

Consumables



Mass Finishing

Shot Blasting

AM Solutions



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



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



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

Consumables	4
Customer Experience Center Mass Finishing	5
Selection criteria for Rösler consumables	6 - 7
Media and compound production	8 - 9
Ceramic media	10 - 13
Plastic media	14 - 15
Mass finishing compounds	16
Compounds for process water recycling systems	17
Compounds for applications using fresh water	18
Powder compounds	19
Grinding pastes and grinding powder	20
Polishing pastes and polishing powder	21
Dry polishing	22
Auxiliary mass finishing media	23
Process water cleaning	24 - 26
Rösler Smart Solutions	27

MEDIA AND COMPOUNDS

In addition to our equipment portfolio we can also offer the worldwide most comprehensive range of media and compounds, these are developed and produced in-house with the highest "made in Germany" quality. With more than 80 years of experience in the field of surface treatment we not only supply individual solutions for new finishing applications but also assist our customers to exploit the potential for product improvement and cost savings.

Developing stable processes with repeatable results is our business



The worldwide most comprehensive range of media and compounds in the market

With 15,000 individual products our consumables portfolio is by far the most comprehensive in the world. It includes ceramic and plastic grinding and polishing media, compounds and process water cleaning agents. Because of their excellent quality many of our consumables are approved for use in the aerospace, medial engineering and automotive industry. Of course, they can always be adapted to the requirements of our customers.





Our ceramic media production

Excellent quality and quick availability

We produce in compliance with strict ecological standards and our consumables production is subject to strict quality controls per DIN EN ISO 9001.

In our central warehouse we stock a minimum of 8,000 tons of media and compounds at any time. This allows us to quickly supply our customers around the world with the consumables they need.



CUSTOMER EXPERIENCE CENTER

MASS FINISHING

A major strength of the Rösler business approach is that **we look at all aspects of a finishing task**. The equipment and the processes are individually tailored to the respective finishing requirements, but also to their optimal integration into the customer's manufacturing operation. Most of the Rösler sales

branches have their own **Customer Experience Centers (CEC)**, equipped with the latest finishing equipment.

To investigate the various finishing possibilities, in our CEC we are conducting **processing trials** with the work pieces of our respective customers.







Process development and process optimization

Our all-around approach guarantees perfect finishing solutions. This includes processing trials, process development, selection of the right machinery and a professional after sales service.

In our CEC, equipped with ultra-modern equipment, we can run practically any mass finishing process. State-of-the-art **physical and chemical measuring** equipment represents a vital tool for process development and optimization.

The entire focus of our specialists in the engineering and R & D departments is on developing **tailormade finishing solutions**.

Product development and optimization

The enormous depth of the Rösler product range, CEC around the world and our well-equipped laboratory at the Untermerzbach location in Germany are an excellent basis for the development of innovative and cost-efficient products in the field of mass finishing.

All our products, be it consumables, finishing equipment,

vibratory motors, process water cleaning centrifuges, as well as work piece handling systems and post processing equipment like dryers, are **developed and manufactured** in-house. Such a high manufacturing depth is unparalleled in our industry.

SELECTION CRITERIA FOR RÖSLER CONSUMABLES

Mass finishing processes

Deburring | Cut-down (rough grinding) | Fine grinding | Surface smoothing | Brightening | Polishing | Edge radiusing | Cleaning | Degreasing/De-oiling | Descaling | De-rusting | Corrosion protection | Ball burnishing | Pressure deburring

Media	Туре	The grinding performance and the surface finish depend on which media type is selected.
	Shape	To reach all surface areas on the work pieces the shape of the media must be adapted to the work piece geometry. This also helps prevent media lodging in the work pieces. The media shape also affects the grinding performance: Round and curved shapes are generally less aggressive than media with edges.
	Size	Larger and heavier media produce a more intensive grinding performance but create a rougher surface finish.
	Separation	There must be a sufficiently big size difference between work pieces and media to allow safe separation of the finished work pieces from the media. Ferromagnetic work pieces can be separated from the media with magnetic tools. For special applications we develop individual separation solutions.
Compounds	Туре	The purpose of mass finishing compounds is primarily to keep the surface of the media and work pieces clean and to make sure that the mass finishing processes remain stable. The compound selection usually depends on The work piece material The finishing application The desired compound characteristics The finishing objective
Additives	Defoamers	For the quick suppression of unwanted foam in the finishing machine we offer various defoamers. The commonly used products are our additives ES3, ES4 and ES7. Our defoamers are easy to handle. They can be directly sprayed into the machine or added to the process water.
	Corrosion protection and increased degreasing effect	For boosting the desired finishing effect we offer various additives. These are generally in liquid form and can be added batchwise or continuously.
	Biocides	Biocides are frequently used in process water recycling systems. They reduce the risk of bacterial infection and facilitate maintenance of the process water. This results in higher uptimes and fewer changes of the process water.

If you have any questions, please contact us or our sales representatives.



Special processes

The RÖSLER Keramo-Finish [®] process is ideal for polishing work pieces made from iron, iron alloys, steel, stainless steel, brass, copper, silver and certain zinc alloys.
The respective media and compounds are
 RP and RCP porcelain media with minimal wear for surface grinding and polishing operations RÖSLER Keramo-Finish[®] pastes, type RSP and RPP
▶ Rösler compounds, type FC and ZF, for rinsing out the paste, surface cleaning, corrosion protection, brightening and high gloss polishing
The ISF (isotropic finishing) method combines chemical and mechanical surface treatment effects. It is ideal for finishing the surface of high-value components without rounding the work piece edge.
The respective media and compounds are
▶ Special ISF media, type FM
▶ Compounds for chemically accelerated mass finishing. The compounds are specially adapted to the respective work piece materials.
Ball burnishing is a cost-efficient process that generates a decorative luster on work pieces made from steel, stainless steel and non-ferrous metals. At the same time it has a light deburring effect and breaks sharp edges.
The respective media and compounds are
Carbon steel and stainless steel media, type RESK, RESA or SAT, for ball burnishing and pressure deburring. There is practically no media wear.
▶ Ball burnishing compounds, type FC. The compounds are frequently adapted to special finishing applications.
Granular polishing media create extremely fine surface finishes. They cause minimal material removal from the work pieces and produce very smooth, shiny surfaces, as if polished by hand.
The respective media and compounds are
 ▶ Rösler polishing media, type SV and SVK, acting as carrier for the respective polishing paste
▶ Rösler dry polishing paste, type RPP 7 and RSP 7

