

KROMAŞ[®]

Better surfaces for life



Surface Finishing Machines and Systems

For Metal and Plastic Industry

About Kromaş

The pioneering that Kromas has started on surface finishing machinery is continued by developing new systems and technologies and making them available to the industry.

Kromas products are successfully used in more than 10.000 companies in 87 countries in 5 continents.

More than 3000 surface processes developed by Rösler Kromas are being successfully implemented, without alternatives.

The machines, systems and process solutions offered by Rösler Kromas provide competitive advantage with high productivity and low processing costs.

Many projects of Kromaş, which has an advanced R&D infrastructure, are supported by domestic (TÜBİTAK etc.) and international (EUREKA etc.) organizations. Kromaş is also developing many patented products.

Kromaş has the ISO 9001:2008 quality management system certification. Kromaş products bear the CE marking, and TSE-EN norms and standards are applied during their production. Furthermore, Kromaş can also produce in compliance with the standards of other countries, which apply different standards.

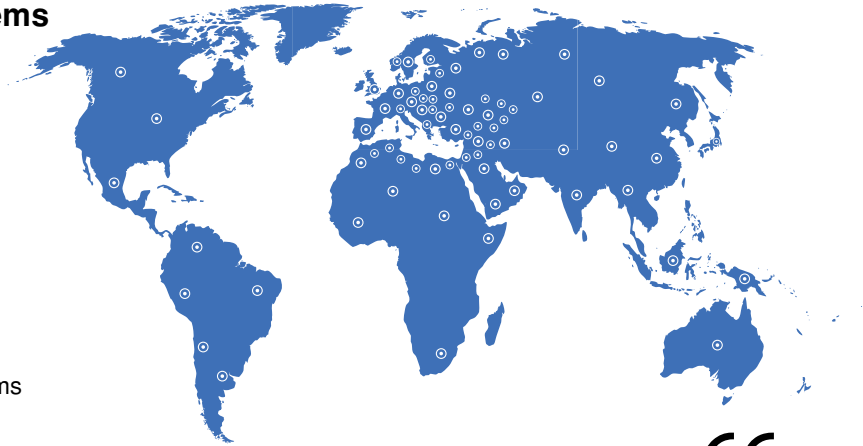
Kromaş's exemplary technical solutions are being monitored and used by many companies.

Products

"Rösler Kromas products are successfully used in more than 10.000 companies in 87 countries in 5 continents."

Surface Finishing Machines and Systems

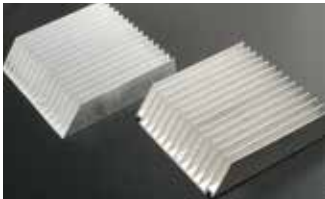
- Surface Finishing Round Vibratory Machines
- Surface Finishing Through Vibratory Machines
- Surface Finishing Linear Vibratory Machines
- Vibratory and Belt Drying Machines
- Surface Finishing Centrifugal Machines
- Centrifugal Drying and De-oiling Machines
- Surface Finishing Barrels
- Surface Finishing Automation Systems
- Process Wastewater Treatment Machines and Systems
- Thermo-Diffusion Zinc Coating Systems
- Surface Ageing (Antique) Machines for Natural Stones
- Centrifugal Edge Rounding and Polishing Machines for Natural Stones

