

CRYOGENIC MEDIA-BLASTING DEBURRING

Media-blasting-, drum deburring- and washing systems
for non-ferrous metals, rubber and plastic components





Our systems and developed technologies as well as our reliable custom special solutions are used worldwide for the cryogenic treatment and cleaning of seals and molded parts since 1948. Maximum benefit for our customers is for us, as a family owned company, our first priority.

Your specialist for

- Cryogenic deburring systems
- Media-blasting deburring systems
- Drum deburring systems
- Washing-, cleaning- and drying systems
- Custom-built solutions

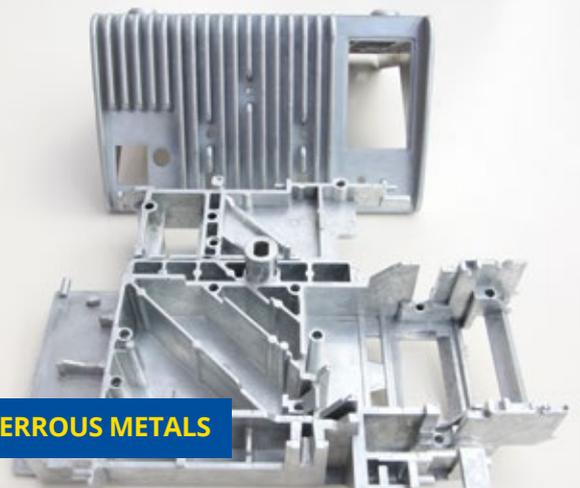
MEWO produces machines for the deburring of:



PLASTICS



RUBBER



NON-FERROUS METALS

Model series	Applications	Page
ROTOR TS 7.12 	High-performance compact media-blasting deburring system for various cryogenic deburring applications of seals and molded parts made of rubber, plastics and non-ferrous metals with quick-change basket system.	4
KME 	High-performance deburring system for various cryogenic deburring applications of molded parts made of rubber, plastics and non-ferrous metals with a length of up to 500mm with quick-change basket system.	6
JET ROTOR SERIE 	The JET ROTOR-Series is a very powerful basic drum-type media-blasting deburring system. It is an ideal introduction for the cryogenic finishing of rubber, plastics and non-ferrous metals from small to medium sized batches. It has a batch volume of up to 50 litres.	8
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ROTOR TS 7.12



The TS 7.12 is a high-performance compact media-blasting deburring system for various cryogenic deburring applications of seals and moulded parts made of rubber, plastics and non-ferrous metals.

This compact media-blasting deburring system with a batch volume of up to 12 litres ensures exceedingly precise results for example occasional rework requiring prototypes, large-scale, multi-shift production runs of bulk goods and individually insert molded parts with article-specific feeds.

The compact media-blasting chamber allows short deburring times with excellent precision and low nitrogen consumption. The removable basket (quick-change basket system) allows the next basket to be filled while deburring with another one is in progress, therefore eliminating downtime.

Controlled blasting medium feed, exact temperature regulation and two-way blasting during every cycle guarantee exact, high-precision reproducibility of results in all areas of the processing basket.

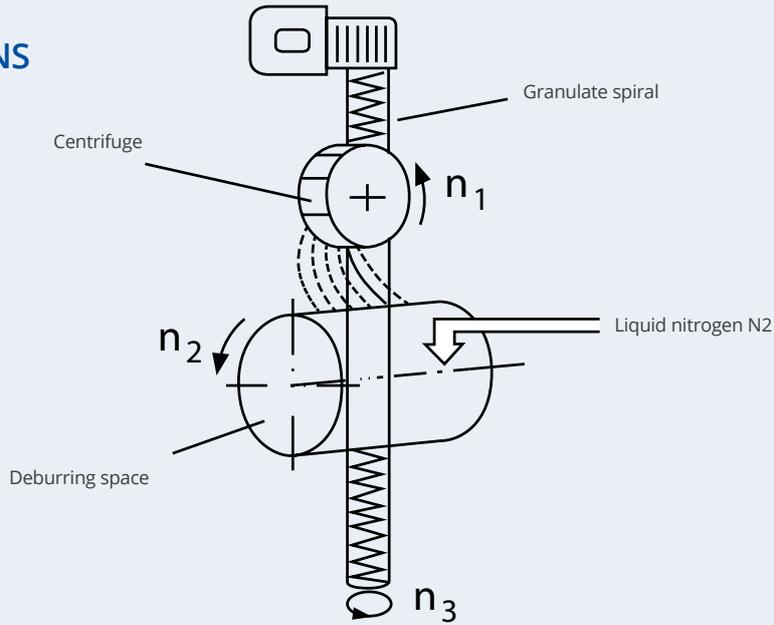
Double cyclones ensure the de-dusting of the blasting chamber as well as the removal of the used nitrogen gas.

