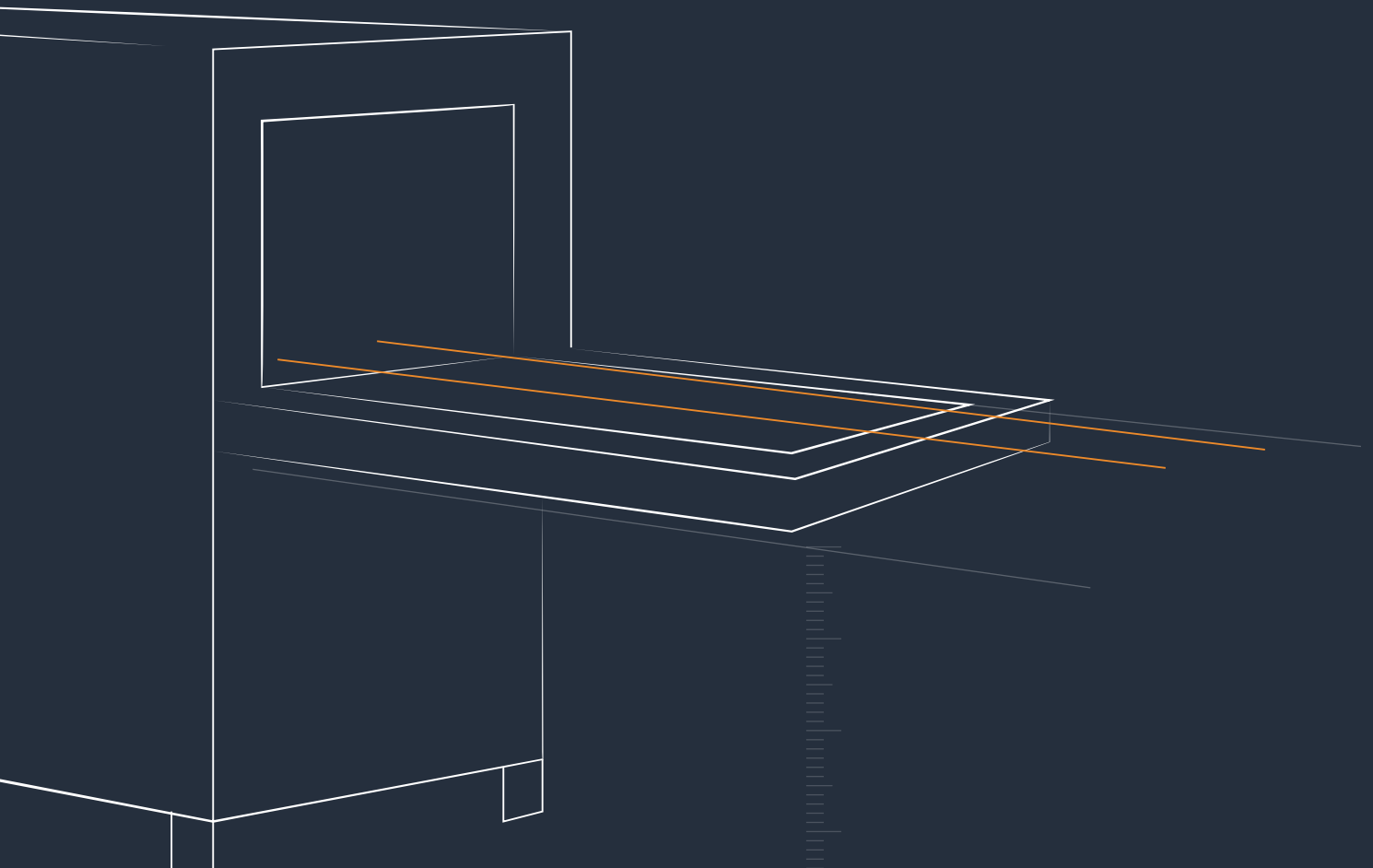


Industrial washing equipment

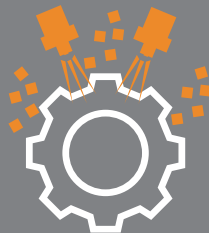


Mass Finishing



High-performance equipment and innovative technologies – productive and cost-effective

Shot Blasting



Customer-oriented equipment technology and intelligent process solutions – long-lasting and energy-efficient

AM Solutions



Comprehensive solutions for additive manufacturing, especially 3D post processing equipment

>80

More than 80 years of **experience**



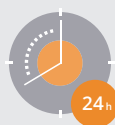
15 locations –
over **150** distributors –
over **1,500** employees across the globe



Worldwide **Customer Experience Center**



More than **15,000**
different types of media and compounds



Our technical service –
round-the-clock support



Transfer of professional knowledge
by certified trainers

Contents

Technology of industrial washing	4
Drum washing systems	5
Washing Cabinets	6 - 7
INDEX rotary washing systems	8 - 9
Conveyor belt washing machine	10
Customized transport systems	11
Transfer washing line system	12 - 13
Equipment components	14
Rösler Academy	15

WE HAVE THE SOLUTION FOR ALL YOUR WASHING REQUIREMENTS

Degreasing | Phosphating | Washing | Passivation | Oiling | Drying

The cleaning and degreasing of metallic and/or plastic components is a fundamental step in the majority of industrial processes in order to be able to pass quality control and actual remaining dirt specifications. The parts must normally be washed before or after machining or between processes; as a prior step before surface treatment or assembly. Rösler washing installations guarantee a reproducible cleaning

efficiency which meets specifications required in subsequent process production or MRO.

We practice washing trials on your components in our own test centers and control the specifications of the required cleaning level in our laboratory.