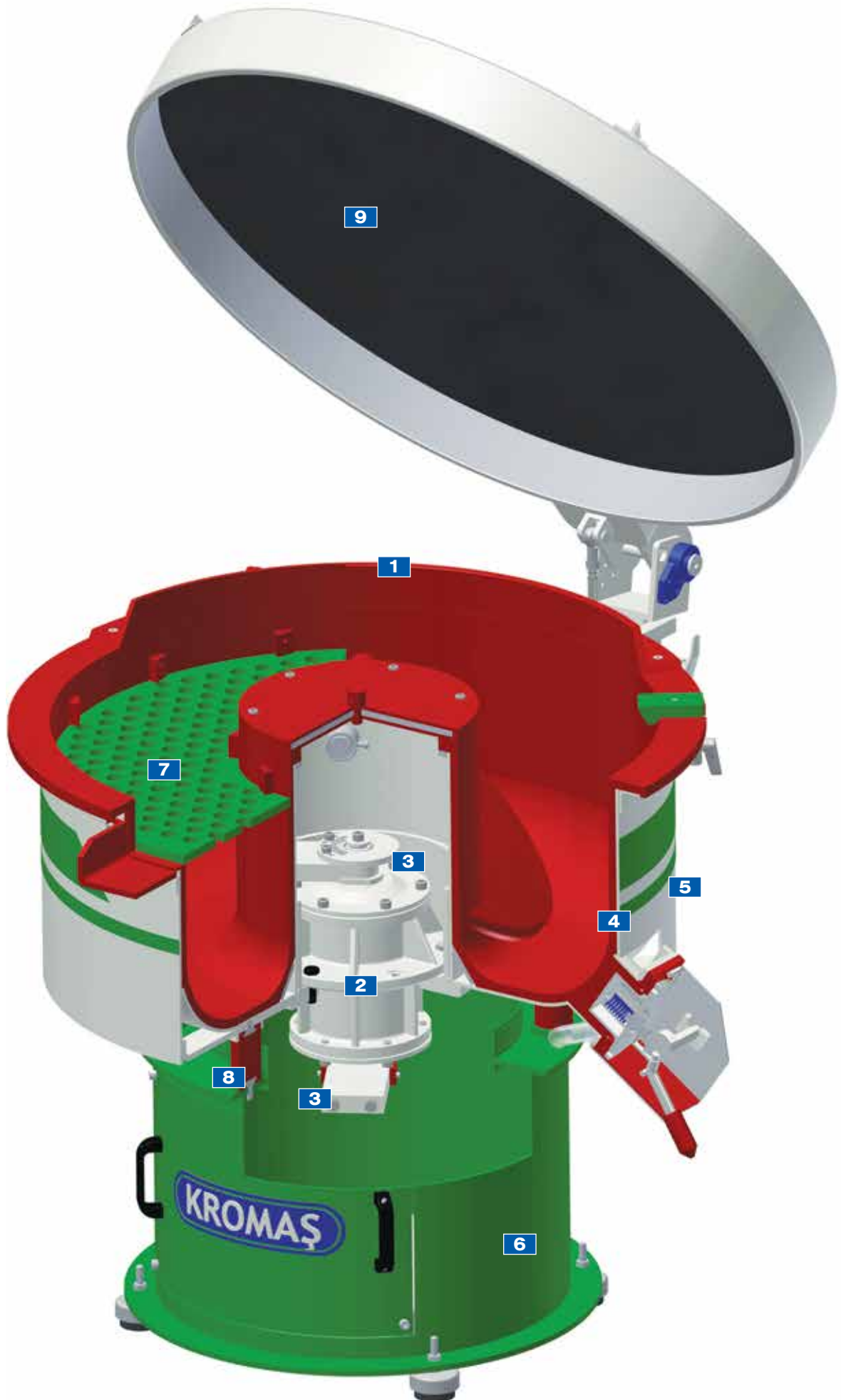


Yüzey İşlem Sarf Malzemeleri

- Ceramic Grinding Media
- Porcelain Polishing Media
- Plastic Grinding and Polishing Media
- Stainless Steel Polishing Media
- Drying and Polishing Granules
- Compound, Paste and Powder Consumables

PLEASE CONTACT US FOR FREE SURFACE FINISHING CONSULTATION, SAMPLE ANALYSIS, CUSTOMIZED PROCESSING DEVELOPMENT FOR SPECIFIC PRODUCTS

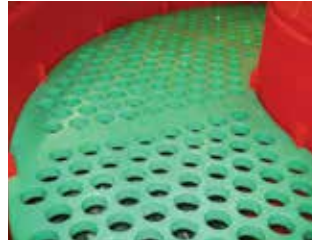




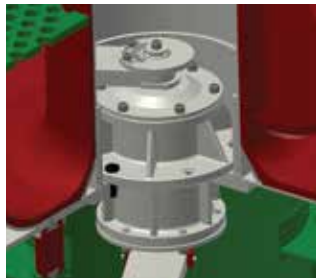
1 POLYURETHANE LINING:
The machines are lined with high quality elastomer polyurethane.



7 SEPARATORS:
Media separators are made of long lasting polyurethane. Media separators for broken or undersized media are made of Stainless Steel. Separators can be changed easily and quickly in less than a minute.



2 VIBRATION MOTOR:
Our own design direct drive steel cased motors have special imported bearings and external lubrication system with high level performance.



8 SUSPENSION:
Long life PU and steel springs are used in the vibratory machines. PU springs are used in models VM 125 and VM 250.



3 VIBRATION ADJUSTMENT:
Vibration amplitude can be observed from the vibration gauge on the bowl. Required vibration can be obtained by adjusting the weights. If an optional frequency converter is installed vibration and processing speed can also be controlled from the control panel.



9 NOISE ISOLATION:
The machines are the quietest vibratory machines on the market and if necessary optional acoustic lid or sound isolation cabin can be supplied.



4 HEAT TREATMENT: All vibrating parts, in particular the metal bowl, are heat treated (normalized) during construction to avoid any stress fractures or metal fatigue due to the vibratory process.



10 STANDARD CONTROL PANEL:
Designed and manufactured using the best materials and are suitable to CE, EN, IP Norm and standards.



5 SHOT BLASTING:
All metal surfaces are shot blasted for the added strength prior to lining and painting.



11 PLC CONTROL PANEL:
It is designed for automation systems and PLC control allows full process control.



6 PAINT:
After painting with epoxy primer and epoxy steel filler, the surfaces are then sprayed with two coats of epoxy paint and then oven treated.



PRODUCTION STANDARDS: All machines and equipments carry the CE (European Union Safety Standard), VDE-IP Electrical Standard, ISO 9001 Quality Management System, EN 60204-1 Electric Standard, TSE Quality Certificate and GS Certificate marks.





Round Vibratory Surface Finishing Machines

Kromas vibratory finishing machines are all around, flexible and efficient machines. Variety of industries are using Kromas machines successfully on daily basis. Vibratory finishing machines are used for finishing of metal, plastic, ceramic, stone, glass, wood and rubber products. Vibratory finishing process includes: deburring, radiusing, polishing, descaling, deflashing, degreasing, cleaning, smoothing etc.