The modern SPS-control unit Siemens S7-1500 allows the storage of a high amount of datasets and ensures the reproducibility of all important process parameters; these can also be retrieved as a CSV file via the optional USB-Interface and transferred to your ERP system for evaluation.

The used blasting medium is plastic granulate; The system can be optionally adapted to work with steel shot in case of extreme deburring requirements.



SPECIFICATIONS



TS 7.12

Centrifuge speed	1000 – 9500 1/min.
Batch volume	1 – 12 litres
Working temperature	to -150 °C
Drum speed	8 – 46 1/min.
Control	Siemens S7-1500, 9" Widescreen Touchpanel TP 900 Comfort
Article data memory	3.000 articles alphanumerical
Acoustic level	80 dB
Required power	4,5 kW
Weight	370 kg
Dimensions machine	B 1400 x H 1870 x T 1260 mm



PROPERTY RIGHTS

- For bulk goods, insert molding and article-specific holder
- German patent registration No. DE 10 2016 006 288.6



ADVANTAGES

- Low space requirement
- Precise temperature control
- Low nitrogen consumption
- Modern control units
- Quick-change basket system for
 - bulk goods
 - insert molding and tray goods



OPTIONS

- Barcode scanner
- USB-Interface for batch-logging
- LAN-connection
- Article-specific inlays
- Article-specific holder
- Industry 4.0 connection



The KME system is a high-performance deburring system for various cryogenic deburring applications of molded parts made of rubber, plastics and non-ferrous metals with a length of up to 500mm with quick-change basket system.

This high-performance system enables precise finishing of molded parts made of rubber, plastics and non-ferrous metals and ensures exceedingly precise results for example occasional rework requiring prototypes, large-scale, multi-shift production runs of bulk goods with a volume of up to 30 litres as well as 30kg of insert moldings with lengths to 500mm in article-specific feeds.

The KME allows short deburring times with excellent precision and low nitrogen consumption. It features an automated quick-change basket system (easy handling). As a result molded part feeds can be filled while deburring, therefore eliminating downtime.



SPECIFICATIONS

KME

Batch volume	Bulk material max. 30 liters, insert molding and tray goods max. 30 kg
Centrifuge speed	1000 – 8500 U/min.
Drum speed	5 – 30 U/min.
Working temperature for blasting	to -150 °C
Control	Siemens S7-1500, 9" Widescreen Touchpanel TP 900 Comfort
Article data memory	3.000 articles alphanumerical
Acoustic level	80 dB
Required power	18 kW
Weight	1.080 kg *
Abmessungen	B 1.420 x H 2.380 x T 2850 mm

* variiert je nach Ausstattung



PROPERTY RIGHTS

- For bulk goods, insert molding and article-specific feeds
- German patent registration No. DE 10 2016 006 288.6



ADVANTAGES

- For bulk goods and insert molding
- Fixed-position / partial processing possible
- With quick-change basket system respectively feeds
- Easy handling system
- Low nitrogen consumption
- Modern control units



OPTIONS

- Article-specific special feeds
- Barcode scanner
- LAN-connection
- USB-Interface for batch-logging
- Remote maintenance
- Industry 4.0 connection
- Fully automatic operation

