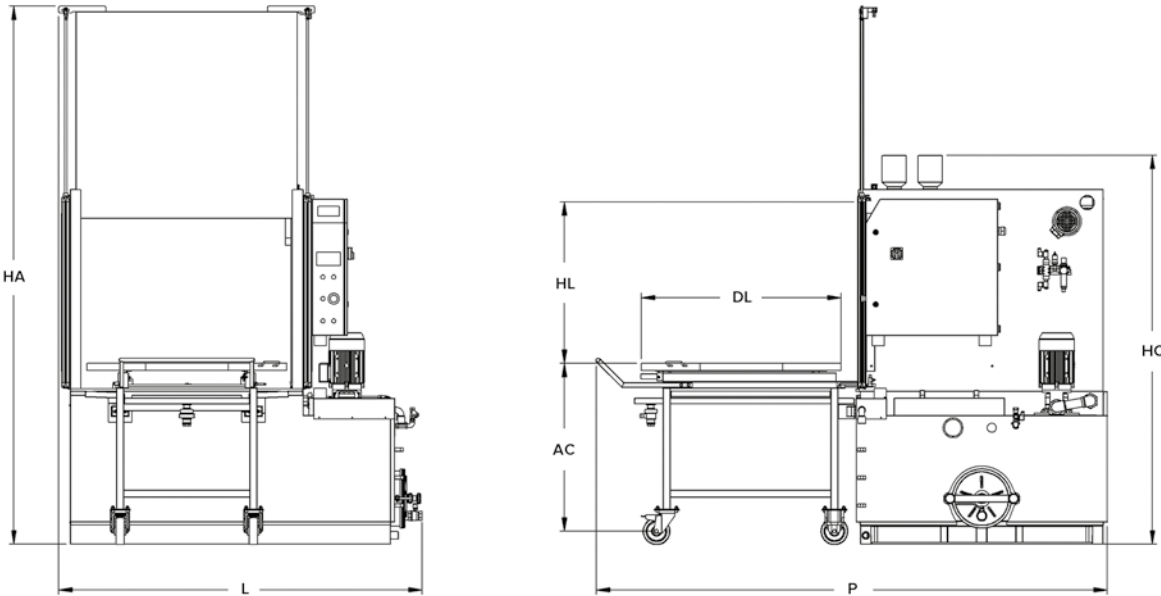
TECHNICAL DATA	ROBUR 1000 1B	ROBUR 1200 1B	ROBUR 1400 1B	ROBUR 1800 1B	ROBUR 2200 1B
Overall dimensions when closed (L x P x H)	203 x 258 x 200 cm	226 x 298 x 210 cm	246 x 330 x 220 cm	279 x 396 x 232 cm	326 x 480 x 236 cm
Overall dimensions when open (L x P x H)	203 x 258 x 275 cm	226 x 298 x 295 cm	246 x 330 x 315 cm	279 x 396 x 337 cm	326 x 480 x 345 cm
Washing capacity (Ø x HL)	90 x 70 cm	110 x 80 cm	128 x 90 cm	165 x 100 cm	200 x 100 cm
Loading capacity	600 kg	600 kg	600 Kg	800 Kg	800 Kg
Washing tank capacity	450 l	550 l	750 l	1000 l	1200 l
Washing pump	4 kw 5 bar 250 l/min	4 kw 5 bar 280 l/min	4 kw 5 bar 300 l/min	5,5 kw 5 bar 350 l/min	5,5 kw 5 bar 400 l/min
High pressure washing pump	5,5 kw 7,5 bar 250 l/min	5,5 kw 7,5 bar 280 l/min	7,5 kw 7,5 bar 300 l/min	7,5 kw 7,5 bar 350 l/min	7,5 kw 7,5 bar 400 l/min
Washing heating	12,0 kw	18,0 kw	24,0 kw	30,0 kw	40,0 kw
Mechanical rotation	0,18 kw	0,18 kw	0,18 kw	0,18 kw	0,18 kw
Vapour extractor	0,25 kw 320 m³/h	0,25 kw 320 m³/h	0,37 kw 580 m³/h	0,37 kw 580 m³/h	2 x 0,37 kw 1160 m³/h
Disc oil separator	0,09 kw	0,09 kw	0,09 kw	0,09 kw	0,09 kw
Vapour condenser	0,20 kw	0,20 kw	0,48 kw	0,48 kw	0,48 kw
Tank emptying pump	0,37 kw	0,37 kw	0,37 kw	0,37 kw	0,37 kw
Drying	5,2 kw	5,2 kw	5,2 kw	8,2 kw	8,2 kw
Burner heating	0,17 kw	0,17 kw	0,17 kw	0,17 kw	0,17 kw
Blowing (compressed air, 6 bar)	400 m³/h	450 m³/h	550 m³/h	700 m³/h	800 m³/h
Power supply	3Ph + N + PE	3Ph + N + PE	3Ph + N + PE	3Ph + N + PE	3Ph + N + PE
Supply voltage	400V 50 Hz	400V 50 Hz	400V 50 Hz	400V 50Hz	400V 50Hz





DIMENSIONS

DIMENSIONS	ROBUR 1000 1B	ROBUR 1200 1B	ROBUR 1400 1B	ROBUR 1800 1B	ROBUR 2200 1B
L (Width)	203 cm	226 cm	246 cm	279 cm	326 cm
P (Depth)	258 cm	298 cm	330 cm	396 cm	480 cm
HA (Open height)	275 cm	295 cm	315 cm	337 cm	345 cm
HC (Closed height)	200 cm	210 cm	220 cm	232 cm	236 cm
DL (Washing diameter)	90 cm	110 cm	128 cm	165 cm	200 cm
HL (Washing height)	70 cm	80 cm	90 cm	100 cm	100 cm
AC (Loading height)	95 cm	95 cm	95 cm	95 cm	95 cm

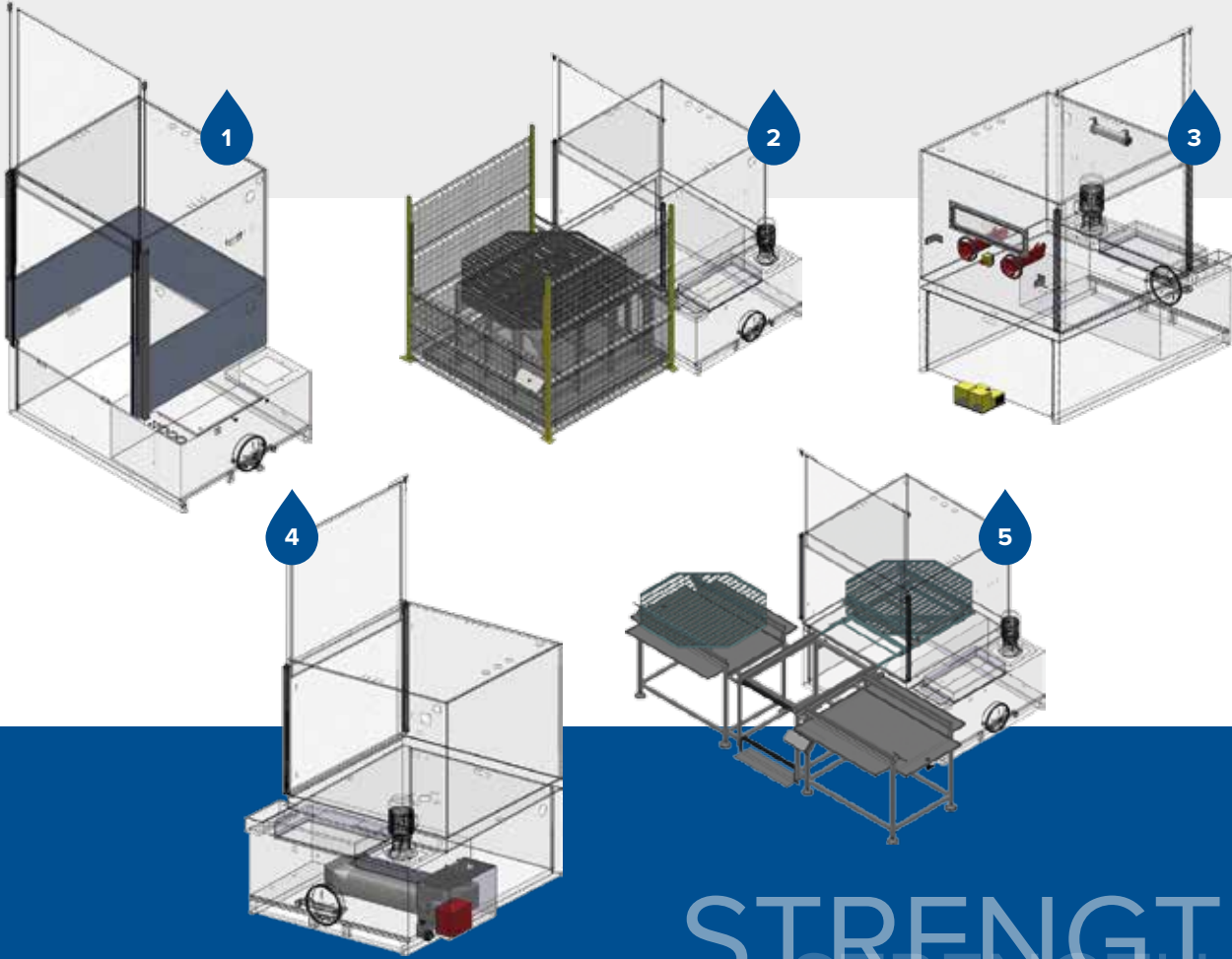


CONNECTIONS

CONNECTIONS	ROBUR 1000 1B	ROBUR 1200 1B	ROBUR 1400 1B	ROBUR 1800 1B	ROBUR 2200 1B
Tank drainage outlet	F 1" 1/4 gas	F 1" 1/4 gas	F 1" 1/4 gas	F 1" 1/4 gas	F 1" 1/4 gas
Oil separator drainage outlet	M 1/2" gas	M 1/2" gas	M 1/2" gas	M 1/2" gas	M 1/2" gas
Vapour extraction outlet	Ø 80 mm	Ø 80 mm	Ø 100 mm	Ø 100 mm	Ø 100 mm
Water filling solenoid valve	F 1/2" gas	F 1/2" gas	F 1/2" gas	F 1/2" gas	F 1/2" gas
Compressed air blowing solenoid valve	F 1" gas	F 1" gas	F 1" gas	F 1" gas	F 1" gas
Compressed air commands inlet	F 1/4" gas	F 1/4" gas	F 1/4" gas	F 1/4" gas	F 1/4" gas
Emptying pump	F 1"1/4 gas	F 1"1/4 gas	F 1"1/4 gas	F 1"1/4 gas	F 1"1/4 gas
Burner flue methane/gas	Ø 130 mm	Ø 130 mm	Ø 130 mm	Ø 130 mm	Ø 130 mm

ACCESSORIES

- Increased washing cabinet height [ 1 ]
- Drying with resistance and air-blade side channel blower
- Increased platform loading capacity by 500 kg
- Automatic loading and unloading [ 2 ]
- Additional external trolley
- Thermal insulation of bag filter
- Thermal insulation of parallel mounted duplex bag filter
- Electric vapour condenser for lowering the quantity of vapour given off (page 39)
- Disoil P LT or HT (page 40)
- Disc oil separator with dedicated gearmotor
- Double piping greater than half the height, can be excluded
- Chemical product doser
- Fine mesh box filters
- Double Stainless Steel bag filter mounted in parallel on the pump delivery pipe
- Stainless Steel bag filter on the pump delivery pipe
- Manual washing and blowing with hoses and washing gun [ 3 ]
- Motorized platform
- Additional STAINLESS steel platform
- Additional galvanized steel platform
- Platform and spider made of Aisi 304 Stainless Steel
- PLC Siemens S1200 - HMI Siemens KTP touch-screen
- Tank emptying pump
- High pressure washing pump
- Customizations for use with abrasive contaminants in the washing fluid
- Customizations for use with strongly caustic chemical products
- Fixed loading and unloading station in place of the trolley
- Heating with diesel or natural gas burner [ 4 ]
- Heating with water/water or vapour/water heat exchanger
- Rinsing with non-reusable mains water into tank with overflow
- Motorized rotation of nozzles, fixed parts-support platform
- Pickling of internal welding
- Blowing with compressed air and independent pipes
- Removable edges of the platform made of Aisi 304 Stainless Steel
- Loading and unloading station (height reduced by 130mm) [ 5 ]
- System retention tank made of Aisi 304 Stainless Steel



STRENGTH

# ROBUR 2B

## ROTATING BASKET METAL PARTS WASHER WITH TWO OR MORE TREATMENT BATHS FOR VERY LARGE VOLUME AND HEAVY PARTS

A range of machines for automatically washing very large and heavy parts. Excellent quality cleaning is achieved through the slow rotation of the basket and special nozzles. The two tanks with dedicated pumps enable washing and rinsing to be carried out automatically. The PLC enables the treatment to be customized.