Small or large, light or heavy, parts are successfully processed in variety of Kromas vibratory machines. Kromas customers benefits from large variety of material handling, automatic solution, drying and waste water treatment systems available to enhance their new or existing processes.

Kromas efficient process solution includes test laboratory centers in Europe, North America and Asia. Results from tests trials allow Rösler Kromas to offer to customers, best optimal machine systems, process and media. Selecting the correct machines by customer production requirement, use of high quality materials, high quality workmanship and engineering guarantee a low maintenance cost and long service life.

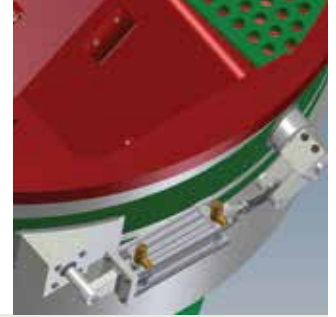
The models between VRM 125-VRM 1000 have media separation systems.



Options - Accessories



VRM 500 ED-SR



Pneumatic Pedal System



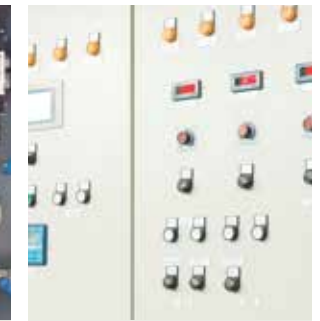
Manual & Pneumatic Noise Cover



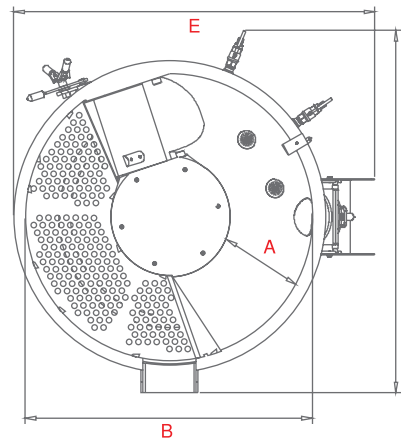
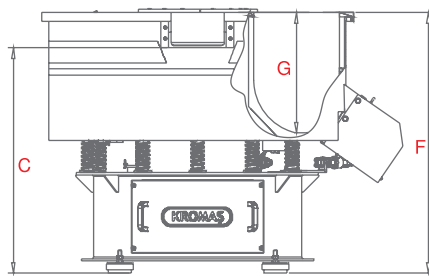
Compound Dosing Pump



Compound Dosing System



Control Panel



ROUND VIBRATORY SURFACE FINISHING MACHINES

Machine Type		VRM 125*	VRM 225	VRM 350	VRM 500*	VRM 800	VRM 1000	VRM 2000	VM 3200	VM4000	
Capacity	litre	125	225	350	500	800	1000	1700	2400	3600	
Polyurethane Thickness	mm	20	20	20	20	20	20	20-30	25-35	25-35	
Steel Thickness	mm	6	6	6	8	10	10	10	10	10	
Process Area Width	mm	A	210	290	367	370	455	440	680	834	910
Inner Diameter	mm	B	700	970	1130	1300	1650	1650	1840	2325	2590
Discharge Height	mm	C	950	930	982	1019	1210	1170	-	-	-
Width	mm	D	776	1100	1434	1639	1837	1920	2021	2520	2800
Length	mm	E	920	1250	1350	1635	1926	1940	2000	2400	2700
Height	mm	F	1050	1060	1137	1180	1393	1395	1410	1675	1645
Process Area Height	mm	G	331	400	435	520	590	610	695	610	760
Weight	kg		272	490	556	905	1900	2110	1900	2900	3560
Motor Cycle (at 50 Hz)	d/d		1500	1500	1500	1500	1500	1500	1500	1500	1500
Motor Power	kW		0,75	1,1	1,1	4	6	6	7,5	22	30

VM 125 and VM 500 machine version are available for ball burnishing process with stainless steel media



Through/Tub Vibratory Surface Finishing Machines

From 20 litres to 2200 litres and more, Kromas is manufacturing Trough Vibrators to fit your process application. Parts up to 2200 mm and bigger, can be processed in plastic or ceramic media, or with ball burnishing vibratory process.

Trough vibrators are ideal for processing of heavy, long, bulky or delicate components which allow unlimited application possibilities.

Drive motors are mounted under the machine, directly to the bottom of the processing tub. Also, larger capacity units are driven by two motors mounted on the side of the tub. Drive motors and imbalance units are connected with unique vibration absorbing couplings.

Processing tub can be divided into individual compartment. This is important for processing of delicate parts. Compartment can be filled with different media for step processing as well. Acoustic protection/ Sound covers are available and listed separately.

Kromas Vibratory Tub/Trough machines are used in variety of industries. From the Automotive and Aerospace parts, to the Natural Stone and Wood industry. Kromas robust design of vibratory tub machines is recognized in "Stone" finishing industry. Tiles and pavers of various materials, size, and thickness are processed in these machines with short cycle time, desired finish and customer satisfaction.