You can choose from our broad machinery range for the optimal surface finishing of your individual work pieces:

Rotary vibrators | Tub vibrators | Linear continuous flow installations | Rotomatic | Long Radius | High energy disc systems | Drag Finishers | Plunge grinding machines | Surf-Finisher | Multi-Surf-Finisher | Drying systems | Process water cleaning & recycling systems



MEDIA AND COMPOUNDS – ALL MADE IN-HOUSE

The worldwide most comprehensive product range



Compound production with state-of-the-art equipment

During the production of our compounds we leave nothing to chance. Our entire focus is on maintaining the highest quality. Our computer-controlled production equipment is precisely mixing the respective raw materials in fully automatic or semi-automatic mode. And the finished products are subject to stringent quality control procedures. Subsequently, specially designed filling stations transfer the compounds into suitable transport containers, which are suitably labeled.

Production of ceramic media

The approved raw materials undergo a comprehensive conditioning process. The resulting mix is automatically shaped and then sintered at high temperatures in a continuous firing process. The ultra-modern control systems in our kilns guarantee a precise temperature curve during the entire firing operation. This is an indispensable precondition for consistent high product qualities and a guarantee for our customers to always achieve the required finishing results. For more than 80 years we have developed and produced high-quality grinding and polishing media for mass finishing applications. Rösler media ensure not only that all work pieces are optimally finished but also that the required quality is maintained, and the costs are tightly controlled.





Production of plastic media

The entire manufacturing operation, from mixing the raw materials to shaping and curing, runs fully automatically. The entire process is computer-controlled and continuously monitored. In contrast to our competitors we are adding an important step to our production process: After they have been shaped, all our plastic media undergo a tempering

operation that follows a precise temperature curve. This crucial step significantly improves the overall quality of our plastic media and is a guarantee for consistent wear characteristics and excellent grinding performance. This ensures repeatable, high-quality surface finishing results.



The non-foaming plastic media version, type "N"

The use of plastic media occasionally causes unwanted foaming, which can adversely affect the grinding performance. With our newly developed non-foaming "N" version – offered for all our standard plastic media recipes – we have resolved this problem. The non-foaming media guarantee stable finishing processes and reduce the amount of dirt residues

on the work pieces and in the machine. This guarantees more stable finishing processes with absolutely consistent results, along with a lower consumption of valuable resources like fresh water, compounds and process water cleaners.

CERAMIC MEDIA

Ordering example:	Type RM	Dimensions 10/15	Shape S	Shape	D Triangle	F Triangle	S Angle cut Triangle	Z Cylinder	ZS Angle cut cylinder	QZ Quinto
						1				
Туре	Spec. weight g/cm³	Grinding perfor- mance	Grinding effect	Dimensions (mm)	a/b	a/b	i b	a/b	a/b	a/b
RP	2.91				02/02 09/09 03/03 10/06 04/04 10/10 06/06 15/15 07/07	10/10	03/08 06/10 04/04 08/12 04/10 09/09 05/05 10/15 05/10 12/04	0.8/03 03/10 1.4/05 04/10 1.5/05 05/10 1.7/05 06/10 01/03 07/15 02/05 10/15 03/05 12/25	01/03 04/10 1.2/03 04/13 1.4/05 05/10 1.5/05 06/10 1.7/05 06/13 02/05 07/15 03/05 08/15 03/10 09/20 04/05 10/20	08/08
RF	2.40				03/03 10/10 04/04 13/13 05/05 15/10 06/06 15/15 08/08 20/20	06/06	10/06	03/03 04/04 06/08 10/14 12/12	03/05 06/10 08/15 10/10 15/36	
RCP	3.60		gg ween the state of the		03/03 09/09 04/04 15/15 06/06 20/20 07/07 25/25 08/08		04/13 10/15 05/12 12/12 06/06 13/13 07/07 15/18 08/08 20/08 09/09	1.7/04 08/13 02/05 10/16 03/05 12/15 04/10 18/30 07/15	1.7/05 07/13 02/05 08/10 2.5/05 09/15 03/05 10/08 04/05 10/15 04/10 12/20 05/10 13/15	10/12 14/17
RM	2.49		والماد واستاني مرين		02/02 20/20 03/03 25/25 04/04 30/30 06/06 40/40 08/08 50/50 10/10 13/13 15/15	06/06 08/08 10/10 13/13 15/15 20/20	03/10 15/18 04/10 16/32 06/10 20/20 08/20 20/30 10/15 25/25 10/20 30/25 13/26 30/30 15/15 35/35	02/05 12/16 04/10 12/25 05/08 15/40 06/10 20/40 07/15 08/20 09/13 10/16	1.5/06 09/20 02/05 10/15 03/05 10/20 03/10 12/20 04/10 12/25 05/10 15/25 06/13 15/30 07/15 20/20 08/15 25/30	15/15 15/18
RPM	2.50		M. Jambana		04/04 06/06 10/10 15/15 20/20 25/25	20/20	03/10 13/13 04/10 15/15 05/10 20/20 06/06 25/25 08/20 30/25 10/15 35/35	04/08 10/20 20/40	04/10 15/30 05/10 20/40 06/13 25/30 09/20 10/20 12/20	08/08
RCB	2.50		management		04/04 15/15 05/05 20/20 06/06 25/25 08/08 30/30 10/10 40/40 13/13	10/10 15/25	04/10 13/15 06/15 15/15 07/07 20/20 10/10 25/25 10/15 30/30	06/13 10/20 15/40 20/40	03/10 10/20 15/30 20/40	
RS	2.52		ring() pringth		02/02 15/15 03/03 16/16 04/04 18/20 05/05 20/12 05/10 20/16 06/06 20/20 06/08 25/25 07/07 30/25 08/08 30/30 10/08 35/10 10/10 40/40 13/13 50/50	06/06 10/10 13/13 15/15 20/20 30/30	03/05 15/15 03/10 15/18 04/04 16/32 04/10 20/20 05/10 20/30 06/06 22/08 06/10 25/25 08/20 30/25 09/10 30/30 10/15 35/35 10/20 40/40 13/26	01/04 10/20 1.4/04 12/12 1.7/04 12/16 02/05 14/40 03/10 15/30 04/10 15/40 05/10 18/40 06/10 20/40 06/14 07/13 08/20	1.5/03 08/20 02/05 09/20 2.7/05 10/15 03/05 10/20 03/10 12/20 04/10 12/25 05/10 15/20 06/10 15/25 06/13 15/30 07/13 20/40 07/15 25/30	10/12 12/12 15/15 15/18 15/25 20/20 25/25

Other types are available upon request.