JET ROTOR SERIES

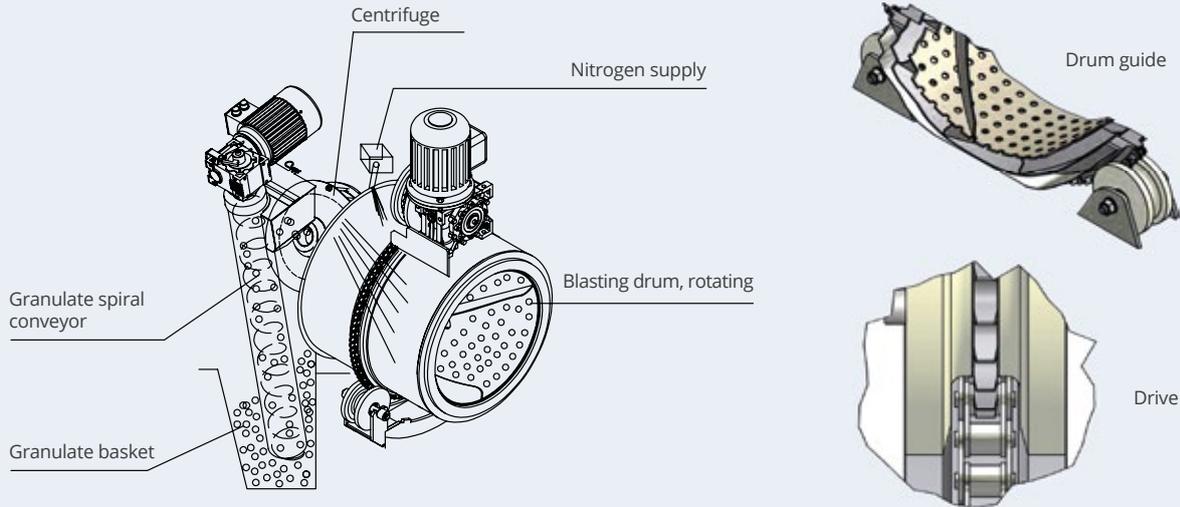


The JET ROTOR-Series is a very powerful basic drum-type media-blasting deburring system. It is an ideal introduction for the cryogenic finishing of rubber, plastics and non-ferrous metals from small to medium sized batches. It has a batch volume of up to 50 litres.

The system requires little floor space and room height due to its extremely compact construction. The well insulated cryogenic cell is double-walled and consists entirely of stainless steel, guaranteeing a low nitrogen consumption.

The deburring drum ensures the separation of burr and granulate. The external cyclon ensures the de-dusting of the blast-medium.

The modern SPS-control unit Siemens S7-1500 allows the storage of a high amount of datasets and ensures the reproducibility of all important process parameters.



JET ROTOR M

JET ROTOR L

Batch volume	1 – 20 litres	1 – 50 litres
Centrifuge speed	1.000 - 9.500 1/min.	1.000 - 9.500 1/min
Working temperature for blasting	to -150 °C	to -150 °C
Granulate material throughput	to 1,5 tons/h	to 1,5 tons/h
Drum speed	5 – 30 1/min.	5 – 30 1/min.
Control	Siemens S7-1500, 9" Widescreen Touchpanel TP900 Comfort	Siemens S7-1500 9" Widescreen Touchpanel TP900 Comfort
Article data memory	3.000 articles alphanumeric	3.000 articles alphanumeric
Acoustic level	80 dB	80 dB
Required power	14 kW	14 kW
Weight	1.100 kg*	1.350 kg*
Dimensions machine	B 2900 x H 2100 x T 2400 mm	B 3100 x H 2100 x T 2460 mm

* varies depending on the equipment



PROPERTY RIGHTS

- German patent DE 10 2005 040 420 B4
- German utility model DE 20 2005 021 921 U1