**ROBUR 2B**  
**1000 | 1200 | 1400**  
**1800 | 2200**

**LOW TEMPERATURE LT**  
Maximum temperature setting 60°C

**HIGH TEMPERATURE HT**  
Maximum temperature setting 80°C

ROBUR 2B

### TECHNICAL DATA

TECHNICAL DATA	ROBUR 1000 2B	ROBUR 1200 2B	ROBUR 1400 2B	ROBUR 1800 2B	ROBUR 2200 2B
Overall dimensions when closed (L x P x H)	242 x 258 x 200 cm	265 x 298 x 210 cm	285 x 330 x 220 cm	318 x 396 x 232 cm	365 x 480 x 236 cm
Overall dimensions when open (L x P x H)	242 x 258 x 275 cm	265 x 298 x 295 cm	285 x 330 x 315 cm	318 x 396 x 337 cm	365 x 480 x 345 cm
Washing capacity (Ø x HL)	90 x 70 cm	110 x 80 cm	128 x 90 cm	165 x 100 cm	200 x 100 cm
Loading capacity	600 kg	600 kg	600 Kg	800 Kg	1000 Kg
Washing / rinsing tank capacity	300 l / 300 l	400 l / 400 l	500 l / 500 l	700 l / 700 l	800 l / 800 l
Washing pump	4 kw 5 bar 250 l/min	4 kw 5 bar 280 l/min	4 kw 5 bar 300 l/min	5,5 kw 5 bar 350 l/min	5,5 kw 5 bar 400 l/min
High pressure washing pump	5,5 kw 7,5 bar 250 l/min	5,5 kw 7,5 bar 280 l/min	7,5 kw 7,5 bar 300 l/min	7,5 kw 7,5 bar 350 l/min	7,5 kw 7,5 bar 400 l/min
Rinsing pump	2,2 kw 2,5 bar 250 l/min	2,2 kw 2,5 bar 280 l/min	2,2 kw 2,5 bar 300 l/min	3 kw 2,5 bar 350 l/min	3 kw 2,5 bar 400 l/min
Heating for washing / rinsin	12,0 kw / 12,0 kw	12,0 kw / 12,0 kw	18,0 kw / 18,0 kw	24,0 kw / 24,0 kw	30,0 kw / 30,0 kw
Mechanical rotation	0,18 kw	0,18 kw	0,18 kw	0,18 kw	0,18 kw
Vapour extractor	0,25 kw 320 m³/h	0,25 kw 320 m³/h	0,37 kw 580 m³/h	0,37 kw 580 m³/h	2 x 0,37 kw 1160 m³/h
Disc oil separator	0,09 kw	0,09 kw	0,09 kw	0,09 kw	0,09 kw
Vapour condenser	0,20 kw	0,20 kw	0,48 kw	0,48 kw	0,48 kw
Tank emptying pump	0,37 kw	0,37 kw	0,37 kw	0,37 kw	0,37 kw
Drying	5,2 kw	5,2 kw	5,2 kw	8,2 kw	8,2 kw
Burner heating	0,17 kw	0,17 kw	0,17 kw	0,17 kw	0,17 kw
Blowing (compressed air, 6 bar)	400 m³/h	450 m³/h	550 m³/h	700 m³/h	800 m³/h
Power Supply	3Ph + N + PE	3Ph + N + PE	3Ph + N + PE	3Ph + N + PE	3Ph + N + PE
Supply voltage	400V 50 Hz	400V 50 Hz	400V 50 Hz	400V 50Hz	400V 50Hz

### EQUIPMENT

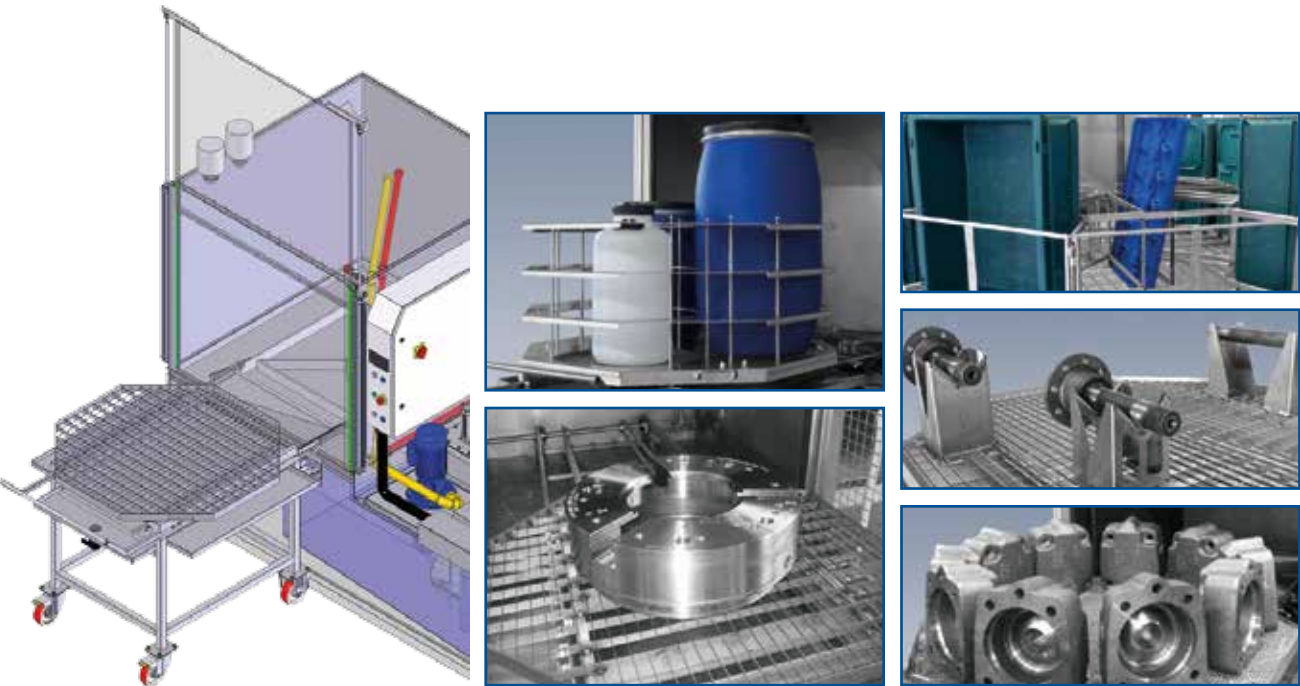
#### Standard

- Timed vapour extraction.
- External trolley made of Aisi 304 Stainless Steel with drip tray and wheels with safety brake
- ISO pneumatic cylinders and «anti-fall» pneumatic safety valves
- Minimum level probe of liquid in the tanks to protect the pump and heating resistances
- Maximum level probe of liquid in the tanks and solenoid valve for automatic water filling
- Two-hand control for closing the door with safety control unit
- Vertical multistage electric pump made of Aisi 304 Stainless Steel with special gaskets
- Box filter with 6 hat filters made of Aisi 304 Stainless Steel for pre-filtering the liquid returning to the tank.
- Double mesh pump intake filters made of Aisi 304 Stainless Steel
- Safety limit switch on door opening
- Electrical system IP65, touch-screen control PLC (DGT V4)

- Basket rotation gearmotor with torque limiter and centring sensor
- Reinforced platform in pressed grid made of galvanised iron with raised external edge
- Weekly schedule to turn on heating and the oil separator (if installed)
- Vertical electrical heating resistances made of Incoloy Stainless Steel
- Tanks accessible from the outside and sludge discharge hatch for easy cleaning
- Structure and sheet metalwork in contact with liquid made of STAINLESS steel
- Lower support structure made of steel
- Triple door seal (lower, upper and side) and gaskets on all tank covers.
- Laser-machined washing/rinsing pipes made of Aisi 304 Stainless Steel

#### HT model

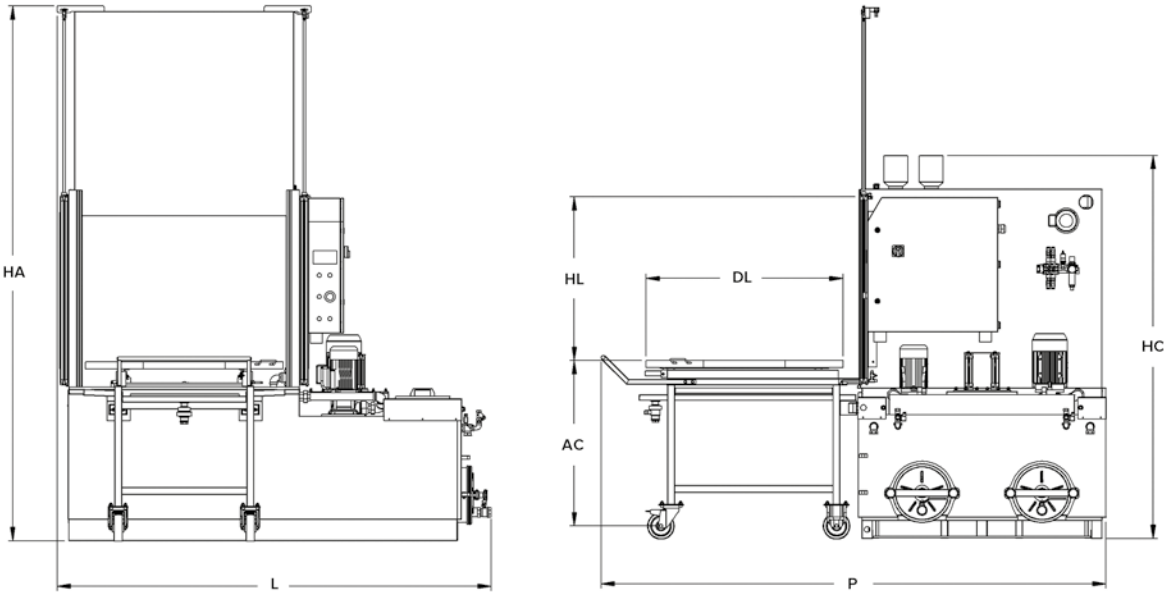
- Compliant thermal insulation with Stainless Steel panels





DIMENSIONS

DIMENSIONS	ROBUR 1000 2B	ROBUR 1200 2B	ROBUR 1400 2B	ROBUR 1800 2B	ROBUR 2200 2B
L (Width)	242 cm	265 cm	285 cm	318 cm	365 cm
P (Depth)	258 cm	298 cm	330 cm	396 cm	480 cm
HA (Open height)	275 cm	295 cm	315 cm	337 cm	345 cm
HC (Closed height)	200 cm	210 cm	220 cm	232 cm	236 cm
DL (Washing diameter)	90 cm	110 cm	128 cm	165 cm	200 cm
HL (Washing height)	70 cm	80 cm	90 cm	100 cm	100 cm
AC (Loading height)	95 cm	95 cm	95 cm	95 cm	95 cm