TECHNOLOGY OF INDUSTRIAL WASHING

Rösler adapts to your requirements manufacturing equipment specially designed based on the components to be treated. Rösler fabricates custom made machines and systems. We are constantly working with our clients in the individual development of solutions for specific challenges of washing and degreasing. We also provide our own laboratory to carry out cleaning tests and analysis.

All of our equipment is manufactured from stainless steel AISI-304 and includes modern filtration systems, blow off zones and can include orientation of the components.

We provide you with more than 30 years of experience in R+D and engineering in the field of industrial degreasing.

Conveyor belt washing machine with external component transport system



Component before and after washing

Rösler laboratory for cleaning tests and analysis

DRUM WASHING SYSTEMS

The Rösler drum type machine is ideal for bulk treatment of large production volumes (nuts and bolts, machined and turned components).

Manufactured from stainless steel AISI 304, the washing machines can have different cycles such as: immersed degreasing, sprayed degreasing, washing, passivation or oiling and drying.

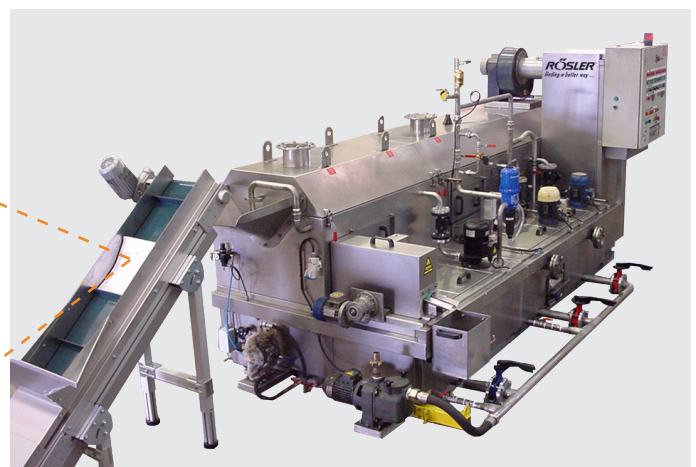
We provide various models with different diameters and a variable production (from 20 litres/h to 1000 litres/h). We also manufacture special type large diameter drums for volumes over 3000kg/h of components.

Rösler washing machines additional equipment:

Automatic component loading systems and weight control at the discharge point; in addition to oil separation, compound dosing systems and steam condensers



Drum washing system for degreasing and rinsing copper fittings; including a conveyor belt with a throughput rate up to 300 litres/h.



WASHING CABINETS

Rösler manufactures washing cabinets in stainless steel 1.4301(AISI 304), with different processing zones: multistage with degreasing, washing, passivation, blow off and drying. The washing is carried

out via centrifugal pumps that blast the cleaning liquid at high pressure, removing any stubborn contaminants and oils which can be on the surface.

Alternative processes:

- ▶ Horizontal rotation of the baskets
- ▶ Vertical rotation of the baskets for immersion bath and spray washing processes
- ▶ Placed on special fixtures for medium or large delicate components

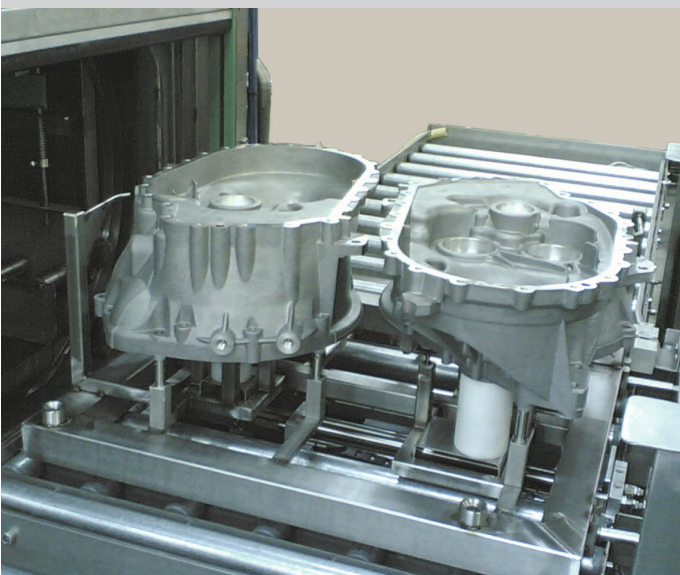
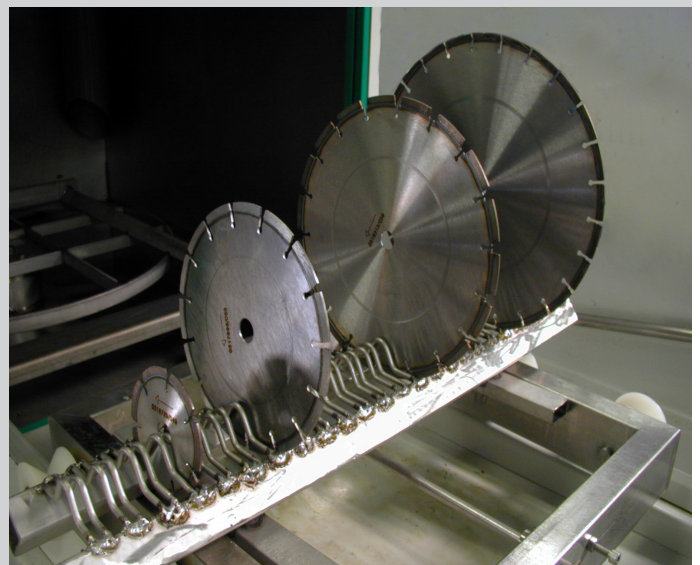
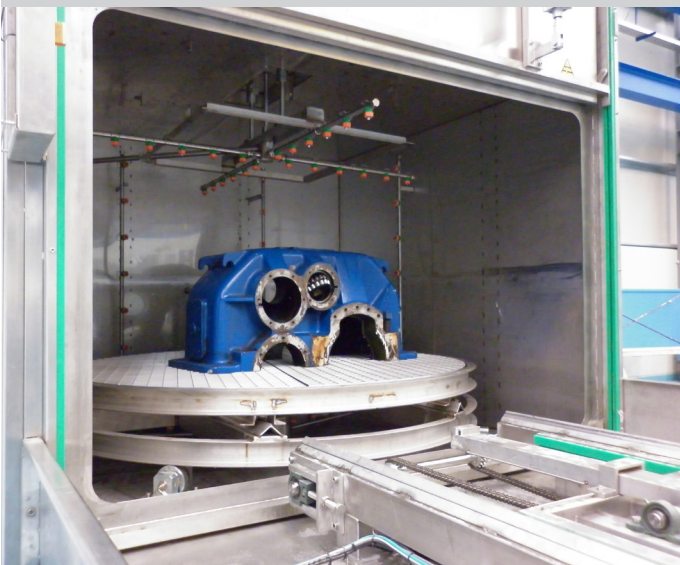
Options:

- ▶ Oil skimmer
- ▶ Filter systems with removable cartridges



Washing cabinet for big-sized components, such as gears of wind turbines (1,500 kg)
Dimensions of the cabin door: 2,400 mm (width) x 1,500 mm (height)

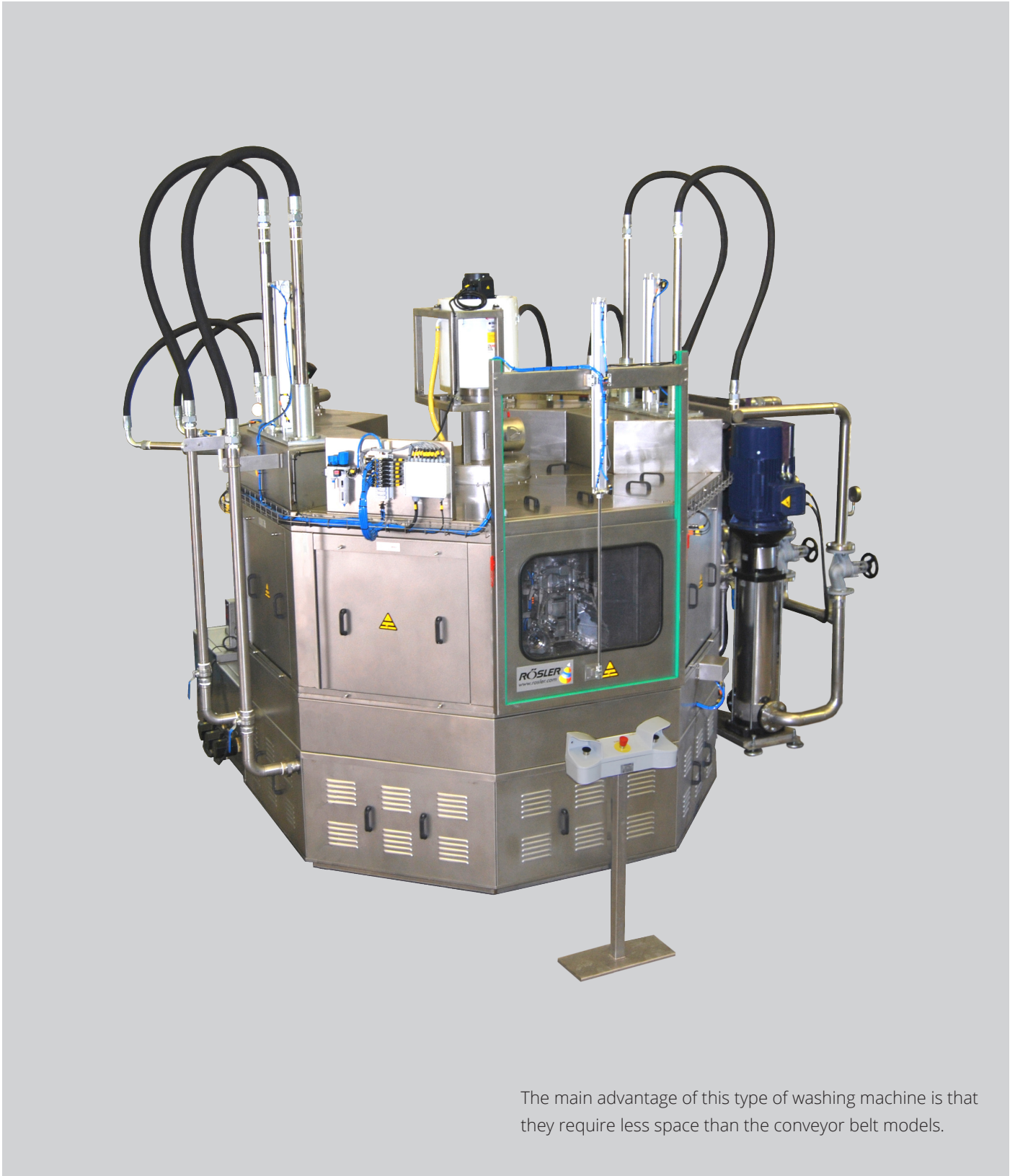
Examples of placement of components to be treated



INDEX ROTARY WASHING SYSTEMS

Rösler´s rotary washing machines consist of a rotary platform and various chambers for separating the washing, degreasing and blow off process. The components are placed directly on the rotary platform or on special designed fixtures based on the

shape and size of the components to be treated. The loading and unloading can be carried out manually or automatically using a robot.