ADVANTAGES

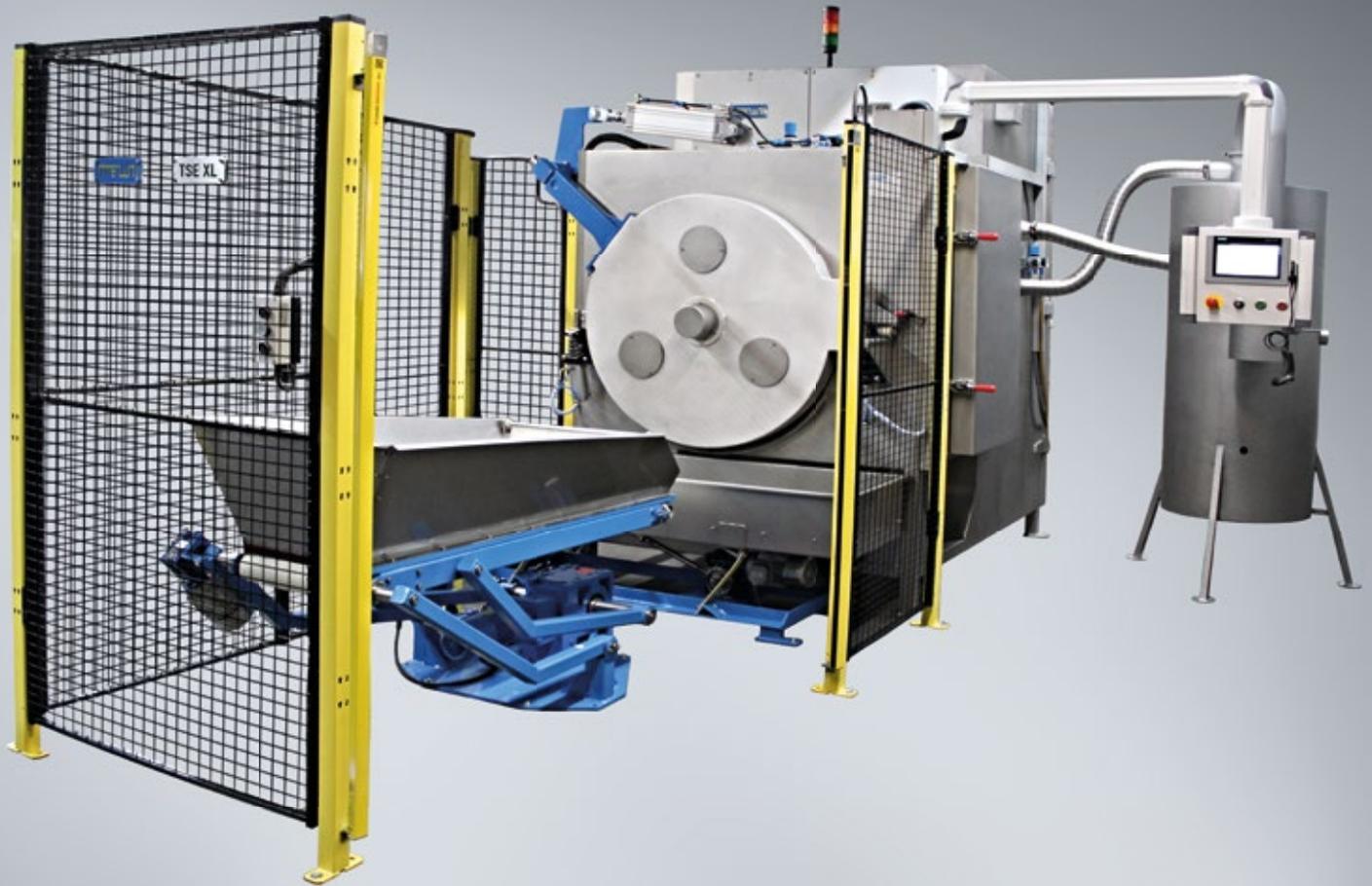
- Noise level 80dB
- Low space requirement
- Low granulate replacement times
- Low nitrogen consumption
- Modern control units
- High efficiency



OPTIONS

- Automated loading device
- Internal screening of the blasting media
- Dosage of granulate amount
- Automated loading door
- Emptying vibration sieve
- Barcode scanner
- USB-Interface for batch-logging
- LAN-connection
- Remote maintenance
- Industry 4.0 connection

ROTOR TSE PREMIUM SERIES



The drum-type media-blast deburring systems of the ROTOR TSE Premium series are designed for the cryogenic finishing of large batch sizes of tumbler-compatible rubber, plastic and non-ferrous metal molded parts.