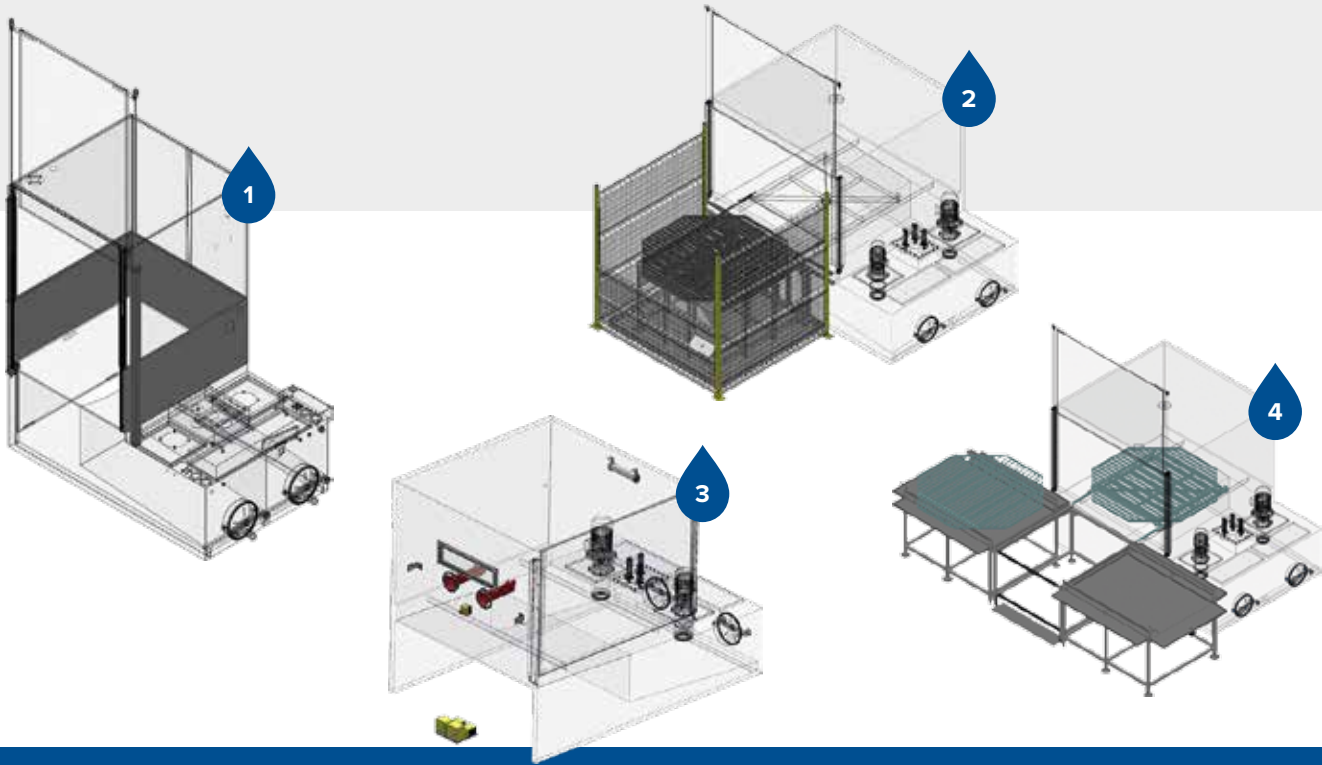


CONNECTIONS

CONNECTIONS	ROBUR 1000 2B	ROBUR 1200 2B	ROBUR 1400 2B	ROBUR 1800 2B	ROBUR 2200 2B
Tank drainage outlet	F 1" 1/4 gas	F 1" 1/4 gas	F 1" 1/4 gas	F 1" 1/4 gas	F 1" 1/4 gas
Oil separator drainage outlet	M 1/2" gas	M 1/2" gas	M 1/2" gas	M 1/2" gas	M 1/2" gas
Vapour extraction outlet	Ø 80 mm	Ø 80 mm	Ø 100 mm	Ø 100 mm	Ø 100 mm
Water filling solenoid valve	F 1/2" gas	F 1/2" gas	F 1/2" gas	F 1/2" gas	F 1/2" gas
Compressed air blowing solenoid valve	F 1" gas	F 1" gas	F 1" gas	F 1" gas	F 1" gas
Compressed air commands inlet	F 1/4" gas	F 1/4" gas	F 1/4" gas	F 1/4" gas	F 1/4" gas
Emptying pump	F 1"1/4 gas	F 1"1/4 gas	F 1"1/4 gas	F 1"1/4 gas	F 1"1/4 gas
Burner flue natural gas/gas	Ø 130 mm	Ø 130 mm	Ø 130 mm	Ø 130 mm	Ø 130 mm

ACCESSORIES

- Increased washing cabinet height [ 1 ]
- Drying with resistance and air-blade side channel blower
- Automatic loading and unloading [ 2 ]
- Increased platform loading capacity by 500 kg
- Additional external trolley
- Electric vapour condenser for lowering the quantity of vapour given off (page 39)
- Thermal insulation of bag filter
- Thermal insulation of parallel mounted duplex bag filter
- Disoil P LT or HT (page 40)
- Disc oil separator with dedicated gearmotor
- Double piping greater than half the height, can be excluded
- Chemical product doser
- Fine mesh box filters
- Double Stainless Steel bag filter mounted in parallel on the pump delivery pipe
- Duplex bag filter mounted in parallel on the pump delivery pipe
- Manual washing and blowing with hoses and washing gun [ 3 ]
- Motorized platform
- Additional STAINLESS steel platform
- Additional galvanized steel platform
- Platform and spider made of Aisi 304 Stainless Steel
- LC Siemens S1200 – HMI Siemens KTP touch-screen
- Tank emptying pump
- High pressure washing pump
- Fixed loading and unloading station in place of the trolley
- Customizations for use with abrasive contaminants in the washing fluid
- Customizations for use with strongly caustic chemical products
- Heating with water/water or vapour/water heat exchanger
- Rinsing with non-reusable mains water into tank with overflow
- Motorized rotation of nozzles, fixed parts-support platform
- Pickling of internal welding
- Blowing with compressed air and independent pipes
- Removable edges of the platform made of Aisi 304 Stainless Steel
- Loading and unloading station (height reduced by 130mm) [ 4 ]
- System retention tank made of Aisi 304 Stainless Steel



# ROTOR

## IMMERSION PARTS WASHER FOR SMALL METAL PRODUCTS AND MECHANICAL COMPONENTS WITH A HERMETICALLY SEALED CYCLE

The basket is inserted either manually or automatically into the basket holder drum.

The treatment cycle is fully automatic and can be configured through the PLC with touch-screen display.

The type of rotation, continuous or tilting, can be defined for each stage.

Hot air drying with blower and heating elements is included. Drying can also be boosted by using a vacuum system.

Cleaning and rinsing by: spraying, immersion, ultrasonic immersion



ROTOR

ROTOR 1B S | M  
ROTOR 2B S | M

HIGH TEMPERATURE HT  
Maximum temperature setting 80°C

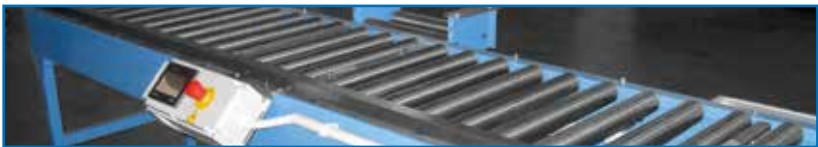
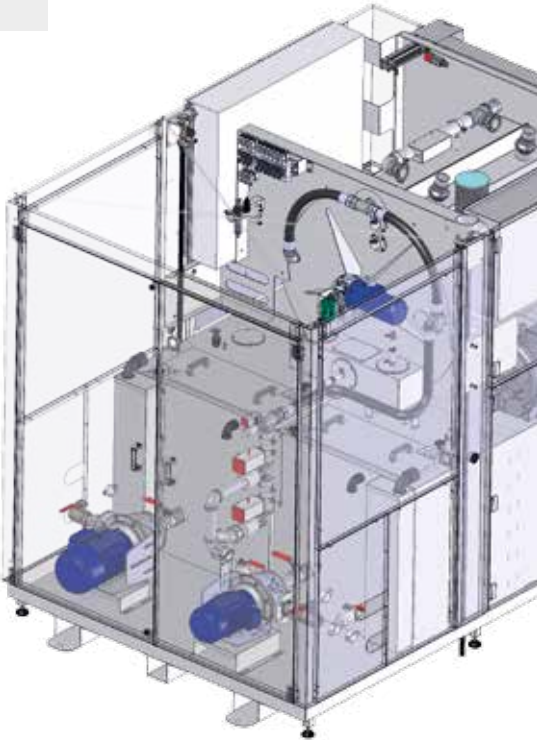
### TECHNICAL DATA

TECHNICAL DATA	ROTOR S	ROTOR M
Overall dimensions ( L x P x H )	140 x 220 x 220 cm	180 x 260 x 220 cm
Standard basket dimensions ( L x P x H )	45 x 30 x 18 cm	75 x 50 x 30 cm
Max. basket dimensions ( L x P x H )	45 x 30 x 30 cm	75 x 50 x 50 cm
Loading capacity	50 kg	80 Kg
Capacity of each tank	480 l	890 l
Barrel capacity	150 l	470 l
Standard pump	1,5 kw 2,5 bar 200 l/min	3 kw 2,5 bar 400 l/min
High-pressure pump (bath 1)	4,0 kw 6 bar 300 l/min	5,5 kw 5 bar 400 l/min
Mechanical rotation	0,18 kw	0,18 kw
Disc oil separator	0,09 kw	0,09 kw
Emptying pump	0,37 kw	0,37 kw
Drying	4,5 kw	4,5 kw
Heating of each tank	16 kw	30 kw
Ultrasound	1500 W	4500W
Power Supply	3Ph + N + PE	3Ph + N + PE
Supply voltage	400V 50 HZ	400V 50 HZ