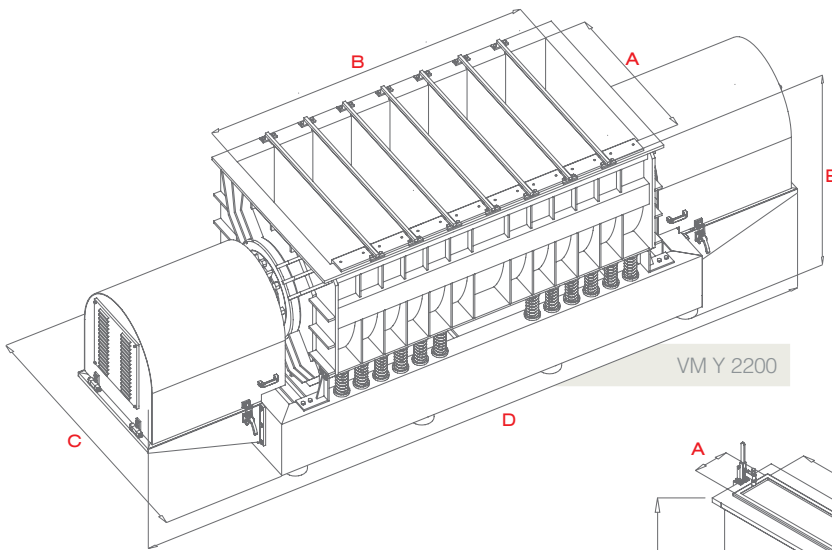
VM 375 Y / Capacity: 375 liter



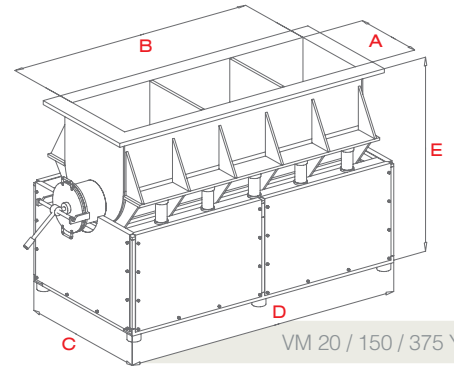
VM 150 Y / Capacity: 150 liter



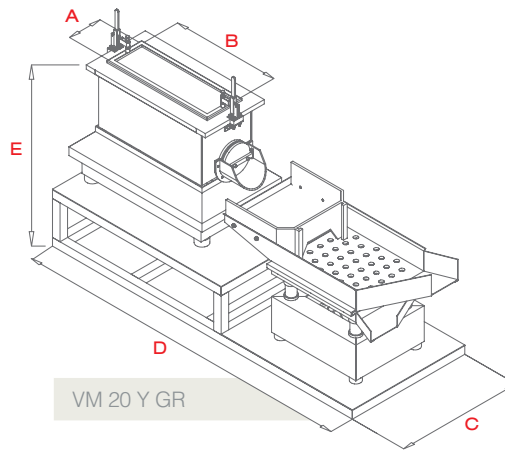
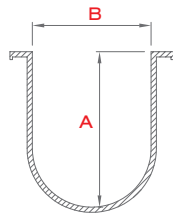
VM 20 Y GR / Capacity: 20 liter