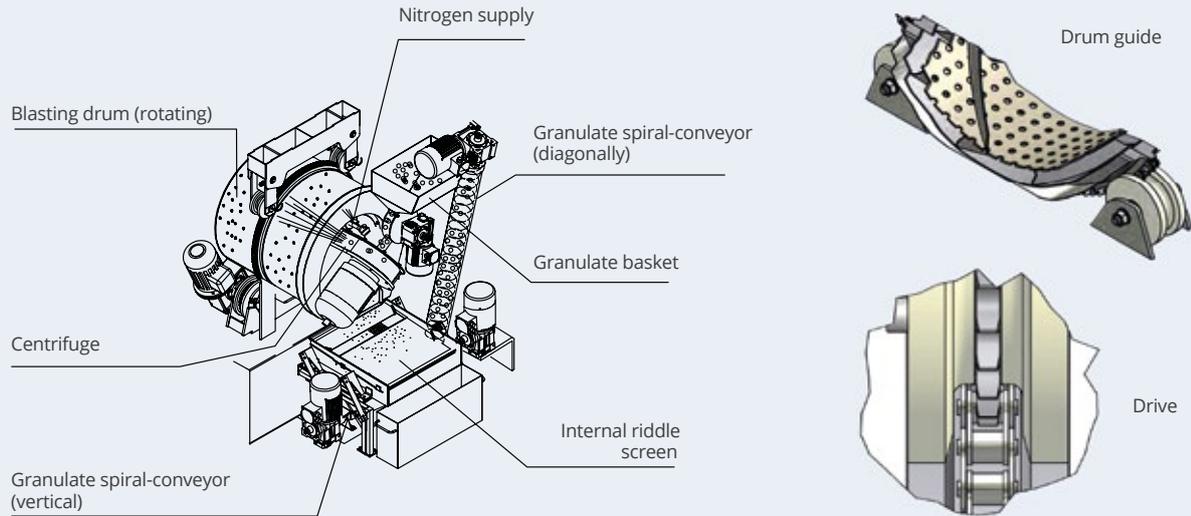
Even very difficult molded parts and seals with batch-volume of 1-30 litres (TSE M), to 50 litres (TSE L), and up to 100 litres (TSE XL) can be deburred due to the precise temperature control of this system.

The well insulated cryogenic cell, which is double-walled and consists entirely of stainless steel, the compact media-blasting chamber and the short processing cycles guarantee a low nitrogen consumption. The external de-dusting unit redirects the exhausted nitrogen back to the cryogenic cell to avoid cryogenic losses.

The conventional refrigeration unit dehumidifies and cools the system when the system is in standby. Large maintenance doors facilitate the cleaning and maintenance of the system.

The internal blasting-media sifter separates dust and burr from granulate and guarantees clean and blasting media.

The modern SPS-control unit Siemens S7-1500 allows the storage of a high amount of datasets and ensures the reproducibility of all important process parameters. As an optional feature, all process data can be read out via an integrated Ethernet interface and transferred directly to your in-house LAN for further processing and analysis.



	TSE M	TSE L	TSE XL
Batch volume	1 – 30 litres	1 – 50 litres	1 – 100 litres
Centrifuge speed	1000 – 9500 1/min.	1000 – 9500 1/min.	1000 – 9500 1/min.
Working temperature for blasting	to -150 °C	to -150 °C	to -150 °C
Granulate material throughput	to 1,5 to/Std.	to 1,5 to/Std.	to 1,5 to/h
Drum speed	5 – 30 1/min.	5 – 30 1/min.	5 – 30 1/min.
Control	Siemens S7, CPU 1513-1PN, 9" Widescreen Touchpanel TP900 Comfort	Siemens S7, CPU 1513-1PN, 12" Widescreen Touchpanel TP900 Comfort	Siemens S7, CPU 1513-1PN, 12" Widescreen Touchpanel TP 1200 Comfort
Article data memory	5000 articles alphanumerical	5000 articles alphanumerical	5000 articles alphanumerical
Acoustic level	80 dB	80 dB	80 dB
Required power	12 kW	14 kW	25 kW
Weight	1800 kg	2300 kg*	3200 kg*
Dimensions machine	B 3700 x H 2150 x T 2650 mm	B 3700 x H 2450** x T 4400 mm	B 3700 x H 3000** x T 5150 mm
Control panel/control box	integrated	1200 x 500 x 2000mm	1200* x 500* x 2000 mm

* varies depending on the equipment ** Height when the automatic door is open



PROPERTY RIGHTS

- German patent DE 10 2005 040 420 B4
- European patent registration EP 2 481 524 A1
- German utility model DE 20 2011 002 098 U1