Other media dimensions are available upon request Special media types for specific applications – please contact us or our sales representatives.

DZ Tristar	DZS Angle cut Tristar	ST Star	E Ellipse	ES Angle cut Ellipse	W Elbow	P Pyramid	K Cone	R Rhombus	PA Paraboloid	G Granulate	MS Multi-Shape (patented)
		X	4			A	1			# 2 P	
	a b		a do	a a a a a a a a a a a a a a a a a a a		0 0	© GA	o a	200	23	a
04/04 02/02 SK 05/05 03/03 SK 06/06 04/04 SK 08/08 06/06 SK 10/10 08/08 SK 10/10 SK	a/b 04/08 06/06 06/10 10/12 10/10 SK	a/b	a/b/c 08/09/03 20/20/08 10/10/05 15/15/04 15/15/06	a/b/c 15/15/04 15/15/06	a/b 10/10 SK	a/b	а	a/b/c	a/b	Ø 2 3 4 5 6 8	a/b/c
04/04 02/02 SK	04/04			20/20/08						3 4 6	
04/04 06/06 SK 05/05 10/10 SK 06/06 08/08 10/10	04/05		08/09/03 15/15/06 20/20/08	15/15/06 25/30/13							
03/03 06/06 SK 04/04 10/10 SK 06/06 10/10 15/15 20/20 30/30	04/04 06/06 06/10 10/12 15/06 15/18 20/20 25/25 30/12 10/12 SK	20/08 22/12 30/12 35/12 45/16	14/14/05 15/15/04 15/15/06 20/20/08 20/20/10	15/15/04 15/15/06 20/15/08 25/25/10 25/25/13	10/05 10/10 14/14 15/10 15/15 20/20 25/25	15/16 22/25 25/27 30/34 35/39 40/45 P/R 45/50 P/R 10 P/PQ 15 P/PQ	15 19 20 30 35 40 45 60	35/18/25 50/30/30	30/17 50/28	1.2 9 2 10 3 11 4 14 5 18 6 7	20/09/10 41/19/20
10/10 20/20	10/10 15/15 15/18 20/10	20/12 22/10 30/12 45/16	14/14/05 15/15/04 15/15/06 20/20/08 20/20/10 25/25/10 25/25/15	20/15/08 25/25/13 25/30/10	20/20 15/15 SK	15/16 22/29 25/27 30/34 35/39 40/45 P/R 45/50 P/R 15 P/PQ	19 20 25 30 45				
03/03 04/04 10/10 20/20	10/20 20/10	30/12 45/16	08/10/03 15/15/04 15/15/06 20/20/08			15/16 25/27 30/34 35/39 40/45 P/R	30 40 60				
03/03 04/04 05/05 06/06 07/07 08/08 10/10 15/15 20/20 04/04 SK 06/06 SK 10/10 SK	04/04 05/05 06/06 06/10 10/12 10/15 15/18 20/20 30/12 10/12 SK 15/15 SK	20/08 20/12 22/12 30/12 35/12 45/16	10/10/05 14/14/05 15/15/04 15/15/06 20/20/08 20/20/10 25/25/10 25/25/15	15/15/04 15/15/06 20/15/06 25/15/10 25/25/13 30/30/12	10/05 10/10 15/10 15/15 20/20 14/14 SK	15/16 17/20 22/25 25/27 30/34 35/39 40/45 P/R 45/50 P/R 10 P/PQ 15 P/PQ	15 19 20 25 30 35 40 60	35/18/25 50/30/30 50/40/40 50/40/30	30/17 50/28	2 3 4 5 6 7 8 11	20/09/10 41/19/20

... Continues on next page

CERAMIC MEDIA

Ordering example:	Type RM	Dimensions 10/15	Shape S	Shape		D angle	F Triangle with big radius	Ang	S gle cut		Z nder	Ang	ZS le cut inder	QZ Quinto
					1		With big radius		ungic	0		Cyli		
Тур	Spec. weight g/cm³	Grinding perfor- mance	Grinding effect	Dimensions (mm)	a				b	8	b	e e	b	
		(///)				a/b	a/b		a/b		/b		/b	a/b
RSF	2.39		ndreji afanyai ma qisi		02/02 03/03 04/04 05/05 06/06 07/07 08/08 10/06 10/10	15/10 15/15 20/12 20/20 25/25 30/20 30/30 40/40 50/50		04/10 06/10 10/06 10/15 13/26 15/10 15/18	20/30 25/25	07/08		02/05 03/05 04/05 04/10 06/13 07/15 09/15	10/15 10/20 12/20 15/25 20/20 25/30	12/12
RFS	2.8		ndra firmfansynis soningsis		03/03 04/04 06/06 10/10			05/08 06/10 10/06 10/15 15/18				03/05 04/05 06/10 07/10 10/20 15/25		
RSG	2.51		Adding to my point		02/02 03/03 04/04 06/06 08/08 10/10 13/13	15/15 20/20 25/25 30/30 35/35 40/40	06/06 10/10 13/13 15/15	04/10 06/10 08/20 10/15 10/20 13/26 15/15 15/18	20/20 20/30 22/08 22/24 25/25 30/25 30/30 35/35	03/05 06/10 06/14 07/15 10/16 12/16	15/30 18/40 20/40	1.5/04 02/05 03/05 03/10 04/05 04/10 05/10 06/13 07/15	08/15 10/20 12/20 12/25 15/25 15/30 20/40 25/30	10/12 15/18 20/20 25/25
RXF	2.63		Opensylver		04/04 06/06 07/07 08/08 10/10	13/13 15/15 20/20 25/25 30/30	10/10 13/13 20/20 25/25	04/04 06/10 08/20 10/15 13/13 15/15	15/18 25/30 30/23 30/30 35/35			1.2/03 1.7/03 02/05 03/05 04/10 05/10	06/13 07/15 10/20 12/20 15/25	10/12
RX	2.60		Prophy .		03/03 04/04 05/05 06/06 07/07 08/08 10/10	13/13 15/15 20/20 25/15 25/25 30/30	08/08 10/10 15/15	06/10 08/20 10/10 10/15 12/10 13/13 15/15	15/18 20/20 22/08 22/24 25/25 30/25	07/13 10/15		1.7/03 03/05 04/05 06/10 07/15	08/15 12/20 15/30 20/40	10/12 15/15 15/18
RMB/D1	2.55		John Called		04/04 06/06 08/08 10/10 13/13 15/15	20/20 25/15 25/25 30/30 40/40	08/06 13/13 15/15	04/08 06/13 10/15 13/13 15/15	15/18 20/20 25/25 30/23 30/30	02/06 07/13 08/20 10/20 20/40		02/05 03/05 04/10 05/10 06/13 07/15	08/15 10/20 12/25 15/25 20/20	12/12 15/15 15/18 20/20
RXX	2.67		MM		04/04 06/06 08/08 10/10 13/13 15/15	20/20 25/15 25/25 30/30	10/10 15/15 25/25	04/04 06/10 08/08 09/09 10/10 10/15 12/20 13/13 15/15	15/18 20/20 22/08 22/24 25/25 30/30 35/35 40/40	03/10 04/10 06/10 07/13 15/30 20/40		03/05 04/05 05/10 06/10 07/15 08/15	09/15 10/20 12/20 15/25	10/12 15/15 20/20