VM Y 2200



VM 20 / 150 / 375 Y

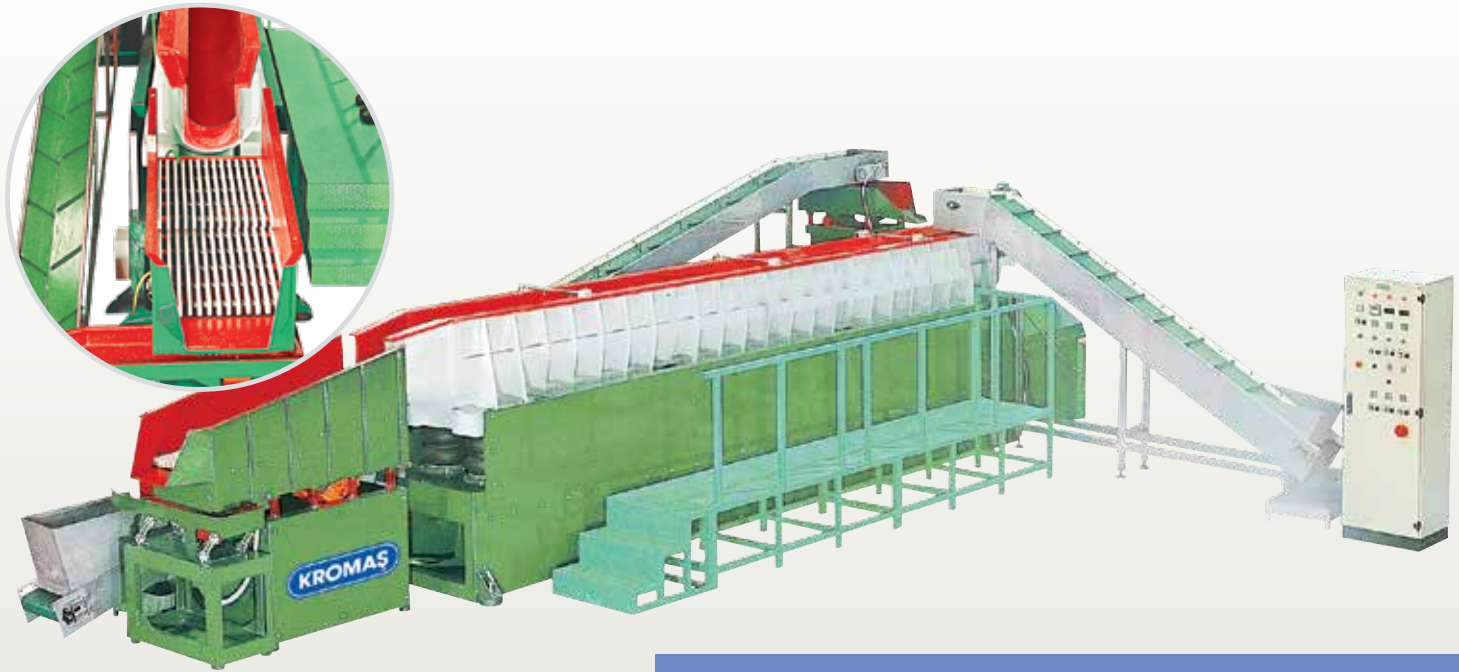


VM 20 Y GR

THROUGH/TUB VIBRATORY SURFACE FINISHING MACHINES

Machine Type		VM 20 Y*	VM 20 Y GR*	VM 150 Y*	VM 375 Y*	VM Y 2200*
Capacity	litre	20	20	150	375	2200
Polyurethane Thickness	mm	15	15	15	15	15-35
Process Area Height	mm	235	235	480	570	985
Process Area Width	mm	A	170	170	365	500
Process Area Length	mm	B	530	530	870	1500
Width	mm	C	600	600	908	1191
Length	mm	D	710	1600	1149	1799
Height	mm	E	782	965	1095	1125
Weight	kg	125	200	496	1002	4710
Motor Cycle (at 50 Hz)	d/d	1500	1500	1500	1500	1500
Motor Power	kW	1	1,1	1,1 / 1,5	4 / 6	22

* All through vibratory machines have versions available for ball burnishing process with stainless steel media.



LNR 6500 / Linear Vibratory Surface Finishing System

Linear Vibratory Surface Finishing Machine

Kromas linear vibratory tub machines allowing unlimited application possibilities. Kromas is manufacturing systems with automatic parts unloading and separation process. Manual and pneumatic noise protection covers are listed as optional machine equipment.

High throughput capacity, high profitability and unlimited automation possibilities are main characteristic of Kromas LNR vibratory continuous finishing system.

It is used in high volume production for finishing, deburring, radiusing in stamping, forging, die-casting processes. Kromas LNR system provides unmatched reliability in operation.

Kromas LNR system provides unique operation safety.

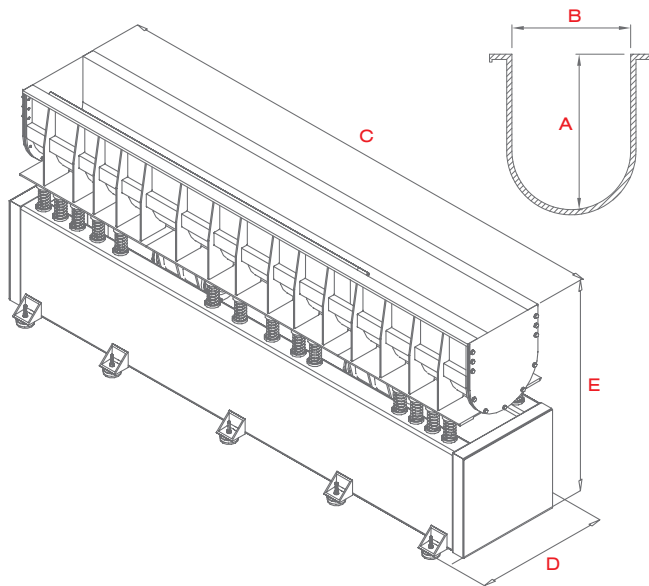




LNR 4000 / Capacity: 900 liter



LNR 2000 / Capacity: 450 liter



	Capacity	Polyurethane Thickness	Process Area Height	Process Area Width	Process Area Length	Width	Height	Length	Weight	MotorCyclei (At 50 Hz)	Motor Power
	litre	mm	mm	mm	mm	mm	mm	mm	kg	d/d	kW
Machine Type			A	B	C	D	E				
LNR 2000	450	20	594	448	2000	1074	1200	2445	1730	1500	6
LNR 4000	900	20	594	448	4000	1074	1200	6000	4500	1500	11
LNR 6500	1350	20	594	448	6000	2550	2200	8500	8125	1500	30



Vibratory Drying Machines

Vibratory Drying Machines are used for drying components/parts, after the vibratory finishing process. Round dryer is filled with drying media (corn maize of various sizes).

Wet parts are loaded continuously into the machine and travel around trough the process channel in pre heated drying media. Parts are separated via separation screen. Dryers with forced hot air are used for one cycle drying of parts.