ADVANTAGES

- Noise level 80dB
- Fast processing cycles
- Precise temperature control
- Modern control units
- Dosage of granulate amount
- Internal screening of the blasting-media
- Low nitrogen consumption due to return of nitrogen
- Energy recovery
- Heat-limit monitoring
- Granulate-level monitoring
- 2 in 1 process „Speed Control“



OPTIONS

- Automated loading device
- Automated loading door
- Refrigeration unit for standby
- Emptying vibration sieve
- Printer for parameter printout
- Barcode scanner
- USB-Interface for batch-logging
- LAN-connection
- Remote maintenance
- Fully automatic mode
- Industry 4.0 connection

ROTOR TRS SERIES



The ROTOR TRS series offers drum-type deburring systems for the cryogenic finishing of shape-, material-, and surface sensitive molded parts and seals made of plastics and rubber with a geometric drum volume of up to 700 litres.

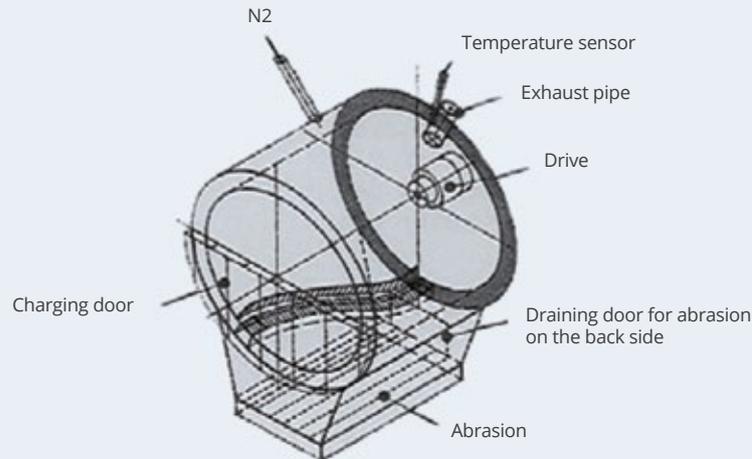
The TRS series offers a solution for special applications that involve surface sensitive and fragile molded parts as an alternative to media-blast deburring systems. Depending on individual applications and requirements, the operation can be aided by special additives which stay inside of the system when molded parts are retrieved due to a patented MEWO process.

The low space requirement allows the installation of the system in space-limited production lines.

The well insulated cryogenic cell, the compact drum and short processing cycles ensure that nitrogen consumption remains low.

The consumed N2 gas gets exhausted via a de-dusting cyclone with non-return valve to avoid cryogenic losses and minimize heat- and moisture influences.

The modern control unit allows the storage of a high amount of datasets and ensures the reproducibility of all important process parameters.



	TRS M	TRS L	TRS XL
Drum volume	100 litres	350 litres	700 litres
Working temperature for blasting	to -150 °C	1to -150 °C	to -150 °C
Drum speed	5 – 30 1/min.	5 – 30 1/min.	5 – 30 1/min.
Control	Siemens S7-1500, 9" Widescreen Touchpanel TP 900 Comfort	Siemens S7, S7-1500, 9" Widescreen Touchpanel TP 900 Comfort	Siemens S7, S7-1500, 9" Widescreen Touchpanel TP 900 Comfort
Article data memory	3000 articles alphanumerical	3000 articles alphanumerical	3000 articles alphanumerical
Required power	6 kW	12 kW	20 kW
Weight	850 kg	1000 kg	1300 kg
Dimensions machine	B 2300 x H 2000 x T 1500 mm	B 2500 x H 3150** x T 2100 mm	B 3400 x H 3950** x T 2500 mm
Control panel/control box	800 x 250 mm	800 x 250 mm	800 x 250 mm

* varies depending on the equipment ** Height when the automatic door is open



PATENT RIGHTS

→ German patent registration DE 199 06 915 A1



ADVANTAGES

- Operations with and without additives (steel balls) possible
- Automated feeding and retrieving possible
- Deburring is aided by diagonally mounted roller rails
- Clean separation of burr and molded parts
- Low space requirements
- Fast processing cycles
- Internal separation



OPTIONS

- Batch printer
- Barcode scanner
- Internal additive saving system (MEWO-patent)