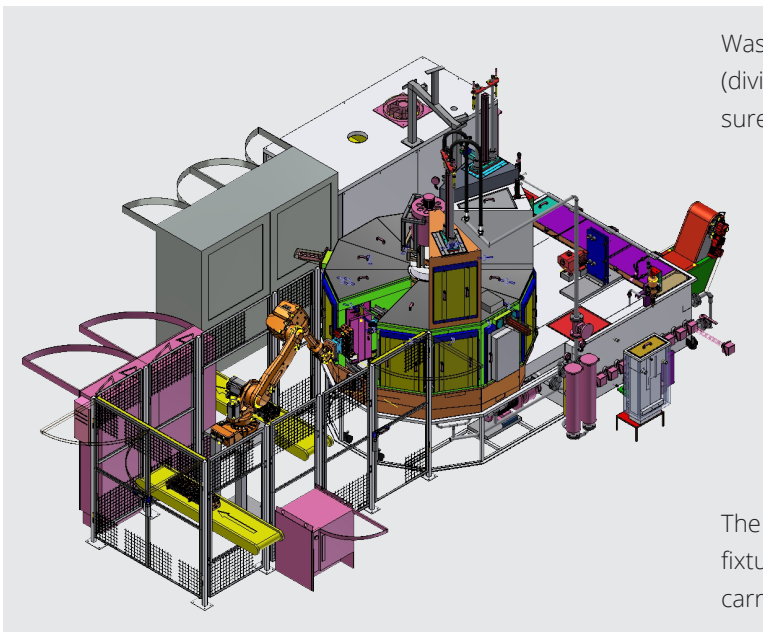
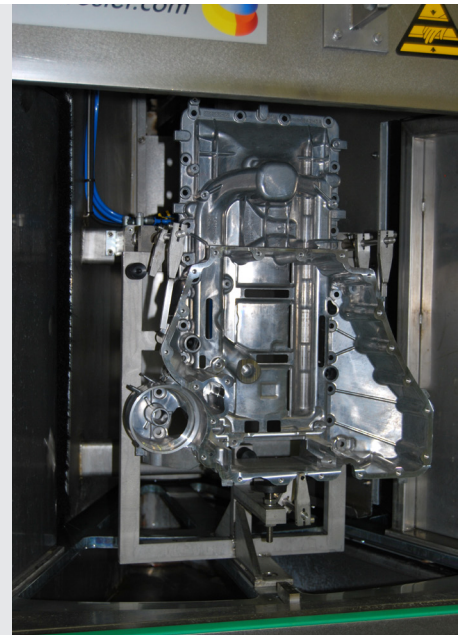


The main advantage of this type of washing machine is that they require less space than the conveyor belt models.



Cleaning levels crankcase:
High pressure zone: Gravimetric 5 mg
Low pressure zone: Gravimetric 20 mg

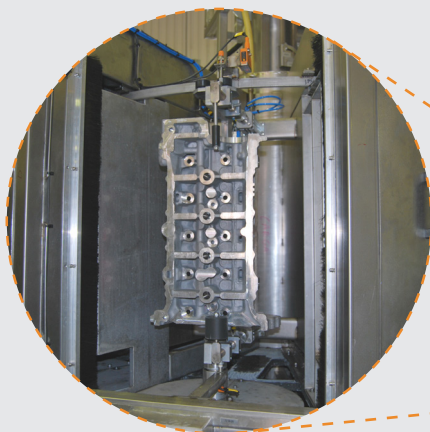
Cover:
Measured gravimetrically 3 mg



Washing installation with three process steps: degreasing (divided in two zones: high and medium pressure), high pressure washing and blow off.



The components are placed vertically on rotary transport fixtures. The loading and unloading of the components is carried out using a robot.



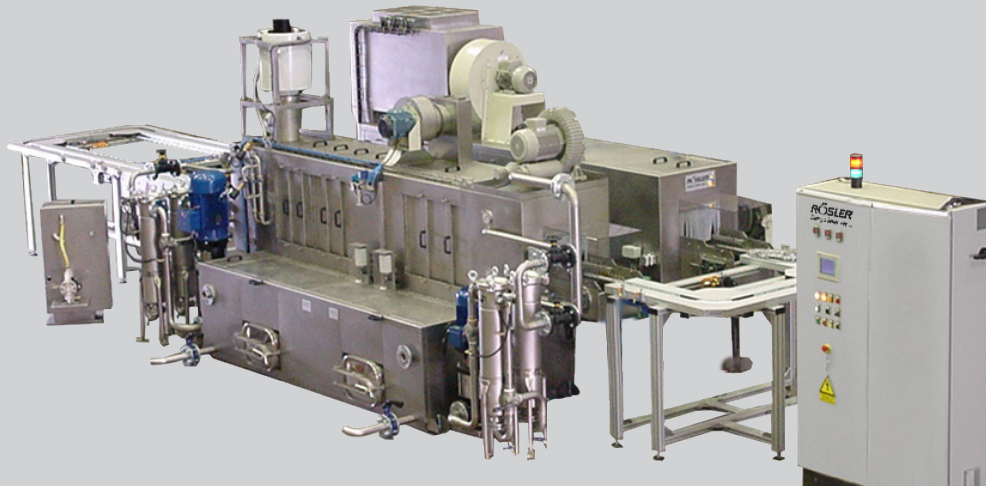
Rotary washing installation for washing cylinder heads with medium or high pressure (about 2900 psi). Level of cleanliness < 300 mg per component.