### EQUIPMENT

#### Standard

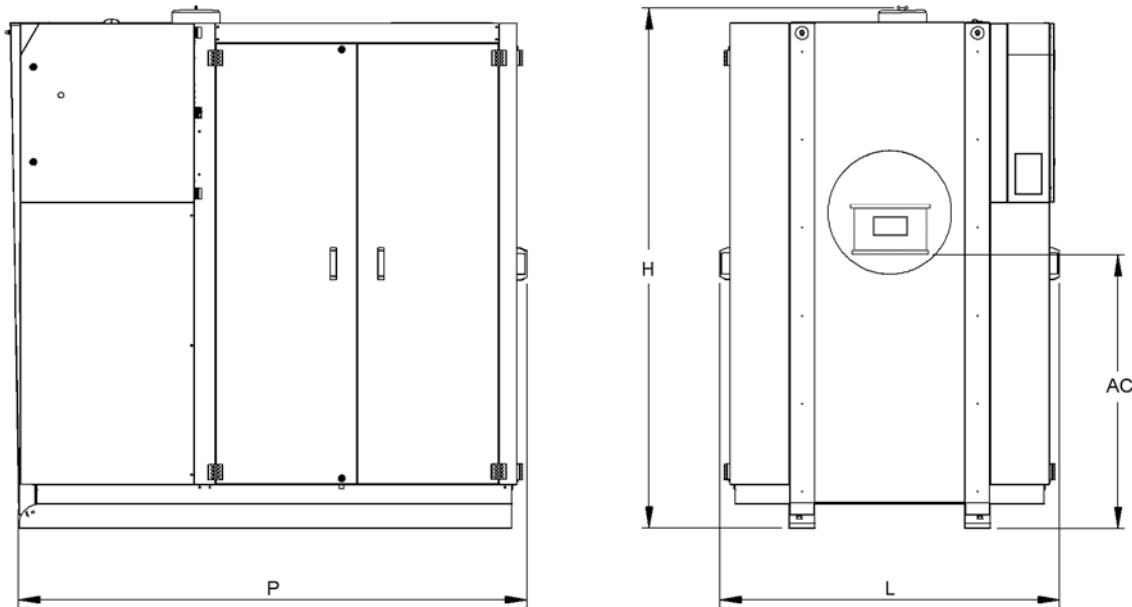
- Full access to the back of the machine via three doors (on the right, left and back) for easy maintenance
- Pneumatic door opening and closing with 4 cylinders
- Hot air drying with side channel blower and heating resistances
- Standard parts holder box with lid, made of Aisi 304 stainless steel mesh, included
- Two-hand door closing safety control unit
- Full thermal insulation
- Minimum level probe of liquid in the tank
- Maximum level probe of liquid in the tank and automatic water filling solenoid valve.
- Disc oil separator with gearmotor
- Electric Stainless Steel pump(s) with special gaskets
- Box filter with 6 hat filters made of Aisi 304 Stainless Steel for pre-filtering the liquid returning to the tank.
- Double mesh pump intake filter(s) made of Aisi 304 Stainless Steel
- Safety limit switch on door opening
- Cycle and functions management via PLC with colour touch-screen display
- Variable speed, inverter-driven, basket rotation gearmotor
- Gloss painted external steel panelling
- Software-regulated basket tilt angle, analogue reading of angle from 0 to 360°
- Electrical heating resistances made of Incoloy Stainless Steel
- Blowing with compressed air
- Structure and sheet metalwork made of Aisi 304 Stainless Steel
- STAINLESS steel washing pipes with laser perforated nozzles
- System retention tank made of Aisi 304 Stainless Steel





DIMENSIONS

DIMENSIONS	ROTOR S	ROTOR M
L (Width)	140 cm	180 cm
P (Depth)	220 cm	260 cm
H (Height)	220 cm	220 cm
AC (Loading height)	120 cm	120 cm
LC (Basket width)	45 cm	75 cm
PC (Basket depth)	30 cm	50 cm
AS (Standard basket height)	18 cm	30 cm
AM (Maximum basket height)	30 cm	50 cm

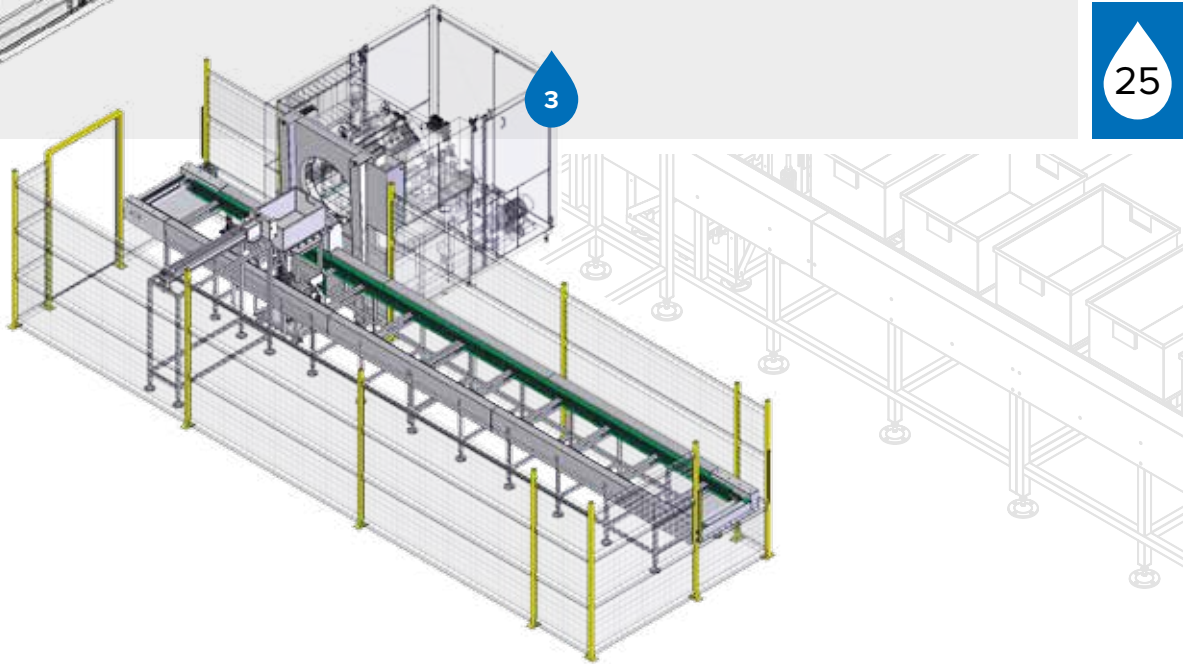


CONNECTIONS

CONNECTIONS	ROTOR S	ROTOR M
Tank(s) emptying valve discharge	F 1" 1/4 gas	F 1" 1/4 gas
Tank(s) emptying pump discharge	F 1"1/4 gas	F 1"1/4 gas
Compressed air blowing inlet	F 3/4" gas	F 3/4" gas
Water filling solenoid valve(s) input	F 1/2" gas	F 1/2" gas
Actuator compressed air input	F 1/4" gas	F 1/4" gas
Overflow discharge	F 1" gas	F 1" gas
Vapour discharge outlet	F 3" gas	F 3" gas

ACCESSORIES

- Vacuum drying
- Additional parts holder box
- Electric vapour condenser for lowering the quantity of vapour given off (page 39)
- Disoil P HT (page 40)
- Chemical product doser
- Fine mesh washing box filterss
- Bag filter on washing pump delivery pipe
- PLC Siemens S1200 – HMI Siemens KTP touch-screen
- High pressure washing pump
- Booster pump from rinsing to washing
- Tank emptying pump
- Customizations for use with abrasive contaminants in the washing fluid
- Customizations for use with strongly caustic chemical products
- Manually operated single roller conveyor [ 1 ]
- Manually operated multiple roller conveyor for box accumulation [ 2 ]
- Automated multiple roller conveyor for automatic box washing [ 3 ]
- Ultrasonics
- Increased loading capacity up to 200 kg



# LINEARJET

METAL PARTS WASHER WITH MOBILE  
NOZZLES FOR BULKY,  
VERY NARROW AND LONG PARTS



LINEARJET R

## LINEARJET V

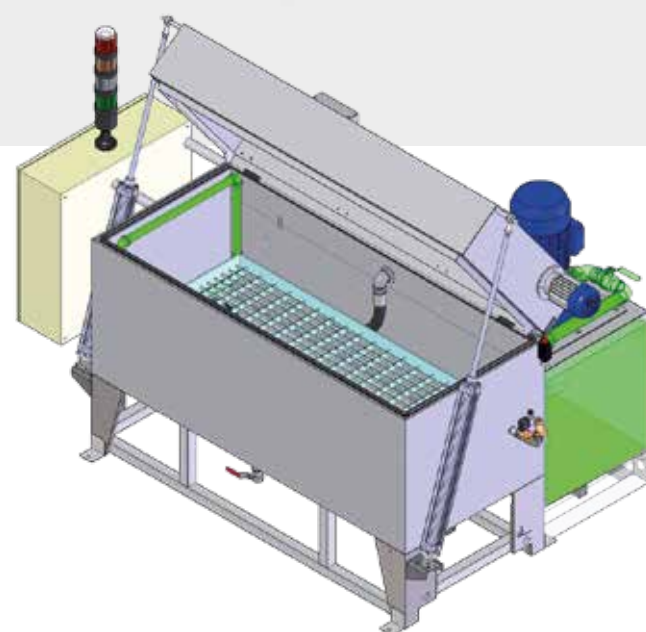
WITH VERTICAL DOOR  
AND FRONT LOADING SURFACE

## LINEARJET R

WITH HINGED LID  
AND FAST TOP LOADING

## HIGH TEMPERATURE HT

Maximum temperature setting 80°C



LINEARJET R

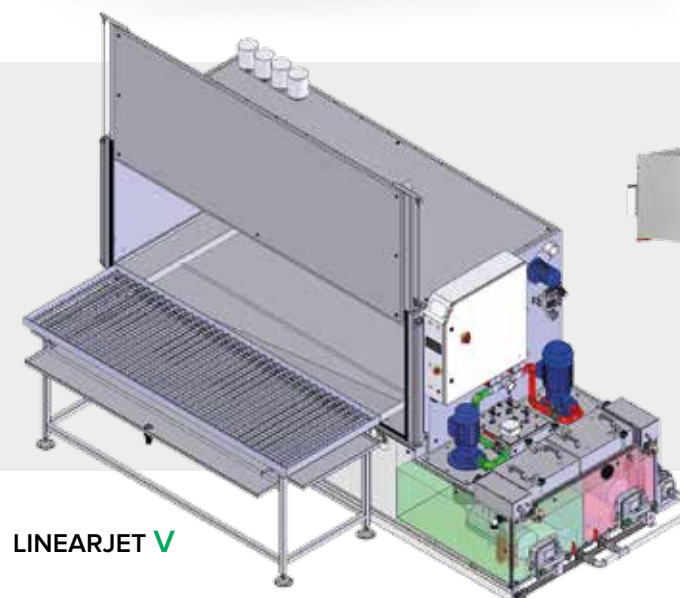
## EQUIPMENT

### Standard

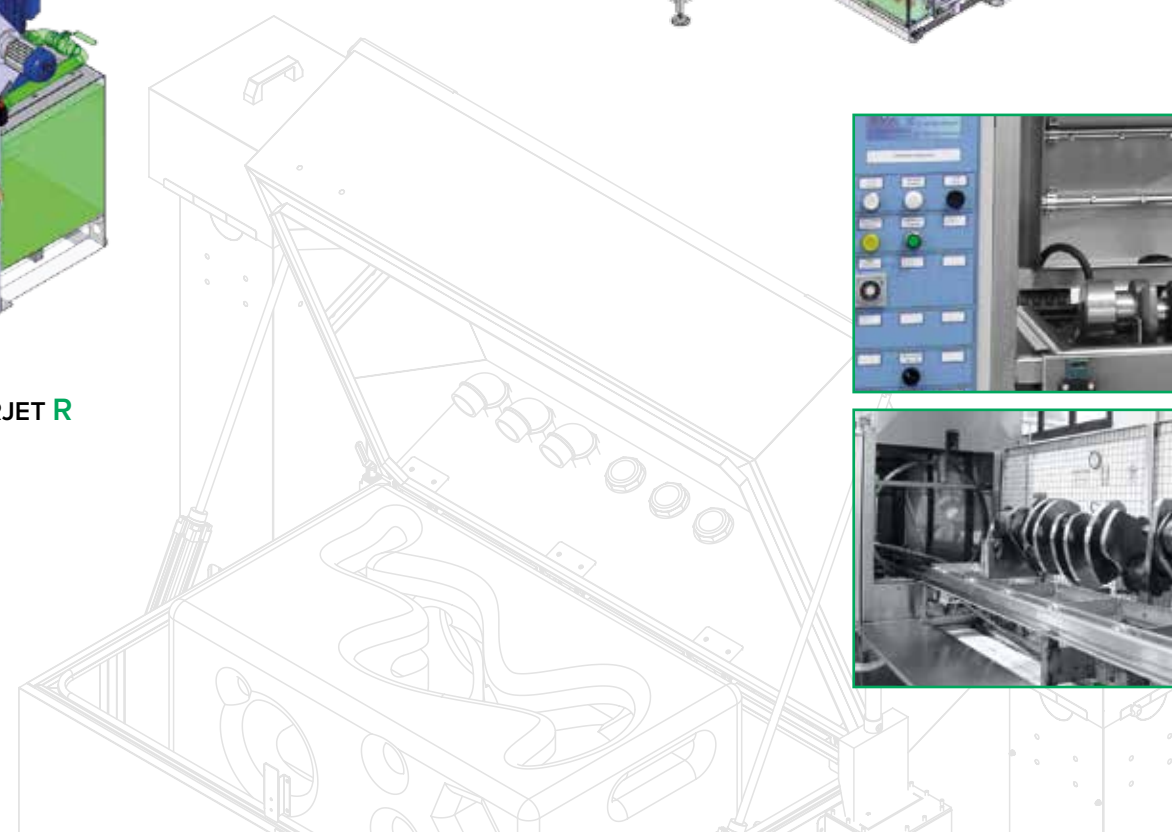
- Timed vapour extraction
- Increased loads and dimensions on request
- ISO pneumatic cylinders and «anti-fall» pneumatic safety valves
- Minimum level probe of liquid in the tank to protect the pump and resistance
- Maximum level probe of liquid in the tank and automatic water filling solenoid valve
- Box filter with 6 hat filters made of Aisi 304 Stainless Steel for pre-filtering the liquid returning to the tank.
- Pump intake filter made of Aisi 304 Stainless Steel
- Movement of jetting pipes over the entire washing area
- Reinforced platform in pressed grid made of galvanised iron with raised external edge
- Structure and sheet metalwork made of Aisi 304 Stainless Steel
- Laser machined washing pipes made of Aisi 304 Stainless Steel



LINEARJET V



LINEARJET V



TECNOLOGY  
TECNOLOGY



# ROBOCLEAN

## HIGHLY CUSTOMIZABLE WASHING FOR TREATING SPECIAL PARTS

These machines have been designed to achieve a high degree of cleaning of complex parts.