WTT SERIES



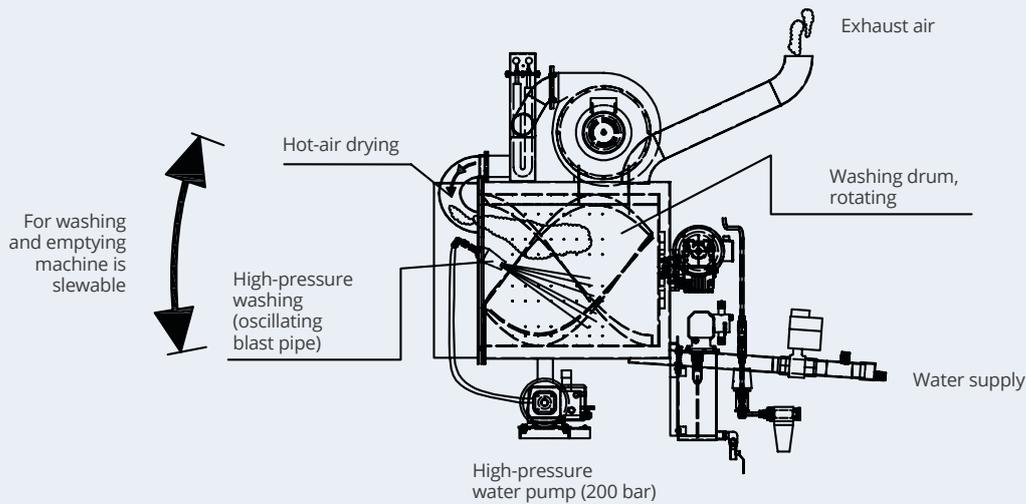
Washing-, cleaning- and drying systems for fine-scale deburring and cleaning/drying of molded parts made of rubber, plastics and non-ferrous metals.

The WTT series is designed as a high performance flow cleaning system for the final deburring, and the cleaning and drying of molded parts made of rubber, plastics and non-ferrous metals.

In all systems, the cleaning process is performed in a rotating drum either with or without high pressure and with or without the addition of detergents, which can be administered in precise doses by the control unit. In order to prevent the inadvertent mixing of parts, extremely small items can be processed in a closed basket that can be inserted and removed separately. The purity level achieved during the cleaning process is subsequently maintained by a multi-stage filter system mounted downstream of the air intake for the dryer.

The patented swivel of the machine body enables the ergonomic charging and discharging of the system, as well as the optimized tumbling of the molded parts during the individual stages of the washing and drying processes. Due to that, the system achieves a higher purity grade of the molded parts, while reducing the time of the processing cycles and the water consumption.

The modern SPS-control unit Siemens S7-1500 allows the storage of a high amount of datasets and washing programs and ensures the reproducibility of all important process parameters and guarantees a consistent grade of purity.



	WTT M	WTT L	WTT XL
Batch volume	40 litres	55 litres	70 litres
Working temperature washing	to 70 °C	to 70 °C	to 70 °C
Washing pressure	50 – 200 bar	50 – 200 bar	50 – 200 bar
Working temperatures drying	to 90 °C	to 90 °C	to 90 °C
Drum speed	5 – 30 1/min.	5 – 30 1/min.	5 – 30 1/min.
Control	Siemens S7-1500, 9" Widescreen Touchpanel TP900 Comfort	Siemens S7-1500, 9" Widescreen Touchpanel TP900 Comfort	Siemens S7-1500, 9" Widescreen Touchpanel TP900 Comfort
Article data memory	3000 articles alphanumerical	3000 articles alphanumerical	3000 articles alphanumerical
Acoustic level	78 dB	78 dB	78 dB
Required power	25 kW	25 kW	25 kW
Weight	800 kg	850 kg	900 kg
Dimensions machine	B 1400 x H 2200 x T 1700 mm	B 1400 x H 2250 x T 1900 mm	B 1400 x H 2250 x T 1900 mm
Control panel/control box	integrated	integrated	integrated



PROPERTY RIGHTS

→ German patent registration DE 10 2007 018 111 A1



ADVANTAGES

- High cleaning effect
- Multiple washing stages
- Modern control units
- Low space requirement
- Patented swivel of the machine body for easy and ergonomic charging and discharging and shorter processing cycles
- Capacity preselection
- Low water consumption



OPTIONS

- USB-Interface for batch-logging
- Barcode scanner
- Separate removable basket for small parts
- Assisted emptying of the processed material
- LAN-connection
- Waste water filter with fast-clean system
- Adapter for TS 7.12 blasting basket (WTT XL only)
- Industry 4.0 connection



Washing-, cleaning-, and drying system for fine-scale deburring and cleaning of bulk-goods and insert molding made of rubber, plastics and non-ferrous metals.