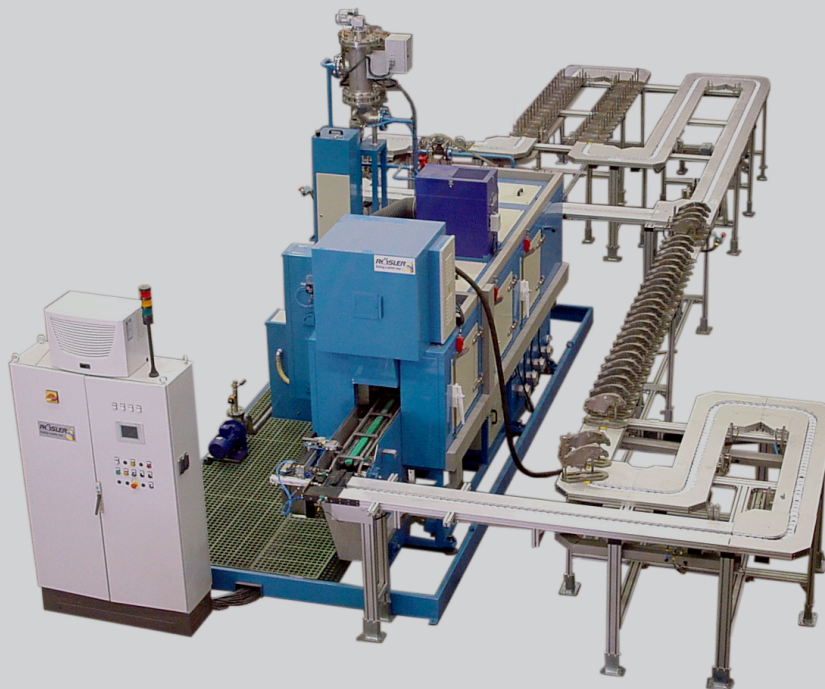
CONVEYOR BELT WASHING MACHINE

Rösler's continuous transport belt washing machines are manufactured from stainless steel 1.4301 (AISI 304) and are used for degreasing, washing, blowing and drying of metallic components which are placed directly on the belt or on

customized pallets according to the components to be treated. Our machines can be equipped with oil separators, medium or high pressure blowers, compound dosing systems, filter systems and vapor condensers.



Fully automatic double washing and filtering line of automotive components with adjacent drying.



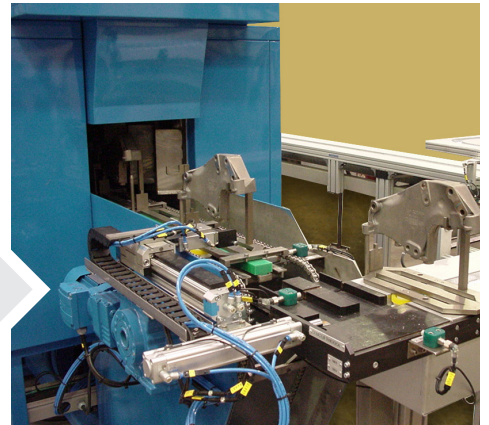
Fully automatic double-track cleaning and filtration line for workpieces from the automotive industry with subsequent drying.

CUSTOMIZED TRANSPORT SYSTEMS



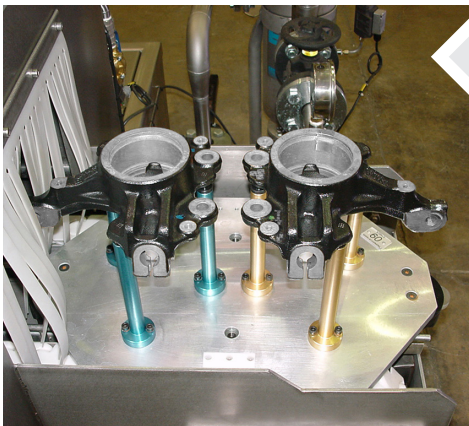
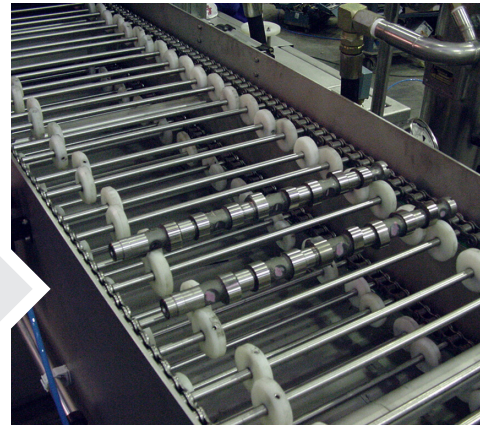
V6 engine block on sliding double chain transport.

Reinforced support rollers for high loads



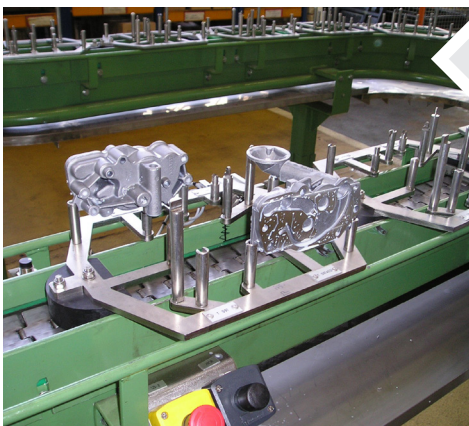
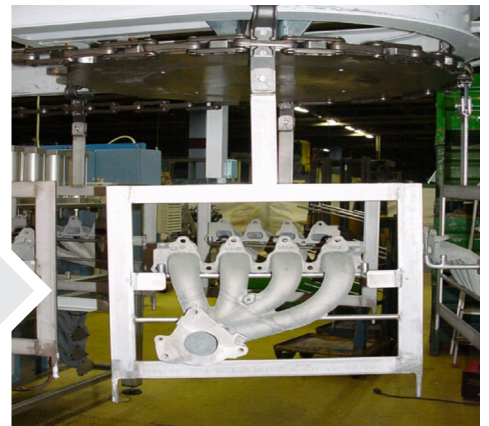
Transport with V supports for washing and drying.