Other types are available upon request.



DZ Tristar	DZS Angle cut Tristar	ST Star	E Ellipse	ES Angle cut Ellipse	W Elbow	P Pyramid	K Cone	R Rhombus	PA Paraboloid	G Granulate	MS Multi-Shape (patented)
		X	4			1		0		200	
a/b	a/b	a/b	a/b/c	a/b/c	a/b	a/b	a a	a/b/c	a/b	ø	a/b/c
	10/12 15/18	20/12 20/08 22/12 30/12 35/12 45/16	10/12/05 15/15/06 20/20/08 25/25/10 25/25/13	15/15/06 20/20/08 25/25/10 25/30/10 30/30/12	10/10 15/10 15/15 20/12			50/30/30 50/40/30 50/40/40			
02/02 SK 03/03 SK 04/04 SK 06/06 SK											
04/04 05/05 06/06 10/10 04/04 SK 06/06 SK 10/10 SK	04/10 06/06 06/10 10/12 15/15 15/18 20/20 20/30 25/25 30/10	20/08 22/12 30/12 35/12 45/16	10/12/05 14/14/05 15/15/04 15/15/06 20/20/08	15/15/06 25/25/10 25/25/13	10/10 15/15 20/20	15/16 22/25 25/27 30/34 35/39 40/45 P/R 45/50 P/R 15 P/PQ	15 19 20 30 35 40	50/30/30	30/17 50/28	2 3 4 5 6 8 11 18	20/09/10 41/19/20
06/06	04/04 04/10 06/06 10/12 15/18 15/10 SK	30/12 45/16	08/10/03 14/14/05 15/15/06	20/20/08	14/14 SK	35/39				5.5	
06/06 10/10	10/12 15/18		14/14/05 15/15/06 20/20/08	25/50/13		10 P/PQ 15 P/PQ					20/09/10 41/19/20
03/03 04/04 06/06 08/08 10/10	04/04 06/06 10/10 10/12 13/20 15/18 20/20 25/10 30/12	20/08 30/12 35/12	15/15/04 15/15/06 20/20/08 25/25/10	15/15/06 20/20/08	20/20	15/16 25/27 10 P/PQ 15 P/PQ		50/30/30		8	20/09/10 41/19/20
10/10	10/12 15/18 15/06 20/20 30/10	45/16	14/14/05 20/20/08	25/25/13	10/10 15/10 15/15 20/20			50/40/40			

PLASTIC MEDIA

Ordering example:	Type RKM	Dimensions 40	Shape
All standard pl	lastic media are "N" version	also available in th	e
Туре	Spec. weight g/cm³	Grinding performance	Grinding effect
RKF	1.51		
RKM	1.72		- market from the former
RKH/4	1.97		
RKK	1.79		and house below the site.
RKB/W	1.78		with the half was the
RKG	1.72		Mayora Markayi da karanga
RKB/WB2	1.80		Haray Apple Control
RKV	1.82		the book of the book of
RKS	1.85		A Proof Hay
RKE	1.82		44 horbert of the forest
RKX	1.82		applant live part

Shape		K Cone			P Pyra				
Dimensions (mm)		a a			a	7			
	8 10 12 15	20 25 30		6 PQ 10 12 15	20 25 30 40	50 60			
	10 12 15 18 20	25 30 35 40 50	60 70	6 PQ 10 12 15 20	25 30 40 45 50	60 70 80			
	6 10 12 15	18 20 25 30		6 PQ 10 12 15	20				
	10 12 15 20	25 30 40 50		10 12 15 20	25 30 40 50	60			
	10 12 15 18	20 25 30 35	40 50 60 70	6 PQ 10 12 15	20 25 30 40	50 60			
	6 8 10	12 15 18	20 25 30	6 PQ 10 12 15	20 30				
	12 15 20 25	30 35 40 50	60	12 15 20 25	30 40 45 50				
	10 12 15 18	20 25 30 40	60	10 12 15 20	30				
	8 10 12 15	20 25 30 40	50 60	10 12 15 20	25 30 40 50	60 80			
	10 12 15 18	20 25 30 40		6 PQ 10 12 15	20 25 30				
	10 12 15	20 25 30		6 PQ 10 15 20	30 40				

Other types, dimensions and colors are available upon request.