Drying with granule after polishing process points out the surface polishing level. Our step dryer can dry parts which have different shape and geopmetry and aren't suitable to dry with granule .

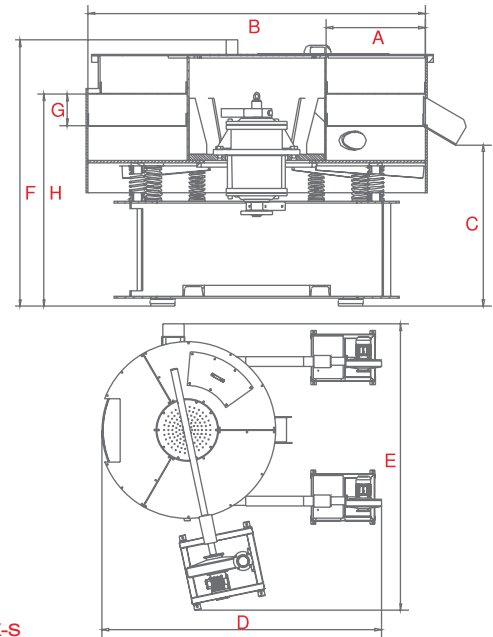
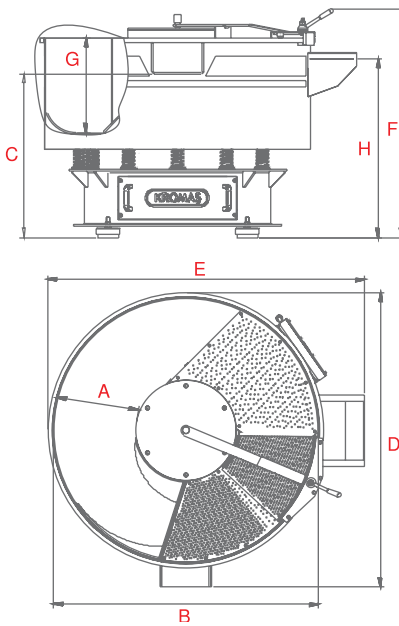




VRM 500K / Capacity: 500 liter



Vibratory step/layer dryer with hot air blower(FKU)



VRM500 K-S

ROUND VIBRATORY DRYERS

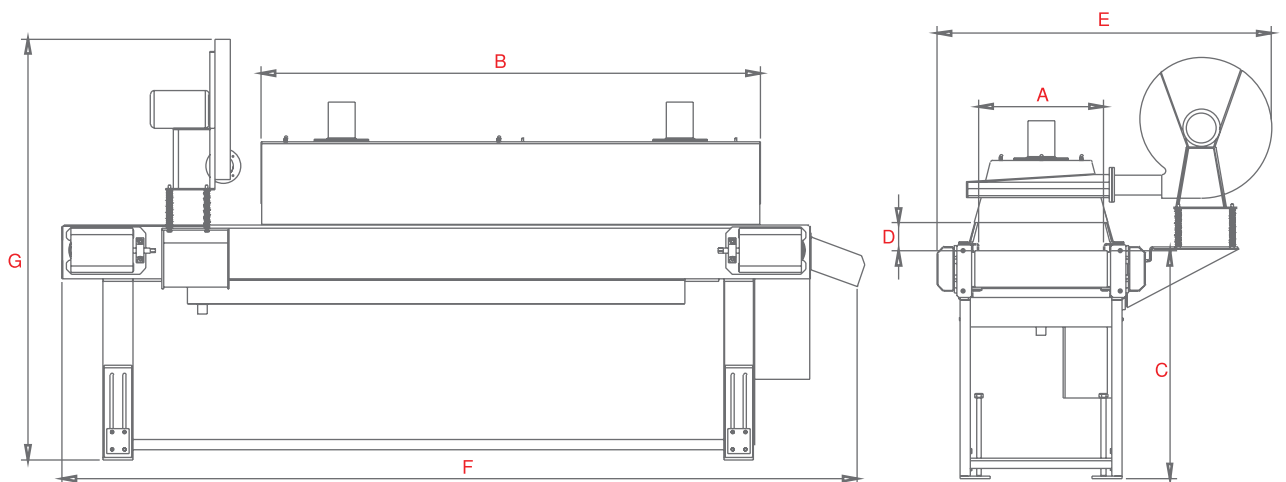
Machine Type		VRM125 K	VRM225 K	VRM350 K	VRM500 K	VRM800 K	VM250 K-S Kademeli Kurutma	VM500 K-S Kademeli Kurutma	
Capacity	litre	125	225	350	500	800	250	500	
Polyurethane Thickness	mm	PU SPREY	PU SPREY	PU SPREY	PU SPREY	PU SPREY	PU SPREY	PU SPREY	
Steel Thickness	mm	6	6	6	6	10	6	8	
Process Area Width	mm	A	242	320	366	405	465	330	470
Inner Diameter	mm	B	700	987	1160	1298	1595	1000	1600
Discharge Height	mm	C	760	820	762	826	1005	330	765
Width	mm	D	890	1175	1332	1485	1768	1170	2650
Length	mm	E	780	1225	1427	1600	1875	1160	2717
Height	mm	F	950	1044	1069	1153	1225	930	1260
Process Area Height	mm	G	330	352	440	477	555	100x4	200x3
Machine Inlet Height	mm	H	885	840	847	903	1080	950	1492
Weight	kg		280	440	500	810	1900	480	1250
Motor Cycle (at 50 Hz)	d/d		1500	1500	1500	1500	1500	1500	1500
Motor Power	KW		0,75	1,1	1,1	4	6	1,1	4
Heating Power	KW		1,8	3	4	4,5	6	12	20



EKR 500X3000

Belt Drying Machines

Rösler Kromas belt dryers are used for drying of large and small parts that are prone to damage. Parts that have many holes of different sizes and heavy parts are ideal for this type of machine. Drying is achieved by temperature controlled hot air which is recirculated in drying chamber. Belt drying machines can optionally be equipped with air sprays to blow off water.