3D models of the part are used to examine the treatment area and the system. Its highly customizable nature makes it possible to enter flow logic for the internal channels of the part to ensure complete washing.



**ROBOCLEAN 1B - 80**  
**ROBOCLEAN 2B - 80**

**HIGH TEMPERATURE HT**  
Maximum temperature setting 80°C

ROBOCLEAN

This compact system, with manual or robotised loading and unloading, is ideal for incorporation into a robotic stations, both as and end of line machine and an inter-operational machine.

The interchangeable positioning and washing supports make it possible to use the same machine to wash different parts.

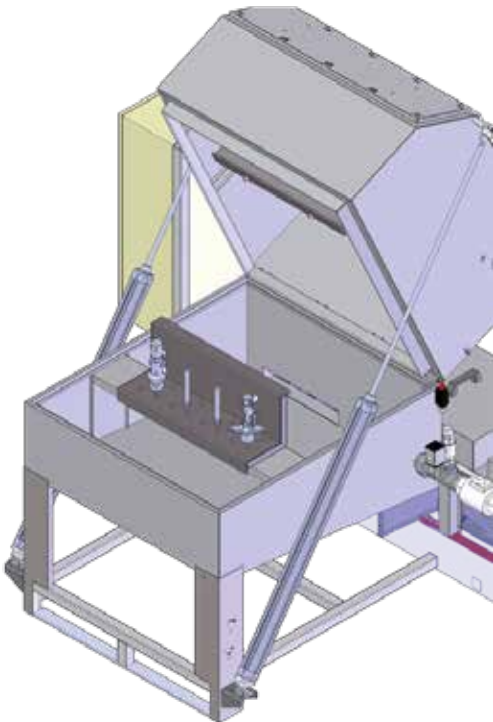
### TECHNICAL DATA

TECHNICAL DATA	ROBOCLEAN 80
Overall dimensions when closed ( L x P x H )	145 x 205 x 140 cm
Overall dimensions when open ( L x P x H )	144 x 205 x 192 cm
Tank capacity	500 l
Washing pump	2,2 kw 3 bar 200 l/min
High pressure washing pump	3 kw 6 bar 200 l/min
Washing heating	20,0 kw
Vapour extractor	0,25 kw
Disc oil separator	0,09 kw
Vapour condenser	0,28 kw
Tank emptying pump	0,37 kw
Power Supply	3Ph + N + PE
Supply voltage	400V 50Hz

### EQUIPMENT

#### Standard

- Pneumatic door opening and closing
- Separate remote electrical cabinet
- Timed vapour extraction
- Compliant thermal insulation with Stainless Steel panels
- Minimum level probe of liquid in the tank to protect the pump and resistance
- Maximum level probe of liquid in the tank and automatic water filling solenoid valve
- Vertical multistage electric pump made of Aisi 304 Stainless Steel with special gaskets
- Box filter with 6 hat filters made of Aisi 304 Stainless Steel for pre-filtering the liquid returning to the tank.
- Pump intake filter made of Aisi 304 Stainless Steel
- Safety limit switch on cover opening
- Tank edge gasket
- Electrical system IP65, touch-screen control PLC (DGT V4)
- Weekly schedule to turn on heating and the oil separator (if installed)
- Electrical resistance made of Stainless Steel
- Tank accessible from the outside of the cabinet with sludge settling partitions
- Structure and sheet metalwork made of Stainless Steel





ROBOCLEAN

HIGHLY CUSTOMIZABLE WASHING  
FOR TREATING SPECIAL PARTS

DIMENSIONS

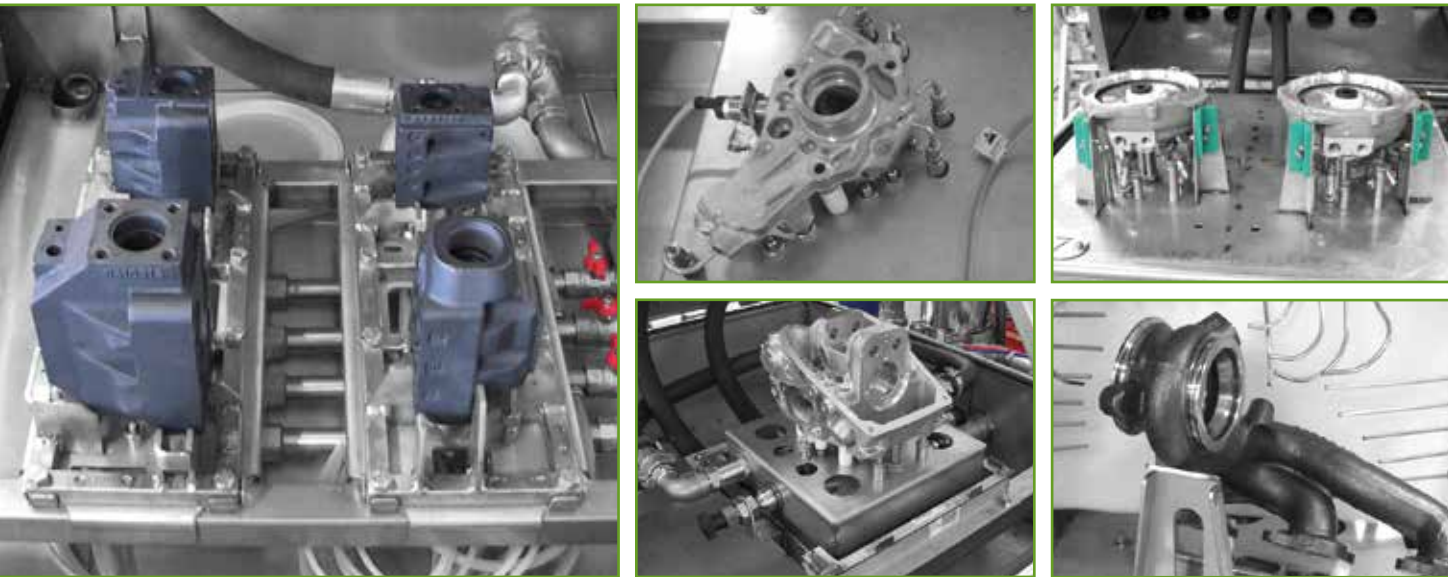
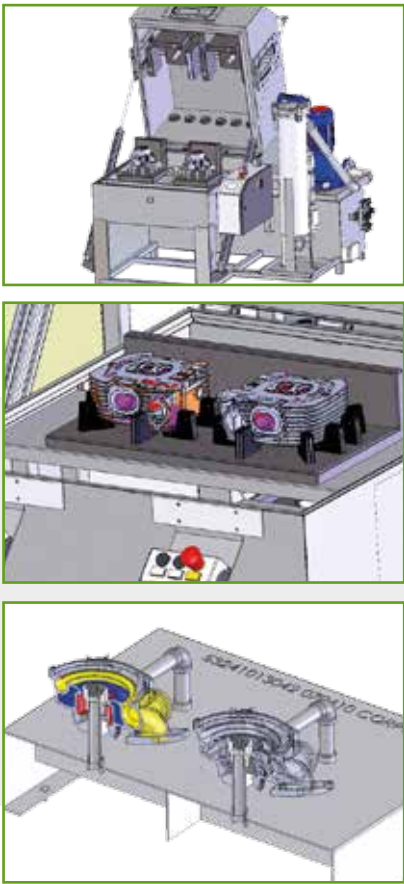
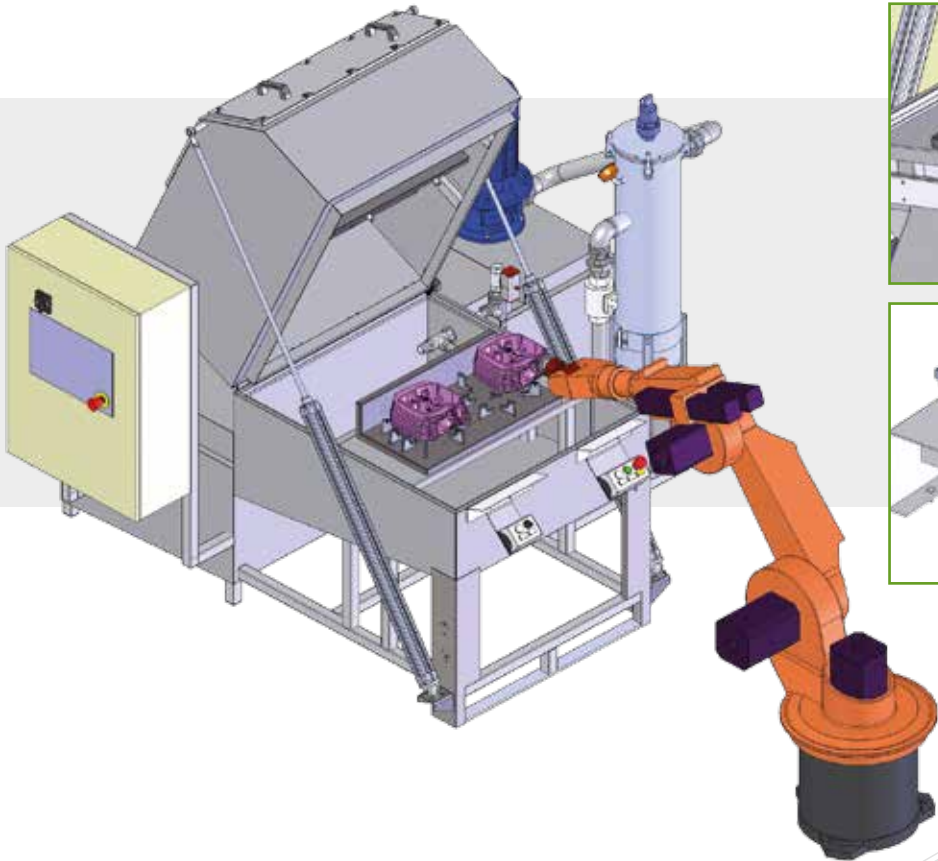
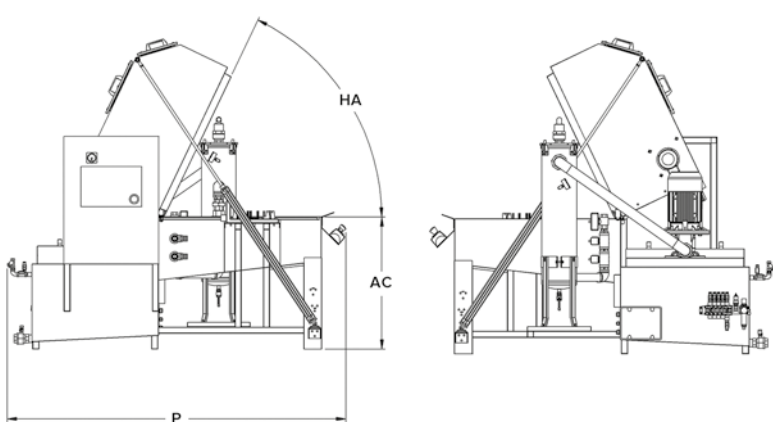
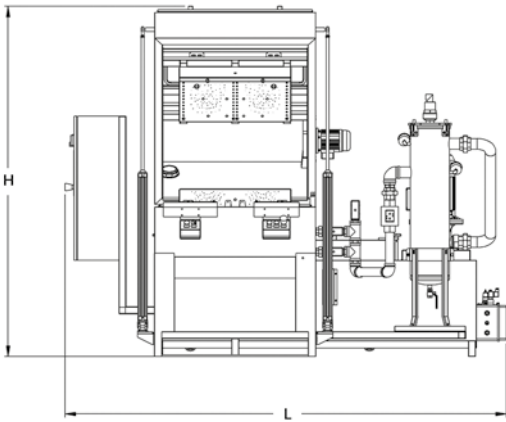
DIMENSIONS	ROBOCLEAN 80
L (Width)	145 cm
P (Depth)	205 cm
H (Height)	192 cm
AC (Load height)	80 cm
HA (Opening angle)	60°