Roller support for camshafts.



Double chain for steering joint support.

Custom-made component handling.



"Flex on line" transporter with special component handling.

Customised Workpiece holder

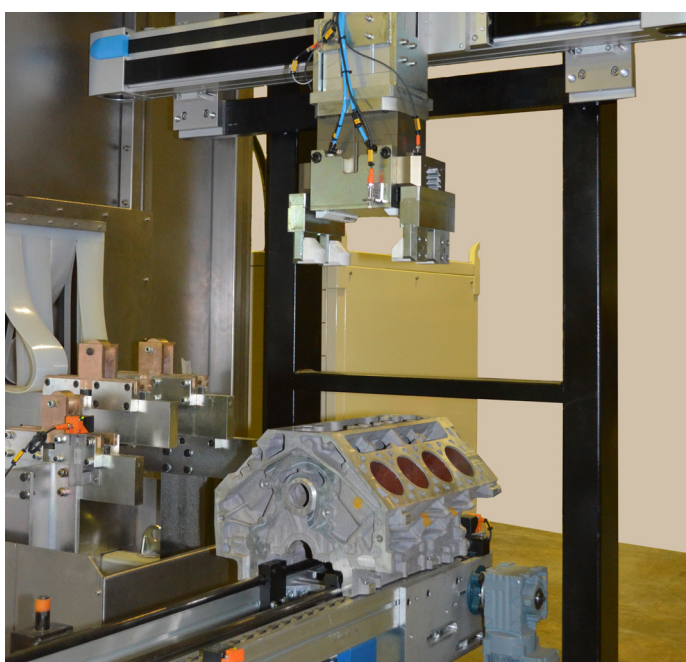


TRANSFER WASHING LINE SYSTEM

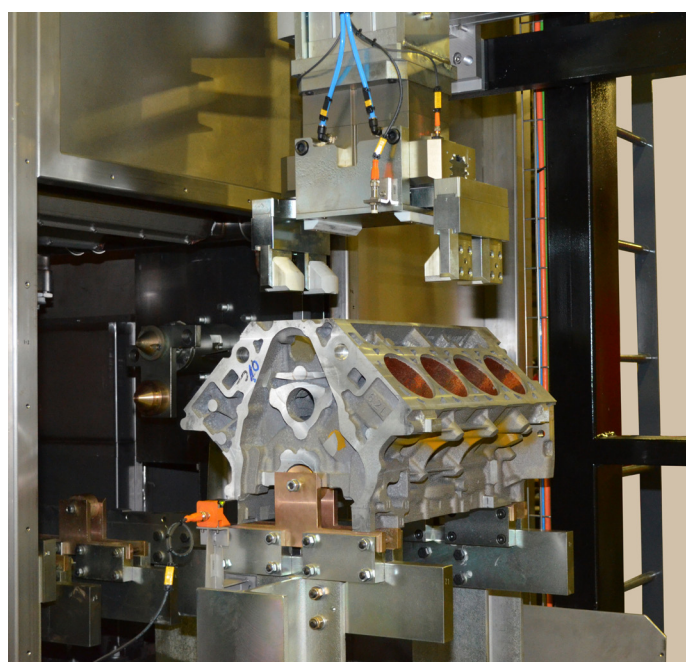
Arrangement of the different plant components on two levels for optimal use of the available space.



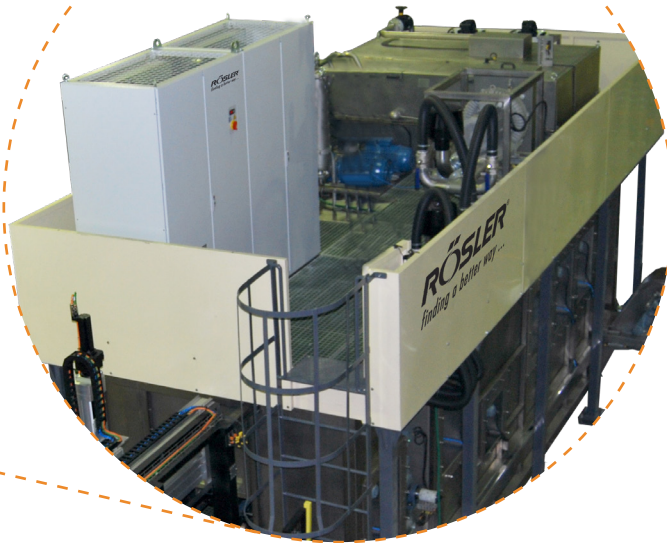
Transfer line system for washing parts using component rotation, targeted washing and blow off as well as general blow off while part's rotation.