	Conveyor Speed	Process Area Width	Process Area Length	Discharge Height	Process Area Height	Width	Length	Height	Weight	Motor Cycle (At 50Hz)	Total Power
	m/dak.	mm	mm	mm	mm	mm	mm	mm	kg	d/d	kW
		A	B	C	D	E	F	G			
TNL 4000	1-2,5	600	2000	830	170	1870	3610	1560	1740	1500	49
EKR 500x3000	1-2,5	500	2000	915	125	1345	3200	1690	520	1500	20



SK 25 / Capacity: 25 liter

Centrifugal Drying and Degreasing Machines

Rösler Kromas SK 25 and 50 liter capacity centrifugal dryers are used for stain free drying and degreasing of small to medium size parts and preventing parts of being tangled. Timer, heat isolation at top cover, automatic brake system which stops the machine when cover is open, and safety lock stands out our centrifugal drying and degreasing machines.



SK 50 K / Inox



	Capacity	Inner Diameter	Width	Length	Height	Weight	Centrifuge Cycle	Motor Power	Motor Cycle (At 50 Hz)	Heating Power	Total Power
	litre	Ø mm	mm	mm	mm	mm	d/d	kW	d/d	kW	kW
		A	B	C	D	E	F	G			
SK25 Y	33	420	645	650	885	133	600	0,55	1500	-	0,55
SK50 Y	46	470	710	720	920	150	600	0,55	1500	-	0,55
SK25 K	33	420	645	650	920	450	500	0,55	1500	2	2,55
SK50 K	46	470	710	720	985	155	500	0,55	1500	2	2,55



Centrifugal Disc Finishing Machines



Rösler Kromas SM Series of centrifugal disc finishing machines are high energy machines. These machines have 10 times higher productivity when compared to round vibratory finishing machines.

SM Machines have universal application, from high gloss polishing to aggressive deburring and radiusing. SM machines are stand alone processing machines. Machines can be equipped with manual tilting or electric tilting motor for easy parts unloading. Low machine configuration allows for easy visual control of a machine finishing process.



Rösler Kromas SM machines are fixed pivot centrifugal disc machines.

At the end of the centrifugal disc finishing process, the system pivots by 140°, thus transporting the mass of media and work pieces/parts onto the screening machine. There, separation takes place. When the SM centrifugal disc machine pivots back to processing position it could be refilled with media and parts manually or by automated system.



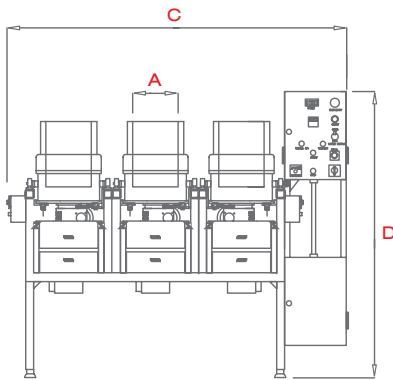
SM 3x14 / Capacity: 3x14 liter



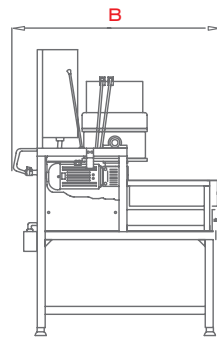
SM 100 R
Capacity: 100 liter



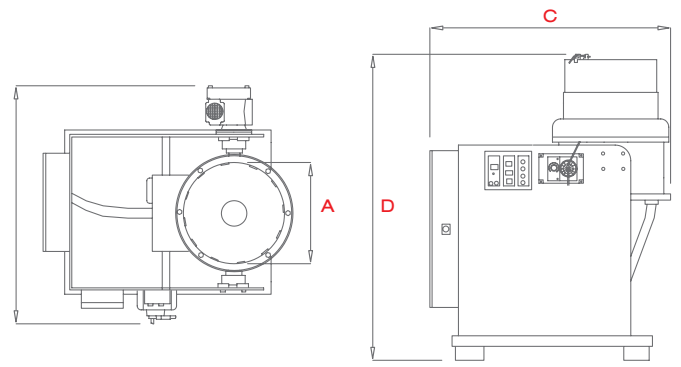
Centrifugal Disc Finishing Machines and Vibratory Separator