PA Paraboloid	PDZ Tristar Pyramid	DK Wedge	QZ Quinto	L Lense
				•
a/b	a a	a/b	a	a a
16 (16/10) 20 (20/11) 30 (29/17) 40 (40/23)				
16 (16/10) 40 (40/23) 20 (20/11) 50 (50/27) 30 (29/17) 60 (60/33) 35 (35/19) 70 (70/39)	20 65/25 DZ 25 30 40 60			16
16 (16/10) 20 (20/11) 30 (29/17)	20 30	10/20 12/16 15/20 20/36	20	16
20 (20/11) 60 (60/33) 30 (29/17) 40 (40/23) 50 (50/27)	20 30 40			
16 (16/10) 40 (40/23) 20 (20/11) 50 (50/27) 30 (29/17) 60 (60/33) 35 (35/19) 70 (70/39)	20 25 30 40 60	10/20		
16 (16/10) 20 (20/11) 30 (29/17)	20	10/20		16
20 (20/11) 60 (60/33) 30 (29/17) 70 (70/39) 40 (40/23) 50 (50/27)	20 30 60	10/20	20 30	16
16 (16/10) 20 (20/11) 30 (29/17)	30			
16 (16/10) 50 (50/27) 20 (20/11) 60 (60/33) 30 (29/17) 70 (70/39) 40 (40/23)	20 25 30 40 60			
16 (16/10) 20 (20/11) 30 (29/17) 40 (40/23)				
20 (20/11) 30 (29/17) 50 (50/27)				

MASS FINISHING COMPOUNDS, ALL MADE IN-HOUSE

Globally the largest product range

Compounds are key ingredients for all mass finishing applications. They represent the perfect combination of eco-friendly production, precision of mass finishing processes and top quality. We are continuously striving to improve our products and processes, be it in our chemical laboratories or our Customer Experience Centers. This ensures that we are always pushing further improvements of the mass finishing technology – for the benefit of our customers.

Of course, our activities also include the development of new possibilities for cleaning and recycling the process water. The complete control of raw materials and finished products per DIN EN ISO 9001 is proof of the strict quality standards in the production of our consumables. Irrespective of whether you use standard or special products, cost efficiency and environmental protection are always part of your mass finishing operation.





You can find more information here:



COMPOUNDS FOR PROCESS WATER RECYCLING SYSTEMS

Nowadays most mass finishing machines are operated in conjunction with process water cleaning and recycling systems. The compounds used for such cleaning and recycling operations combine functionality with biological stability, high uptime and high-quality finishing results, irrespective of the application. Today, compounds for recycling mode, in combination with suitable finishing equipment and flocculants are an essential part of modern mass finishing technologies.

To make a mass finishing process even more stable and sustainable, we recently developed our Long-Life Compounds.

Long-Life Compounds minimize the maintenance work for recycling systems and, in conjunction with new process water cleaning equipment, they generate cost savings of up to 60 percent. The raw materials used in the production of the Long-Life Compounds allow particularly clean sanitary finishing operations. This results in a doubling of the process water uptime, causing less machine down times and increasing overall productivity and equipment availability. Additional benefits of the Long-Life Compounds are lower disposal costs and – since no biocides or any other additives are required – easier handling of the recycling operation.

	Туре	ZF 110 i	ZF 113	ZF 138	ZF 311	ZF 322	ZF 322 S	rd
	Description	Excellent corrosion protection for all rust-sensitive ferrous metals	General cleaning compound that offers corrosion protection for all ferrous and non- ferrous metals	Cleaning compound with excellent corrosion protection for all ferrous metals	Low-foam cleaning and passivating compound with corrosion protection, particularly suitable for stampings covered with oil	Highly effective degreasing/ de-oiling compound with corrosion protection for all metals	Highly effective degreasing/ de-oiling compound with good corrosion protection for all ferrous and non- ferrous metals	Standard
	pH value 0.5 %	9.9	8.9	9.4	9.6	8.4	9.0	
	Mild steel	++	+	++	++	+	++	
	Stainless steel	+	+	++	+	++	++	
	Copper/Brass	•	+	•	•	+	+	
2	Aluminum	•	+	•	•	++	++	
	Zinc	•	+	•	•	+	++	
	Magnesium		•			•	+	
	Grinding / Deburring / Edge radiusing	++	++	++	++	+	++	
	Degreasing/ De-oiling	•	+	+	++	++	++	
(Smoothing/ Brightening	++	+	•	•	+	+	
	Corrosion protection	++	+	++	++	+	++	
)	Cleaning	+	+	++	++	++	+	
	Degreasing	•	+	++	++	++	++	
-	Brightening	•	+	++	•	++	+	
	Foaming	•	•	•	•	•	•	
		LF 110	LF 113	LF 138	-	LF 322	LF 322	

We reserve the right for technical changes.

++ = Excellent/high suitability

+ = Medium suitability

= Limited suitability

COMPOUNDS FOR APPLICATIONS USING FRESH WATER

Liquid compounds are the foundation for modern mass finishing processes. They keep the process stable and, thanks to their excellent ability to remove contaminants, they keep the work pieces and media clean. They also ensure that the media

maintains its functionality – in any mass finishing operation. The Rösler program offers you the right product for your individual applications and ensures high cost-efficiency with excellent protection of the environment.

	Туре	FC 115	FC 120	FC 230	FC 310	FC 396	FC 410	FC 430	FC 630 AL
	Description	Excellent corrosion protection for all rust-sensitive ferrous metals	General Cleaning and polishing compound with corrosion protection	Cleaning and polishing compound for non-ferrous metals and stainless steel	Alkaline liquid compound for all metals	Highly alkaline degreasing compound for very oily work pieces	Highly acidic pickling compound	Acidic pickling and polishing compound for all non-ferrous metals and stainless steel	Polishing compound with excellent brightening effect on all metals, especially titanium
	pH value 0.5 %	8.8	7.6	7.8	10.0	11.7	1.8	2.8	7.9
	Mild steel	++	+	•	++	++	+	•	•
	Stainless steel	•	+	++	++	++	+	++	++
erial	Copper/Brass	•	+	++	+	•	+	++	++
Material	Aluminum	•	+	++	++	•		++	++
	Zinc	•	+	+	+	•		+	++
	Magnesium		•	+	•				+
	Grinding / Deburring / Edge radiusing	++	+	+	++	++	•	•	+
	Degreasing/ De-oiling		•	•	+	++		•	•
Application	Smoothing/ Brightening	•	+	++	•	•	+	++	++
plica	Pickling				-		++	+	
Ą	Polishing		+	++			+	++	++
	Ball burnishing		•	+			++	++	+
	Descaling/ de-rusting						++	+	
	Corrosion protection	++	+	•	++	++	•		•
ies	Cleaning	+	+	+	++	+	+	++	+
Properties	Degreasing		•	•	+	++		•	•
Pro	Brightening	•	+	++	+	•	+	++	++
	Foaming	•	+	+	-	•	+	++	++

We reserve the right for technical changes.