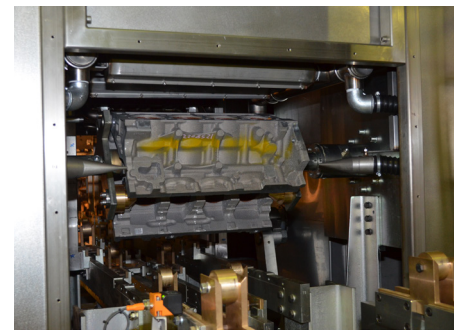
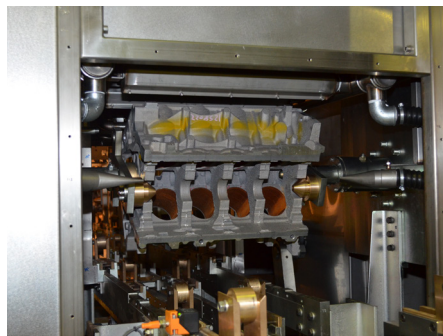
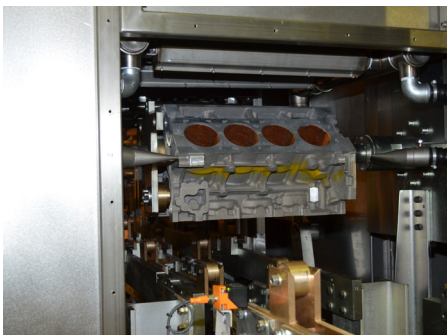
Loading zone, transfer of block using automatic manipulator



Unloading zone using second automatic manipulator and transfer of the components to production line

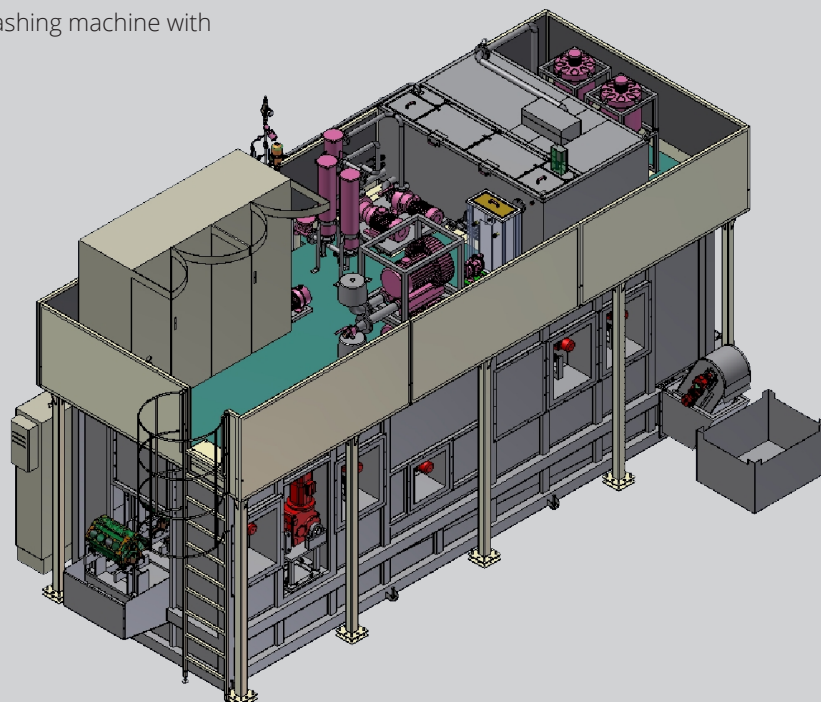


View of upper level where exchangers, refrigerators, storage tanks and medium pressure pumps are installed.



View of block rotation in the final blow off zone.

Example of a transfer washing machine with second level.



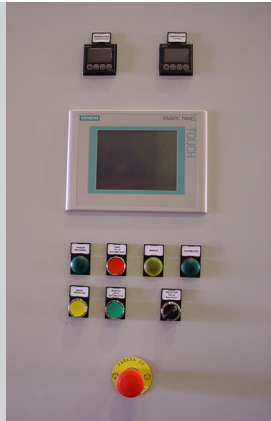
EQUIPMENT COMPONENTS:

To ensure our high quality standards we only use components from well-known companies that are leaders in their field.

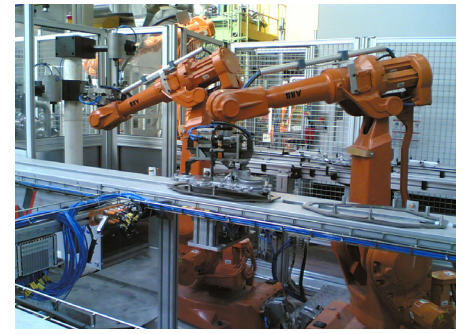
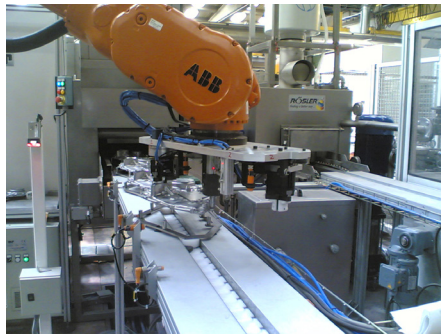
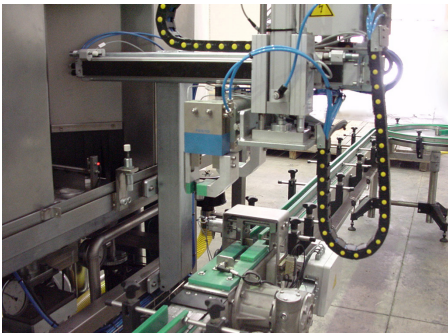
Control systems

We adapt to any PLC control system for automated control of the different process steps.

- Siemens
- Allen Bradley
- OMRON
- Telemecanique



Auxiliary equipment for water treatment: Demineralizing systems



Manipulator and robotic loading and unloading system



Duplex cartridge or filter bags up to 50 µm



Oil separators



Vapor aspiration system using centrifuge condenser

LEARNING FROM THE GLOBAL LEADER

Our comprehensive mass finishing know-how is founded on over 80 years of experience. As the global technology and market leader in the field of surface treatment we can offer proven

solutions ranging from a broad equipment and consumables portfolio to round-the-clock after-sales service. In our training seminars we are passing our extensive knowledge on to you.