CONNECTIONS

CONNECTIONS	ROBOCLEAN 80
Tank drainage outlet	F 1" gas
Oil separator drainage outlet	M 1/2" gas
Vapour extraction outlet	Ø 80 mm
Water filling solenoid valve	F 1/2" gas
Compressed air blowing solenoid valve	F 1" gas
Compressed air for buffers and cylinders	F 1/4" gas
Emptying pump	F 1 1/4 gas

ACCESSORIES

- Electric vapour condenser for lowering the quantity of vapour given off (page 39)
  - Disoil P HT (page 40)
  - Chemical product doser
  - Fine mesh box filters
  - Bag filter with thermal insulation
  - Double Stainless Steel bag filter mounted in parallel on the pump delivery pipe
  - Flushing of internal cavities
  - Robot Interface for loading and unloading
  - PLC Siemens S1200 – HMI Siemens KTP touch-screen
  - Tank emptying pump
- High pressure washing pump
  - Customizations for use with abrasive contaminants in the washing fluid
  - Part presence/absence detectors
  - Compressed air blowing
  - System retention tank made of Aisi 304 Stainless Steel



PRECISION  
PRECISION



# ROUNDJET

PARTS WASHER FOR THE TREATMENT OF SPECIAL PARTS WITH CYCLE TIMES OF LESS THAN 3 SECONDS

The washing cycle consists of six stages.

Starting from the loading station, the continuous (step-by-step) rotation moves the parts forwards through the subsequent stages of treatment until the part is brought back to its original position for unloading. Particularly suited for use in robotic stations.(positioning precision +/- 0.5 mm).

It can, however, be loaded and unloaded manually by the operator.



ROUNDJET

**ROUNDJET 1B**  
1000 | 1200 | 1400 | 1800

**HIGH TEMPERATURE HT**  
Maximum temperature setting 80°C

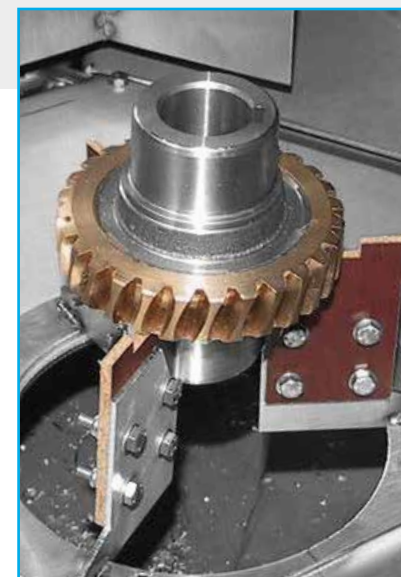
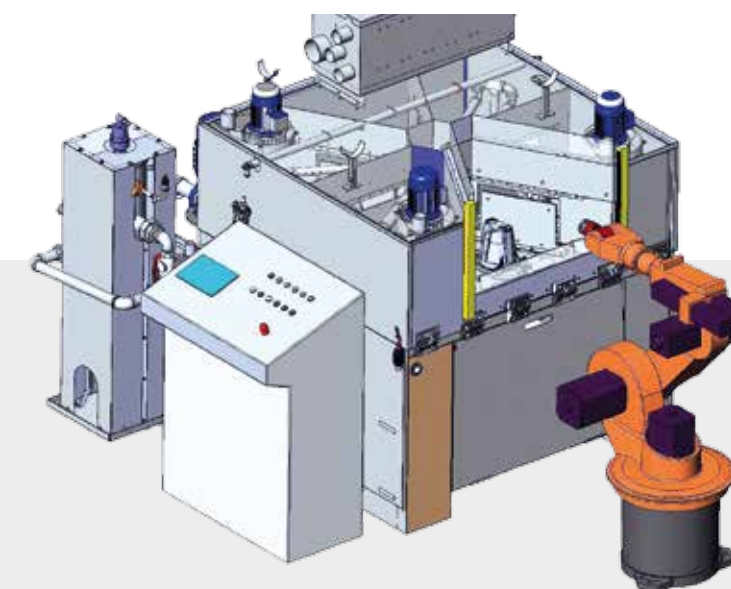
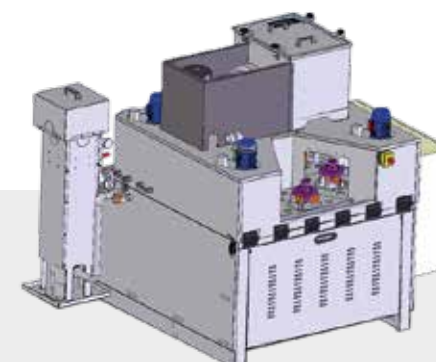
## EQUIPMENT

### Standard

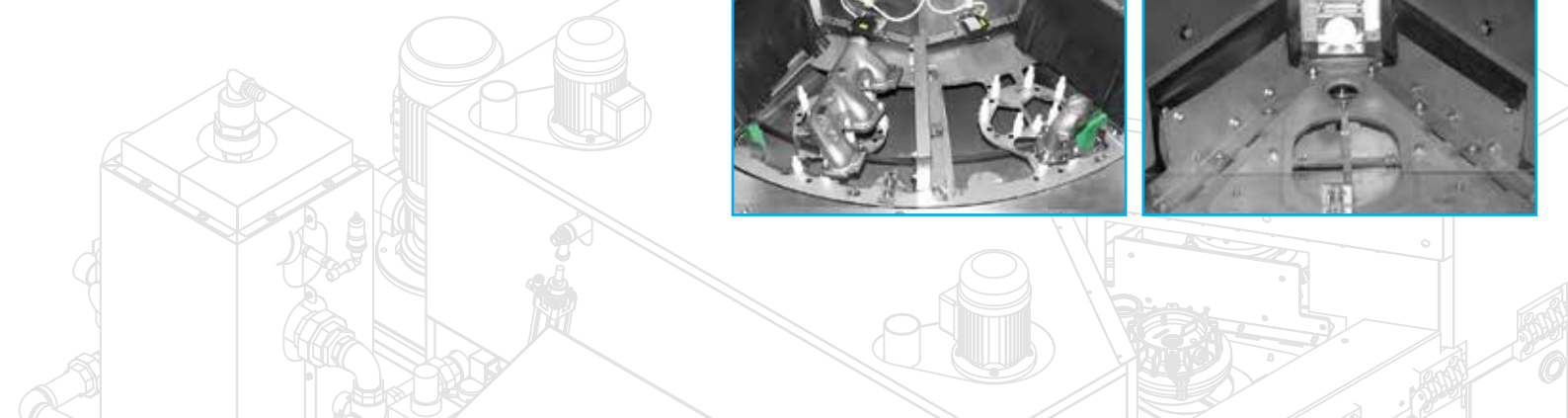
- Separate remote electrical cabinet
- Timed vapour extraction
- Compliant thermal insulation with Stainless Steel panels
- Minimum level probe of liquid in the tank to protect the pump and resistance
- Maximum level probe of liquid in the tank and automatic water filling solenoid valve
- Vertical multistage electric pump made of Aisi 304 Stainless Steel with special gaskets
- Box filter with 6 hat filters made of Aisi 304 Stainless Steel for pre-filtering the liquid returning to the tank.
- Pump intake filter made of Aisi 304 Stainless Steel
- Safety limit switch on cover opening
- Tank edge gasket made of EPDM
- Electrical system IP65, touch-screen PLC (DGT V4) control
- Part(s) positioning support
- Positioned washing supports, complete mapping of all holes and contaminant retention zones.
- Weekly schedule to turn on heating and the oil separator (if installed)
- Electrical resistance made of Incoloy Stainless Steel
- Tank accessible from the outside of the cabinet
- Structure and sheet metalwork made of Stainless Steel

## ACCESSORIES

- Electric vapour condenser for lowering the quantity of vapour given off (page 39)
- Disoil P HT (page 40)
- Chemical product doser
- Fine mesh box filters
- Duplex bag filter mounted in parallel on the pump delivery pipe
- Bag filter with thermal insulation
- Flushing of internal cavities
- Robot Interface for loading and unloading
- PLC Siemens S1200 – HMI Siemens KTP touch-screen
- Tank emptying pump
- High pressure washing pump
- Customizations for use with abrasive contaminants
- Part presence/absence detectors
- System retention tank made of Aisi 304 Stainless Steel



SPEED  
SPEED



# TUNNEL

## MULTISTAGE METAL CLEANING TUNNEL FOR COMPLEX AND SERIES PRODUCED MECHANICAL COMPONENTS

The machine consists of several treatment chambers for washing, rinsing, blowing and drying.

They can be single or multi-stage with final drying according to needs.

All operations are performed automatically on the parts as they move along the conveyor belt.