- ++ = Excellent/high suitability
- + = Medium suitability
- = Limited suitability



POWDER COMPOUNDS

Mass finishing compounds in powder form are used for applications where other compounds produce insufficient results: The most important tasks are intensive ("shock")

degreasing, special pickling and descaling processes, improving the grinding effect of the media and general cleaning of the media

	Туре	R 11	R 20 B	R 35 E	R 40	R 55	R 60
	Description	For cleaning and corrosion protection	For cleaning, corrosion protection and brightening of the work pieces	General degreasing/de- oiling compound with corrosion protection	Highly acidic powder for pickling and descaling	Grinding additive for improving the grinding effect of the media and general cleaning of the media	Polishing powder with brightening effect
	pH value 0.5 %	11.1	9.2	10.6	1.8	10.4	8.9
	Mild steel	++	+	++	+	++	+
	Stainless steel	+	+	+	+	+	+
Material	Copper/Brass	•	+	+	+	+	++
Mat	Aluminum	•	+	+		•	+
	Zinc	•	+	+		•	+
	Magnesium			•			
	Grinding / Deburring / Edge radiusing	++	+	++		++	+
	Degreasing/ De-oiling	+	+	++			
tion	Smoothing/ Brightening	+	+	+		•	++
Application	Pickling				+		
Ар	Polishing		+				++
	Ball burnishing						+
	Descaling/ de-rusting				+		
	Corrosion protection	++	+	++		•	+
ies	Cleaning	++	+	++		+	+
Properties	Degreasing	+	+	++			
Pro	Brightening	+	+	+			++
	Foaming	+	+	+	+		+

We reserve the right for technical changes.

- ++ = Excellent/high suitability
- + = Medium suitability
- = Limited suitability

We offer special compounds for special mass finishing applications. Contact us for further information.

GRINDING PASTES AND GRINDING POWDER

Grinding pastes increase the metal removal rate during mass finishing processes. After an in-depth analysis we precisely adapt our products to the surface condition of the respective work pieces. Whenever non-abrasive ceramic media are used, a subsequent polishing operation is possible. Depending on the product type, the grinding pastes must no longer be

pre-mixed with water but – if desired – can be automatically added into the slightly damp mass of polishing media.

If grinding additives are used in process water cleaning and recycling systems, we recommend the use of a less foaming powder version.

	Туре	RSP 506 S	RSP 5064 S	RSP 587	RSP 508	RSP 5086 S	þΩ	_	70
	Description	General grinding product	Product with excellent grinding effect	Paste with excellent grinding effect	Product with excellent grinding effect	Paste with extremely strong grinding effect	Process water recycling	Automatic dosing system	Standard
	pH value 0.5 %	ca. 9.0	ca. 9.3	ca. 9.3	ca. 9.5	ca. 9.0	wate	c dos	
	Mild steel	++	++	+	+	+	cess	mati	
-	Stainless steel	+	+	++	++	++	Pro	Auto	
Material	Copper/Brass	+	+	+	+	+			
Σ	Aluminum	•	•	•	•	•			
	Zinc	•	•	•	•	•			
Application	Grinding / Deburring / Edge radiusing	+	++	++	++	++			
Applic	Smoothing/ Brightening	+	•	•	•				
	Pumpable paste for recycling operations	RSP 806	RSP 8064	RSP 887	RSP 808	RSP 8086			
	Standard	RSP 626	RSP 6264	RSP 6268		RSP 6286			

We reserve the right for technical changes.

- ++ = Excellent/high suitability
- + = Medium suitability
- = Limited suitability



POLISHING PASTES AND POLISHING POWDER

Polishing pastes are used for mass finishing applications requiring a perfect finish with high luster. They are the basis for our proven Keramo-Finish® process. Selection of the right paste depends on an in-depth analysis of the work piece material and surface conditions. The development of polishing powders on the basis of our polishing pastes represents a significant technical improvement. Since our powders generate

less foam, they can be used in process water recycling systems. Pastes of the type RSP/RPP 8... and 5... must no longer be pre-mixed with water. They can be directly added into the slightly damp mass of polishing media. Dosing of the paste can be automated.

	Туре	RPP 503	RPP 527	RPP 579	RPP 590	RPP 520	bū	_	70
	Description	Polishing paste with a slight grinding effect	Light grinding paste with polishing effect	General polishing paste	Polishing paste with good brightening effect	Polishing paste with excellent brightening effect	Process water recycling	ing system	Standard
	pH value 0.5 %	ca. 9.2	ca. 8.6	ca. 9.0	ca. 9.0	ca. 8.7	wate	dos	
	Mild steel	++	+	++	+	+	cess	natic	
ia I	Stainless steel	+	++	++	+	+	Pro	Automatic dosing	
Material	Copper/Brass	•	+	++	++	++		∢	
Ž	Aluminum	•	•			•			
	Zinc	•	•			•			
ion	Grinding / Deburring / Edge radiusing	+	+	+		•			
Application	Smoothing/ Brightening	+	++	++	++	++			
Ар	Polishing	+	+	++	++	++			
	Pumpable pastes for recycling operations	RPP 803	RPP 827	RPP 879	RPP 890	RPP 820			
	Standard	RPP 623	RPP 627	RPP 6279	RPP 629	RPP 632 R			

We reserve the right for technical changes.

++ = Excellent/high suitability

+ = Medium suitability

• = Limited suitability

We offer special compounds for special mass finishing applications. Contact us for further information.

DRY POLISHING

In dry polishing operations specially treated granules made from corn cob or nut shells serve as carrier material for polishing additives. After a suitable smoothing operation dry polishing processes – which can be run in any mass finishing machine – generate perfectly polished high-luster surface finishes.

	Туре	RSP 797	RPP 746	RPP 747	RPP 7221 A	RPP 709	RPP 722 L3
	Description	Grinding paste	Polishing additive producing a high luster	Polishing additive with good brightening effect	Polishing additive with good brightening effect, suitable for precious metals	Polishing additive producing excellent luster	Polishing additive with good brightening effect
	Plastic	++	+	+	+	+	+
	Stainless steel	+	+	+	+	++	++
Material	Non-ferrous metals	++	+	+	++	++	+
Mat	Aluminum	++	+	+	++	+	+
	Zinc	+	+	+	++	+	+
	Titanium	+				++	
Application	Smoothing/ Brightening	++	+	+	+	++	+
Applic	Polishing		+	+	+	++	+

We reserve the right for technical changes.