The application area has a wide range from fine-scale seals to high precision components to solid molded parts made of rubber, plastics and non-ferrous die-cast metals with a length from 1.0mm up to ca. 400mm. The batch volume has a range from 1 litres up to 12 litres and offers precise processing possibilities for individual prototypes up to medium-sized series.

The processing can be done with bulk goods or with insert moldings with fixed positions.

All processing baskets and article specific changeable feeds are compatible with the MEWO ROTOR TS 7.12 system. Restacking of the processed parts between deburring and cleaning/drying is therefore not necessary.

The WT 7.12 is designed as a flow system and contains a high pressure unit for the cleaning- and drying process. Removable

processing baskets or system feeds (quick-change basket system) can be filled while the system is running, resulting in no downtime.

The molded parts can be cleaned and immediately dried with or without high pressure and with or without additional detergents. The system contains a multi-stage filter system for the air inlet to retain the purity grade after the cleaning stage.

The modern SPS-control unit Siemens S7-1500 allows the storage of a high amount of datasets and guarantees the reproducibility of all important process parameters for every single step or the whole process. Target/actual comparisons can be manually obtained via a USB-Stick or via a direct LAN-connection.



SPECIFICATIONS

WT 7.12 Washing Unit

Batch volume	1 – 12 Litres
Working temperature washing	up to 60 ° C
Washing pressure	50 – 200 bar
Working temperatures drying	to 90 °C
Drum speed	8 – 46 1/min.
Control	Siemens S7-1500, 9" Widescreen Touchpanel TP900 Comfort
Article data memory	3000 Articles alphanumerical
Acoustic level	70 dB
Required power	14,5 kW
Weight	300 kg*
Dimensions machine	B 3100 x H 1920 x T 1750 mm

* variiert je nach Ausstattung



ADVANTAGES

- Easy handling (quick-change basket system)
- Noise level 70dB
- Size of moulded parts from 1.0mm to 400mm
- High cleaning effect
- Multiple washing-/drying stages
- Exact temperature control
- Low water consumption
- Compatible with MEWO ROTOR 7.12
- Low space requirement



OPTIONS

- Article specific changeable feeds
- Barcode scanner
- USB-Interface for batch-logging
- LAN-connection
- Industry 4.0 connection



High-performance drying tunnel for the drying of cryogenic processed molded parts made of rubber, plastics and non-ferrous metals.

The TT 06 is a high performance dryer for cryogenic processed bulk goods and insert moldings made of rubber, plastics, and non-ferrous metals.

With its 1.20m long heating section, its roll able substructure and its close-meshed conveyor belt made of stainless steel, the TT 06 enables flexible usage for a wide range of products for molded parts that are 5mm or longer in space restricted areas.

The integrated heat recovery unit guarantees energy saving and efficient processing with short warm up times and cycle times of a minute.

The variably adjustable belt speed and temperature guarantee a safe drying process for parts of different shapes and sizes. The removable bulk good filling aid and the integrated light barrier with auto stop function secure a continuous part-supply and avoid overheating.



SPECIFICATIONS

TT 06

Belt speed	0,6-6,0m/min
Temperature	to 250 °C
Required power	12 kW
Dimension	B 900mm x H 2.000mm x T 2.190mm
Control box	integrated
Acoustic level	72 dB/A
Weight	320 kg



ADVANTAGES

- Low space requirement
- Integrated heat recovery unit
- Removable bulk good feeding aid
- Short processing cycles
- Light barrier with auto stop function



Our systems and developed technologies as well as our reliable custom special solutions are used worldwide for the cryogenic treatment and cleaning of seals and molded parts since 1948. Maximum benefit for our customers is for us, as a family owned company, our first priority.

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