### LINEAR AND OVAL CONVEYOR TUNNELS

FOR THE TREATMENT OF VARIOUS SHAPES AND SIZES WITH MIXED POSITIONING

### LINEAR AND OVAL STEP-BY-STEP PALLET CONVEYOR TUNNELS

FOR THE CUSTOMIZED TREATMENT OF TECHNOLOGICALLY COMPLEX PARTS

### PIPE TUNNELS

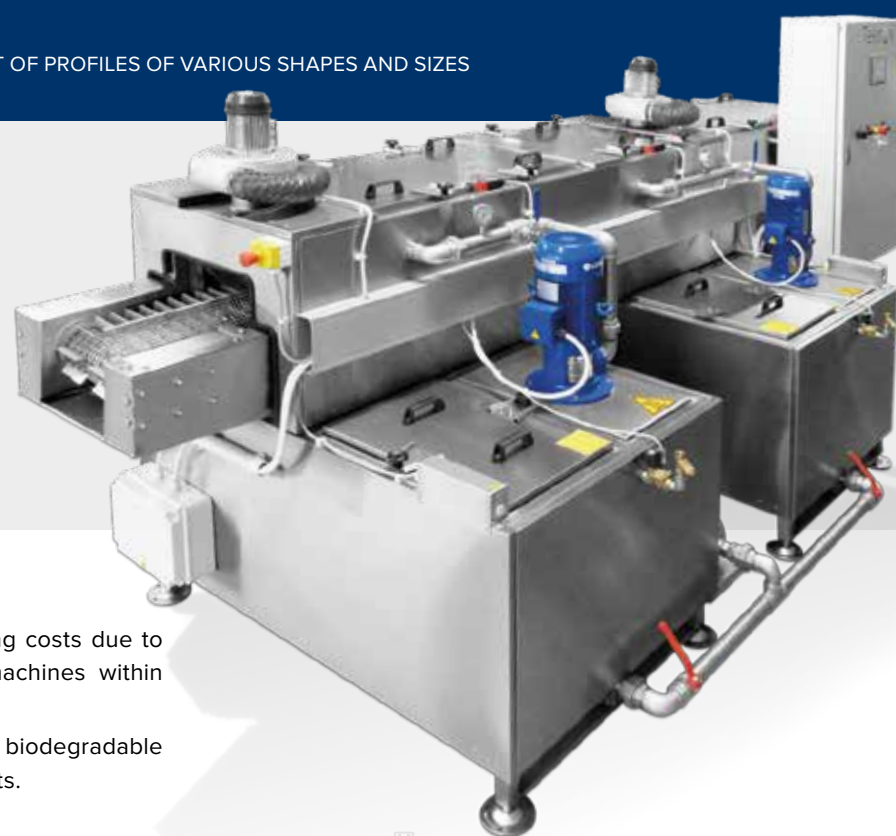
FOR THE INTERNAL AND EXTERNAL TREATMENT OF PROFILES OF VARIOUS SHAPES AND SIZES

#### LOW TEMPERATURE LT

Maximum temperature setting 60°C

#### HIGH TEMPERATURE HT

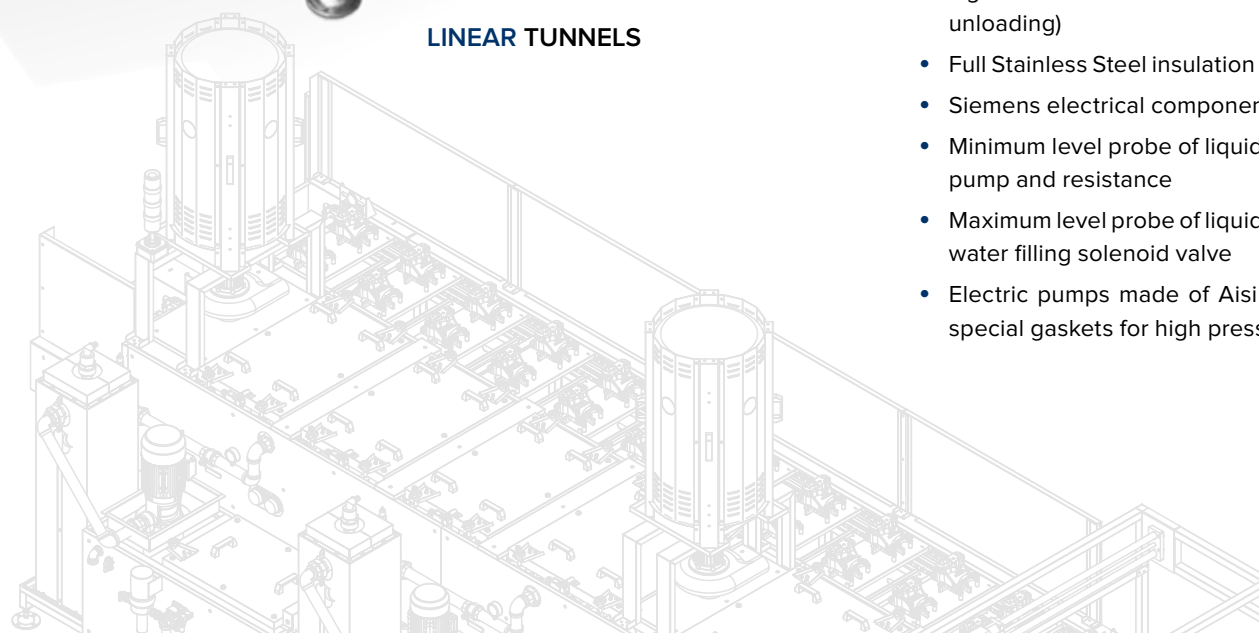
Maximum temperature setting 80°C



LINEAR TUNNELS

## ADVANTAGES

- Reduction of operating and manufacturing costs due to the possibility of incorporating these machines within automatic production areas.
- Reduction of costs through the use of biodegradable environmental friendly chemical detergents.
- High degree of washing cycle automation.
- Optimisation of treatment parameters without the need for constant monitoring by specialised operators.
- The opportunity to treat “technologically complex” components characterised by high production quantities and high final quality requirements.
- The opportunity to increase productivity and improve the efficiency of each production line.



## INTEGRATED AUTOMATION



OVAL TUNNELS



PIPE TUNNELS

## EQUIPMENT

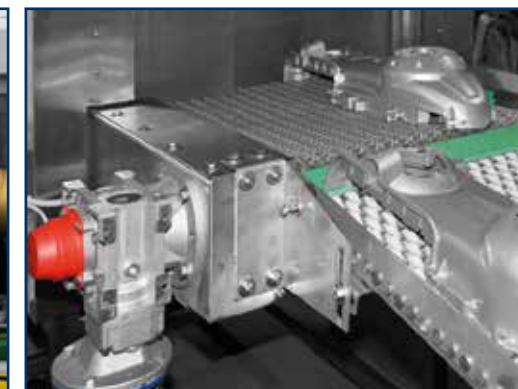
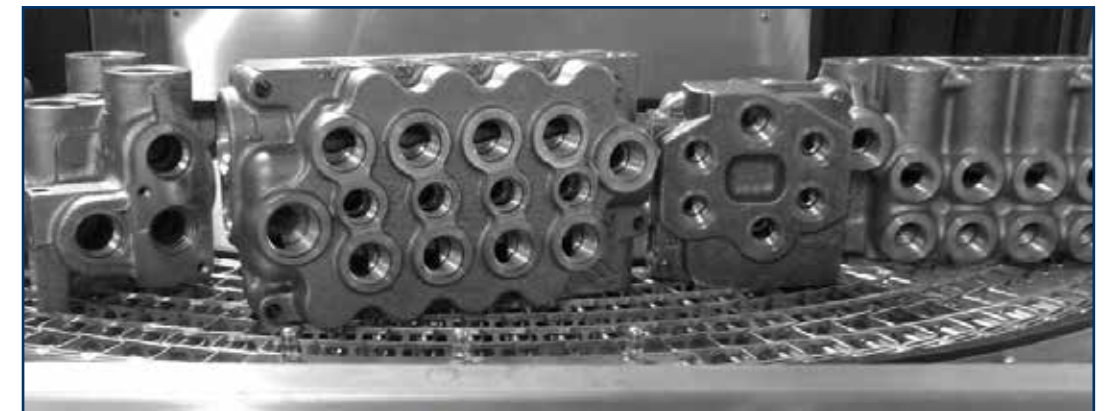
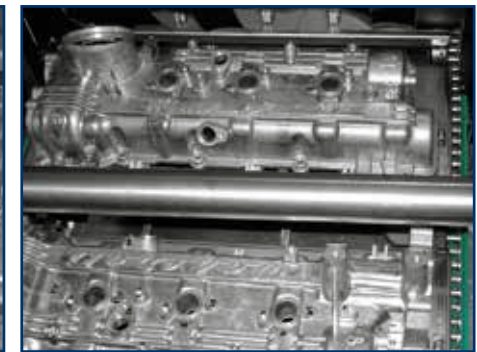
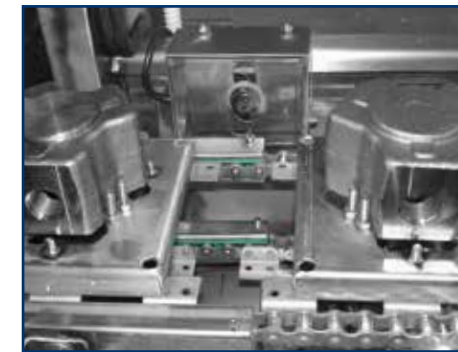
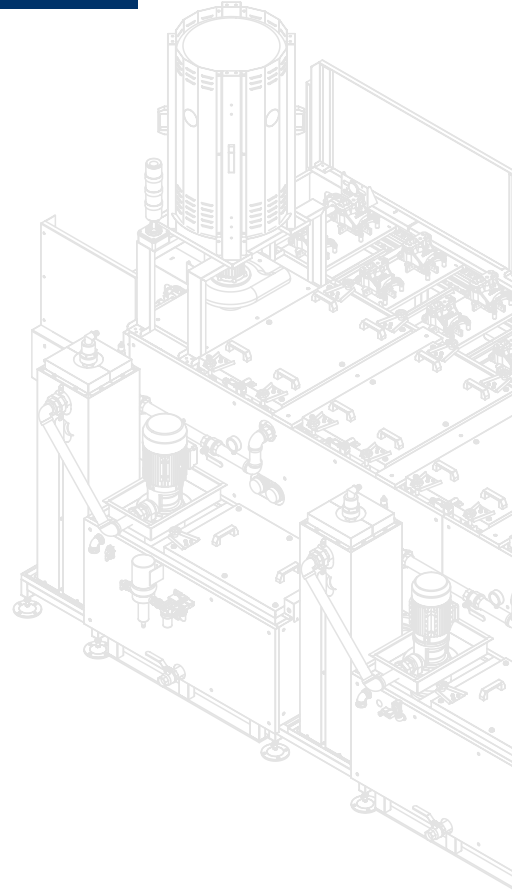
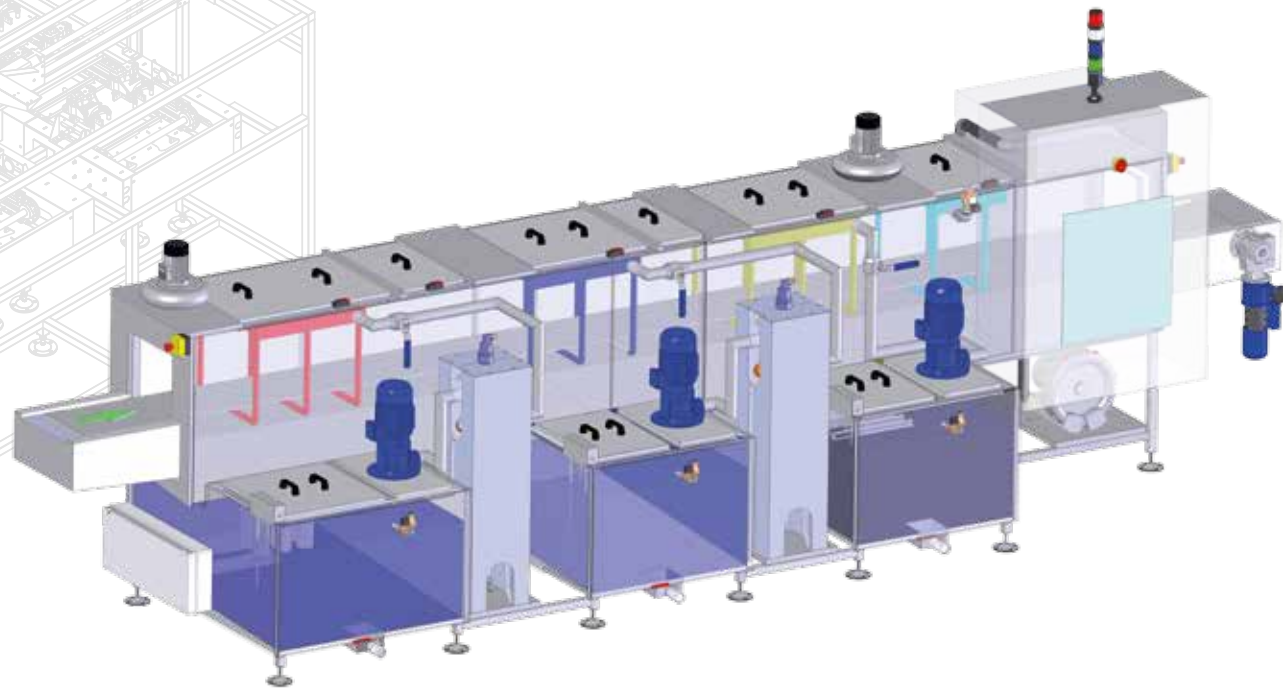
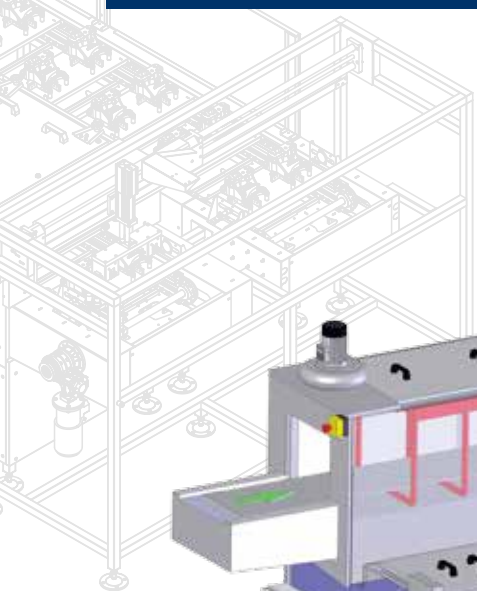
### Standard