++ = Excellent/high suitability

+ = Medium suitability

Additional additives for dry polishing operations:

- ▶ Fluid 708: This oil-based material increases the moisture and adhesion properties of all types of polishing granules, such as granulated corn cob, nut shells, plastic granules and small wooden cubes. It is used in conjunction with grinding and polishing media for stainless steel, brass, zinc, aluminum, plastic and organic materials like animal horns.
- ▶ Fluid 771: This fat-based material improves the bonding characteristics and smoothing performance of polishing media that have become too dry (granulated corn cob, nut shells, plastic granules and small wooden cubes). It is used in conjunction with grinding and polishing media for stainless steel, brass, zinc, aluminum, plastic and organic materials like animal horns.
- ▶ **Granulates:** Numerous granulated media have already been enhanced with different grinding and polishing additives. These granulates can be utilized directly and must not undergo a special conditioning phase during the first hours of operation. Specially formulated granulates are especially suitable for the treatment of work pieces with cutting edges.

We offer special compounds for special mass finishing applications. Contact us for further information.



AUXILIARY MASS FINISHING MEDIA

Stainless steel polishing media are used for high gloss polishing and pressure deburring of ferrous and non-ferrous metals. They are available in a variety of shapes such as balls (spheres), satellites and pins.

Additional dimensions and steel qualities are available upon request

Stainless steel polishing media	Materials	Designation	Dimensions i	n mm		
			Ø	a/b		
Balls	1.4301 = AISI 304 1.4034 = AISI 420 1.4401 = AISI 316	RESK 2.0 RESK 2.8 RESK 3.2 RESK 3.9 RESK 4.5 RESK 5.0	Ø 2.0 Ø 2.8 Ø 3.2 Ø 3.9 Ø 4.5 Ø 5.0		©a	
Satellites	1.4301 = AISI 304 1.4034 = AISI 420 1.4401 = AISI 316	SAT 03/05 SAT 05/07 SAT 07/10 SAT 08/12		03/05 05/07 07/10 08/12	b	
Stainless steel pins	1.4301 = AISI 304 1.4034 = AISI 420	RESA 01/05 RESA 01/09 RESA 1.6/07 RESA 02/05 RESA 03/03 RESA 03/09		01/05 01/09 1.6/07 02/05 03/03 03/09	ea b	

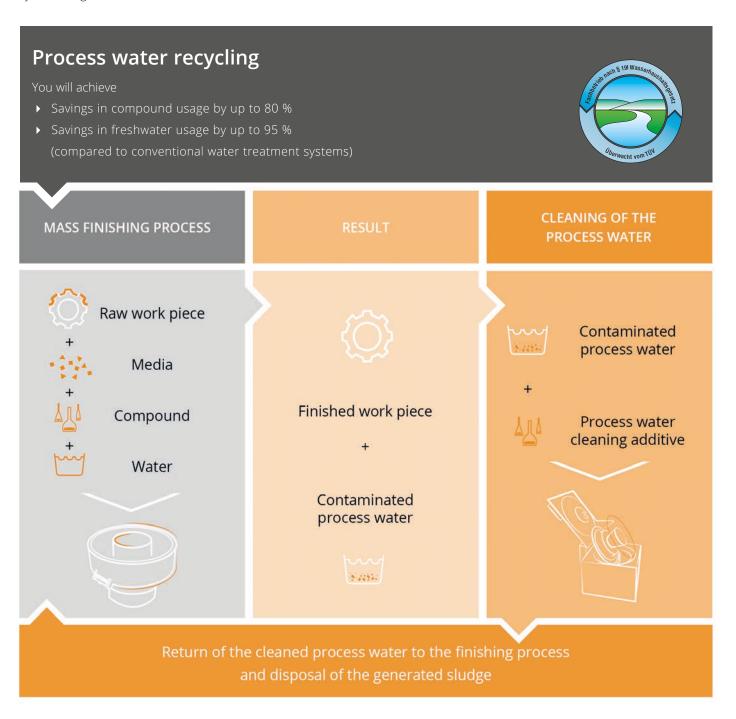
Drying and polishing media	Materials	Designation	Dimensions	in mm	grain size in mm	
			Ø	a/b		
Drying granulates / Supervelat SV	Organic product for spot- free drying and surface cleaning and polishing of a wide range of work pieces. Serves as carrier material for dry polishing operations.	SV 6 SV 8 SV 12 SV 16 SV 20 SV 30 SV 40			ca. 2.0-5.0 ca. 2.0-4.0 ca. 1.6-2.0 ca. 0.8-1.6 ca. 0.6-1.0 ca. 0.4-0.7 ca. 0.2-0.4	
Crushed nut shells	Organic product for polishing and drying of a wide range of work pieces. Serves as carrier material for dry polishing operations.	SVK 6 SVK 8 SVK 16 SVK 20 SVK 30 SVK 40			ca. 2.40-4.00 ca. 1.70-2.40 ca. 1.40-1.70 ca. 0.45-1.00 ca. 0.45-0.80 ca. 0.20-0.45	
Glass beads	Alternative drying media	RGK RGK RGK	Ø 3 ± 0.2 Ø 4 ± 0.3 Ø 5 ± 0.2			

Supporting media	Function	Designation		grain size in mm	
Anti-stick balls	Prevent flat work pieces from sticking to each other	RAT 1 RAT 2		ca. 0.3-0.9 ca. 0.00-0.3	

PROCESS WATER CLEANING

Since they offer significant cost and environmental advantages, process water cleaning and recycling systems have become the preferred wastewater treatment method. The technical principle of 2-phase separation (solid phase vs. liquid phase) by centrifugal force is the basis for these state-of-the-art

process water cleaning systems. They guarantee stable finishing operations. High-performance equipment, in combination with proven process technology, can handle most mass finishing applications, even applications outside of the mass finishing field.