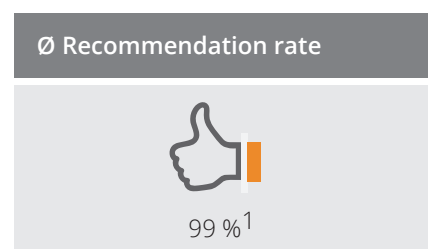
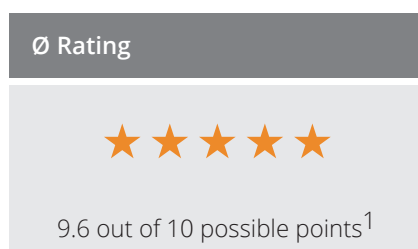
Rösler Academy

The central training center of the Rösler Oberflächentechnik GmbH

- ▶ An area of more than 1,350 m² for learning and working
- ▶ Equipped with the latest digital media and communication technologies
- ▶ Certified professional trainers
- ▶ Specialized fields: Mass finishing, shot blasting, lean management
- ▶ More than 10 different training seminars
- ▶ Focus on hands-on learning
- ▶ Training seminars in German and English
- ▶ Customized training seminars at customer locations upon request

Our professional trainers

All our trainers are certified and are among the best in their respective fields. In our training seminars you will benefit from the extensive experience of our trainers, who will provide you with first-hand practical knowledge.



¹ Source: Evaluation questionnaires filled out by participants, Status 31/12/2022

You can find more information about our seminars, dates and registration procedures under www.rosler-academy.com or scan the QR-Code.



Mass Finishing
Shot Blasting
AM Solutions
www.rosler.com

Germany

Rösler Oberflächentechnik GmbH
Werk Memmelsdorf
Vorstadt 1
D-96190 Untermmerzbach
Tel.: +49 9533 / 924-0
Fax: +49 9533 / 924-300
info@rosler.com

Rösler Oberflächentechnik GmbH
Werk Hausen
Hausen 1
D-96231 Bad Staffelstein
Tel.: +49 9533 / 924-0
Fax: +49 9533 / 924-300
info@rosler.com

USA

Rösler Metal Finishing USA, L.L.C.
1551 Denso Road
USA-Battle Creek
MI 49037
Tel.: +1 269 / 4413000
Fax: +1 269 / 4413001
rosler-us@rosler.com

France

Rösler France
Z.I. de la Fontaine d'Azon
CS 50513 - St. Clément
F-89105 Sens Cedex
Tel.: +33 3 / 86647979
Fax: +33 3 / 86655194
rosler-fr@rosler.com

Italy

Rösler Italiana S.r.l.
Via Elio Vittorini 10/12
I-20863 Concorezzo (MB)
Tel.: +39 039 / 611521
Fax: +39 039 / 6115232
rosler-it@rosler.com

Switzerland

Rösler Schweiz AG
Staffelbachstraße 189
Postfach 81
CH-5054 Kirchleerau
Tel.: +41 62 / 7385500
Fax: +41 62 / 7385580
rosler-ch@rosler.com

Spain

Rösler International GmbH & Co. KG
Sucursal en España
Polg. Ind. Cova Solera C/Roma, 7
E-08191 Rubí (Barcelona)
Tel.: +34 93 / 5885585
Fax: +34 93 / 5883209
rosler-es@rosler.com

Netherlands

Rösler Benelux B.V.
Reggestraat 18
NL-5347 JG Oss
Postbus 829
NL-5340 AV Oss
Tel.: +31 412 / 646600
Fax: +31 412 / 646046
rosler-nl@rosler.com

Belgium

Rösler Benelux B.V.
Avenue de Ramelot 6
Zoning Industriel
B-1480 Tubize (Saintes)
Tel.: +32 2 / 3610200
Fax: +32 2 / 3612831
rosler-be@rosler.com

Austria

Rösler Oberflächentechnik GmbH
Hetmanekgasse 15
A-1230 Wien
Tel.: +43 1 / 6985180-0
Fax: +43 1 / 6985182
rosler-at@rosler.com

Romania

Rösler Romania SRL
Str. Avram Iancu 39-43
RO-075100 Otopeni/ILFOV
Tel.: +40 21 / 352 4416
Fax: +40 21 / 352 4935
rosler-ro@rosler.com

Russia

Rösler Russland
Borovaya Str. 7, bldg. 4, office 107
111020 Moscow
Tel. / Fax: +7 495 / 247 55 80
rosler-ru@rosler.com

Great Britain

Rösler UK Ltd.
Unity Grove, School Lane
Knowsley Business Park
GB-Prescot, Merseyside L34 9GT
Tel.: +44 151 / 4820444
Fax: +44 151 / 4824400
rosler-uk@rosler.com

Brazil

Rösler Otec do Brasil LTDA
Av. Antonio Angelo Amadio, 1421
Centro Empresarial Castelo Branco
18550-000 Boituva
São Paulo - Brasil
Tel.: +55 15 / 3264-1117
Tel.: +55 15 / 3264-1112
info@rosler-otec.com.br

China

Rosler SURFACE-TECH (BEIJING) CO., LTD.
Beijing Office
Fu Hua Mansion, Office A-11-K
No. 8, Chao Yang Men North Avenue
Beijing 100027, P.R. China
Tel.: +86 10 / 6554 73 86
Fax: +86 10 / 6554 73 87
rosler-cn@rosler.com

and over 150 additional distributors
around the world



Find your contact