- Electrical vapour extraction
- Feeding via gearmotor (inverter-controlled adjustable speed)
- Light curtain barrier at outlet (in case of manual unloading)
- Full Stainless Steel insulation to reduce operating costs
- Siemens electrical components
- Minimum level probe of liquid in the tank to protect the pump and resistance
- Maximum level probe of liquid in the tank and automatic water filling solenoid valve
- Electric pumps made of Aisi 304 Stainless Steel with special gaskets for high pressures and flow rates.
- Box filter with 6 hat filters made of Aisi 304 Stainless Steel for pre-filtering the liquid returning to the washing tank.
- Pump intake filters made of Aisi 304 Stainless Steel
- Electrical system IP65, touch-screen PLC (DGT V4) control
- Weekly schedule to turn on heating and the oil separator (if installed)
- Electrical heating resistances made of Incoloy Stainless Steel
- Safety sensors to ensure operator safety when using the machine
- Structure and sheet metalwork made of Stainless Steel
- Laser-machined washing/rinsing pipes made of Aisi 304 Stainless Steel



# TUNNEL

MULTISTAGE METAL CLEANING TUNNEL  
FOR COMPLEX AND SERIES PRODUCED  
MECHANICAL COMPONENTS



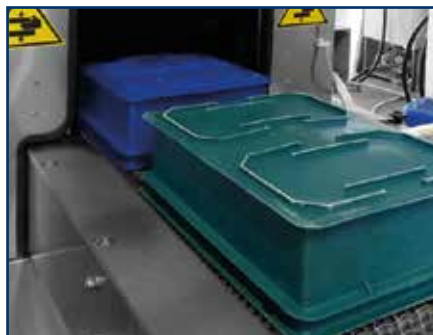
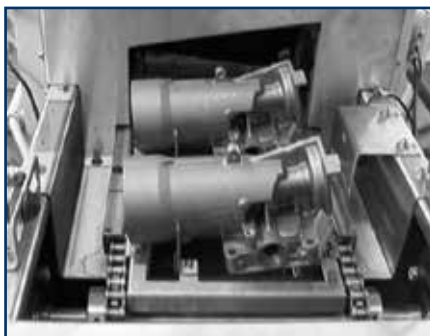
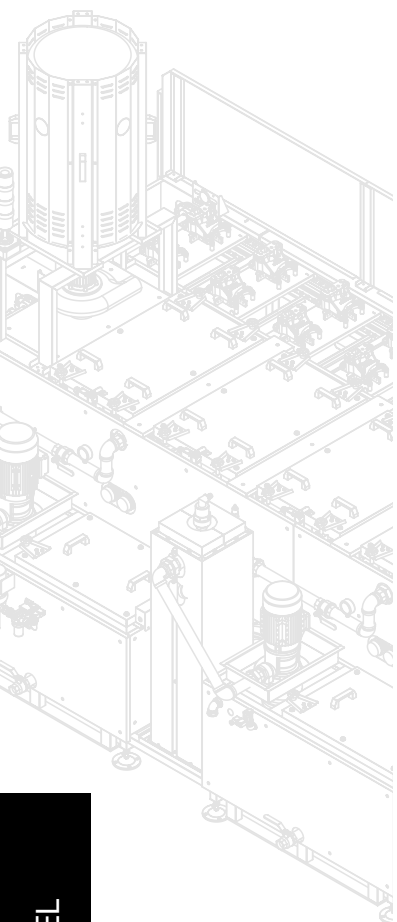
## ACCESSORIES

- Additional customisations on request
- Separate remote electrical cabinet
- Step conveyor feeder with dedicated pallets
- Light curtain barriers at the loading and/or unloading stage
- Electric vapour condenser for lowering the quantity of vapour given off (page 39)
- Disoil P LT or HT (page 40)
- Disc oil separator with dedicated gearmotor
- Separation of parts to be washed into parallel rows with linear guides
- Chemical product doser
- Bag filter with thermal insulation
- Robot interface for automatically loading parts
- Robot interface for unloading parts (only for pallet tunnels)
- PLC Siemens S1200 – HMI Siemens KTP touch-screen
- Tank emptying pump
- High pressure washing pump
- Customized treatment station, pause in position, pneumatic flushing
- Customizations for use with strongly caustic chemical products
- Designed for the removal of abrasive contaminants from the treated components
- External fittings made of stainless steel
- Ramps with high flow pump
- Heating with diesel or natural gas burner
- Pickling of internal welding
- Sheet metal unloading chute
- Part presence/absence detectors
- Stack light for indicating system status
- Models with other supply voltages
- System retention tank made of Aisi 304 Stainless Steel



AUTOMATION  
INTEGRATED  
AUTOMATION



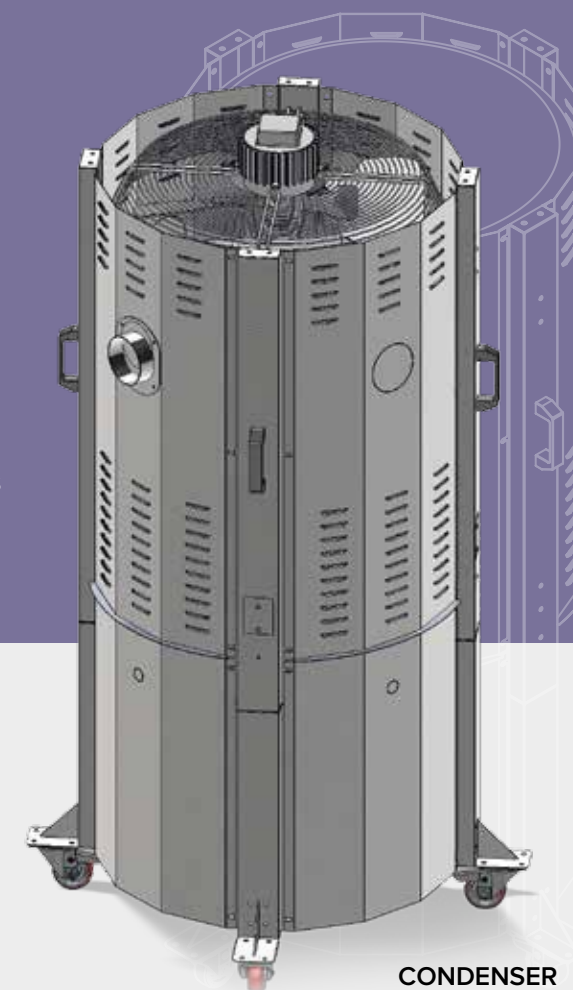


AUTOMATION  
INTEGRATED  
AUTOMATION

# CENTRIFUGAL CONDENSER

The new centrifugal condensation system designed and patented by TEKNOX has enabled the amount of steam generated and the cost of equipment to be significantly reduced.

It is recommended when it is not possible to vent the steam suction outlet to the outside. The condenser is equipped with wheels for easy positioning and can be installed on existing machines or integrated into new systems. This device can only be used with systems that use water-based detergents that are non-hazardous to personnel or the environment.



CONDENSER

## CONDENSER S

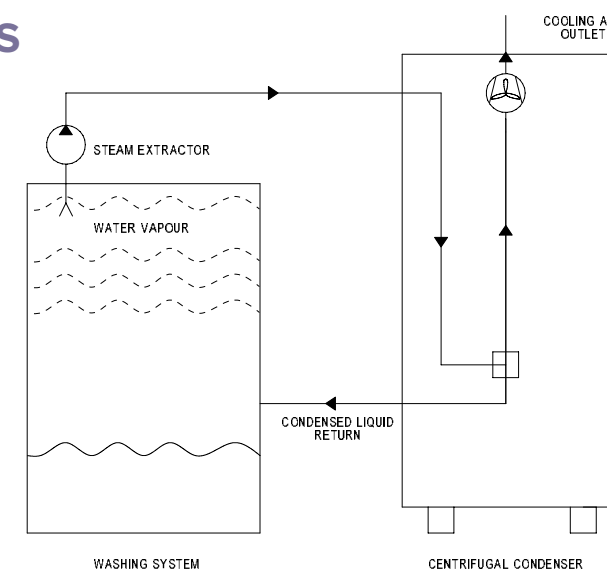
FOR Ø 80 MM PIPING

## CONDENSER M

FOR Ø 100 MM PIPE

## TECHNICAL DATA AND CONNECTIONS

TECHNICAL DATA AND CONNECTIONS	CONDENSER S	CONDENSER M
Overall dimensions (L x P x H)	770 x 770 x 1600 H	1000 x 1000 x 1600 H
Steam pipe diameter	80 mm	100 mm
Condensate return pipe diameter	16 mm	16 mm
Fan power	0,20 kW	0,48 kW
Fan flow rate	5200 m³/h	9000 mc³h
Supply voltage	400V 3 Ph 50Hz	400V 3 Ph 50Hz





# DISOIL P

## OIL SEPARATOR FOR NEAT NON-EMULSIFIED OILS FROM TREATMENT BATHS

Disoil P is a system that enables insoluble oils to be removed automatically from washing system tanks.

During treatment, the oil and water sucked up from the tanks are separated on the basis of their different specific gravities. The oil is collected in a special drum to be forwarded for recycling or treatment and the regenerated water can be reused in the production cycle.



DISOIL P

DISOIL P

### LOW TEMPERATURE **LT**

Treatment of liquid at a temperature of less than 60°C.

### HIGH TEMPERATURE **HT**

Treatment of liquid at a temperature higher than 60°C

## TECHNICAL DATA AND CONNECTIONS

TECHNICAL DATA AND CONNECTIONS	DISOIL P
Overall dimensions (L x P x H)	700 x 600 x 1100 cm
Pump delivery rate	up to 800 l/h
Supply pressure and consumption	2 bar - 150 NI/min
Total capacity	100 l

## ADVANTAGES

- Reuse and extended life of the washing fluid
- It does not contain consumables and does not require personnel to operate it
- Reduces maintenance and disposal costs
- Contributes to the reduction of bacterial growth that causes unpleasant odours
- Can be interfaced with the weekly programmer (if equipped with a TEKNOX washing system)
- Improved cleaning of machined parts
- It does not alter the percentage of detergent (if present)