Long-Life products

Process water cleaners with foam management

LIQUID PROCESS WATER CLEANERS

Liquid process water cleaning additives work over a broad pH spectrum, are easy to handle and generate a significant increase in the productivity and efficiency of your mass finishing equipment. The dosing is variable and depends on the amounts

Application

of contaminants in the process water. We will be happy to analyze your process water in our development and analytical laboratory and determine the flocking compound that is most suitable for your recycling system.

Туре	AR 8400/1	AR 8401	AR 8403	AR 8404	AR 8405	AR 8407	ard	
Solids	+	+	+	+	+	++	Standard	
Oil /Surfactants	+	•	++	•	•	+	S	
Universally usable	•	•	++	+	+	++		
Remarks	Highly cationic, organic substance	Contains nearly no chlorides	Reduces nickel content	Good flocculation (when the proces exposed to high r	s water is	Quick floc formation		
LF version		AR 8401 LF	AR 8403 LF	AR 8404 LF	AR 8405 LF	AR 8407 LF		
LF version				exposed to high r	mechanical loads)			

They maintain the properties of the standard process water cleaners but offer the following benefits:

- ▶ Improved sanitary conditions of the entire system
- Improved recycling properties
- Savings in biocide use
- Improved equipment availability
- ▶ Up to 100 % longer uptimes of the process water

Versions with	AR 8604/2	AR 8605/2	AR 8607/1
defoaming effect	AK 8604/2	AR 0003/2	AK 800// I

They maintain the properties of the standard process water cleaners but offer the following benefits:

- ▶ Primarily used in case of soft process water and / or foaming compounds
- ▶ Require no additional dosing of defoamers
- Allow operation with simultaneous use of plastic and ceramic media
- Less downtime

Depending on the finishing application, finishing requirements and operating conditions both versions improve the process water uptime and improve the equipment performance.

We reserve the right for technical changes.

++ = Excellent/high suitability

+ = Medium suitability

= Limited suitability

PROCESS WATER CLEANERS IN POWDER FORM

Process water cleaners in powder form are effective over a broad pH spectrum. They are primarily used to reduce the metal contents in the contaminated process water. If dosed correctly, they can – after a suitable quality check – ensure that

the cleaned water can be discharged to drain. Our in-house analytical laboratory is available to analyze your process water and to determine the right product for your finishing application.

Powder products for chemical-physical wastewater treatment

Тур	AR 7038	AR 7090	AR 7234	AR 7009	ii	AR 7120	AR 7134	ing
Description	Composite ·			onic polymers,	to	of anionic and c	ationic polymers,	recycli
Characteristics	Wastewater containing oil	Lowering of the sulfate content	Wastewater containing high organic loads	General purpose product		General pur	pose product	water
Highlights			Low consumption	cost-efficient	vate	effective remova	l of oil and grease	cess
Applications	tion Composite flocculants consisting of anionic and cationic polymers, inorganic salts and clay. Composite flocculants consisting of anionic and cationic polymers, inorganic and cationic polymers, inorganic salts and clay. Composite flocculants consisting of anionic and cationic polymers, inorganic salts and clay. Composite flocculants consisting of anionic and cationic polymers, inorganic salts and clay. Composite flocculants consisting of anionic and cationic polymers, inorganic salts and clay. Composite flocculants consisting of anionic and cationic polymers, inorganic salts and clay. Composite flocculants consisting of anionic and cationic polymers, inorganic salts and clay. Composite flocculants consisting of anionic and cationic polymers, inorganic salts and clay.	Proc						
					Cle		if wastewater contains large amounts of	
				AD 7000 C		AD 7420 C	AD 7424 C	

- ▶ Chemically identical with the respective powders
- Create minimal amounts of dust
- Easy dosing
- ▶ Dust creation reduced by 80 %
- ▶ Free-flowing granules facilitate handling
- ▶ Faster reaction
- ▶ Not affected by foaming in the dirty water tank
- Less reactive to humidity
- ▶ Up to 20 % lower dosing quantities

We reserve the right for technical changes.

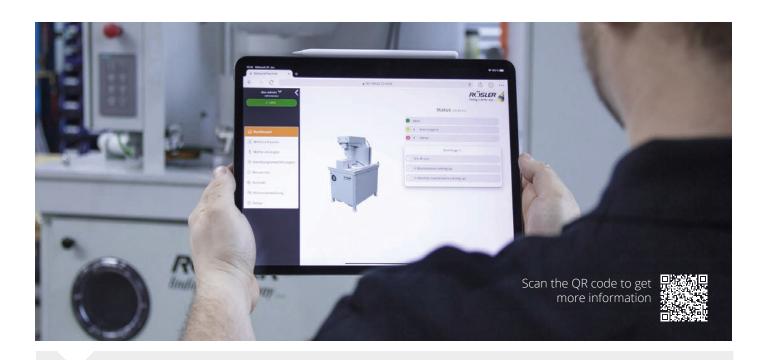


RÖSLER SMART SOLUTIONS

A digital added value to meet your challenges

Now is the time to promote the **digital transformation** and develop innovative digitization solutions. Under our new brand **Rösler Smart Solutions** we have developed a comprehensive digitization product that will allow you to **make processes**

and their parameters more transparent and to define the potential for substantial cost savings. Our package creates the potential for optimization significant reduction of the operating costs.















Transparency of processes and costs.

Process monitoring and recording of data.

Quick correction of deviations and faults.

Intelligent operation with uptime projections.

Optimized utilization of resources and cost reduction.

27



Mass Finishing

Shot Blasting

AM Solutions

www.rosler.com

Germany

Rösler Oberflächentechnik GmbH

Werk Memmelsdorf Vorstadt 1 D-96190 Untermerzbach 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

Rösler France

ZI. 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

Rosier Schwelz 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

Roster International Gmbh & 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

Rösler Benelux B.V.

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

Austria

Rösler Oberflächentechnik GmbH Hetmanekgasse 15

Hetmanekgasse 15 A-1230 Wien Tel.: +43 1 / 6985180-0 Fax: +43 1 / 6985182

Romania

Rösler Romania SRL

ROSIER KOHIAHIA SKL Str. Avram lancu 39-43 RO-075100 Otopeni/ILFOV Tel.: +40 21 / 352 4416 Fax: +40 21 / 352 4935 rosler-ro@rosler.com

Russia

Rösler Russland

Rospiel Russianu 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.

Koster Un Ltz 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

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