SM 14 / SM 2x14 / SM 3x14



SM 50 / SM 100 / SM 200 / SM 400



CENTRIFUGAL DISC FINISHING MACHINES									
Machine Type		SM 14	SM 2x14	SM 3x14	SM 50 C	SM 50 BR	SM 100 R	SM 200	SM 400
Capacity	litre	14	2x14	3x14	50	50	100	200	400
Polyurethane Thickness	mm	20	20	20	20	20	20	20	20
Steel Thickness	mm	10	10	10	10	10	10	10	10
Process Area Width	mm	A	2x280	3x280	425	425	585	670	940
Width	mm	B	1020	1500	3167	950	1180	1380	1720
Length	mm	C	1140	1140	1140	1105	1365	1380	1590
Height	mm	D	1600	1600	1600	1530	1315	1510	1650
Weight	kg		150	300	450	303	385	790	985
Motor Power	kW		1,1	2,2	3,3	3	3,5	4	10



Process Water Recycling Systems

- Recycling of waste water that comes out of mass finishing machines (deburring, polishing etc.) by separating particules from water,
- Cleaning of cold water that are used for processing of metal, optical glass, stainless steel, ceramic and other parts,
- Recycling of precious metals and alloys,

Proces Scope:

This process is physical cleaning of waste water that comes from the source.

The system works with neutral waters (between ph 6.5-9.5).

Processes that are made at the system:

- Flocculation
- Filtration
- Defoaming
- Disinfection





ARS 25 B 60



ARS 140 B 1000

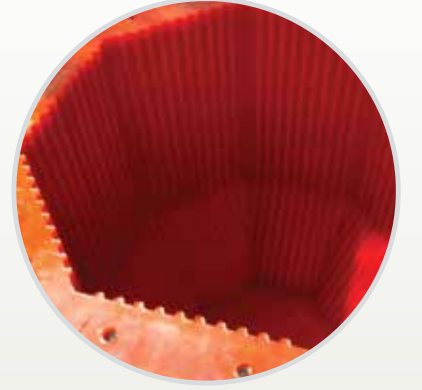
Applications:

These systems are produced to work with vibratory surface finishing machines, centrifugal surface finishing machines and barrel type machines as a standard. As optional, It can be also prepared as a project for the waste water that occurs in different industries.

Optionals:

- Chemical treatment
- Automatic Sludge Discharging Unit

Machine Type	Unit	ARS25 B0	ARS25 B60	ARS25 MN500	ARS25 MN1000	ARS140 B1000
Capacity	liter/hour	300	300	300	300	1200
Clean Water Tank Capacity	liter	-	60	270	556	482
Waste Water Tank Capacity	liter	-	60	135	260	338
Total Tank Capacity	liter	-	120	405	816	820
Sludge Container Capacity	kg	2,5	2,5	2,5	2,5	14
Max. Clean Water Outlet Pressure	bar	0,5	0,5	0,5	0,5	0,3
Separation Factor	g	1800	1800	1800	1800	2010
Centrifuge Speed	rpm	4100	4100	4100	4100	2750
Motor Power	kW	1,5	1,5	1,5	1,5	5
Total Power	kW	1,5	2	1,5	1,5	5,5
Measurements	mm	702x413x780	680x800x800	1560x760x1392	2060x1080x1392	2120x1275x1695
Total Weight	kg	115	160	290	335	620
Control Unit	-	Semi automatic	Semi automatic	Semi automatic	Semi automatic	Semi automatic
Chemical Dosing	-	-	Optional	Standard	Standard	Standard
Disinfections	-	Optional	Optional	Optional	Optional	Optional
Filtration	-	Centrifugal filter	Centrifugal filter	Centrifugal filter	Centrifugal filter	Centrifugal filter
Defoaming	-	Optional	Optional	Optional	Optional	Optional
Ratio of Water Recycling	%	95	95	95	95	95



Patented, special inner design to increase process efficiency

DM 400 / Capacity: 400 liter

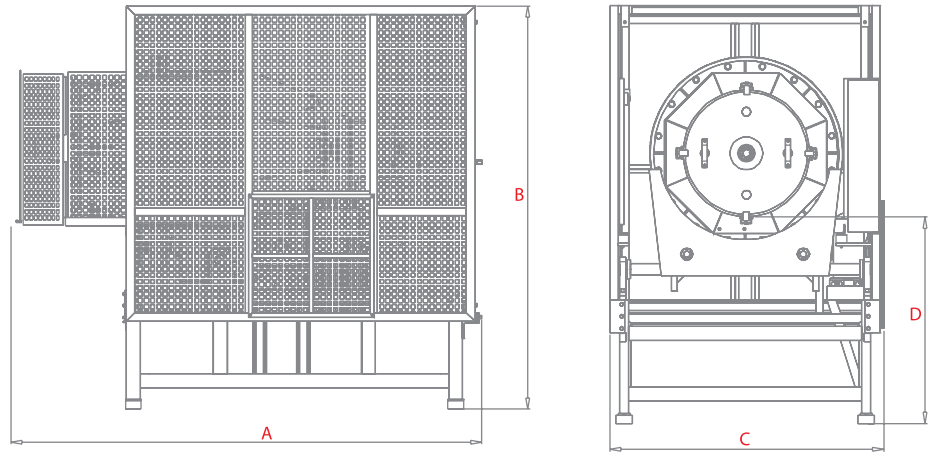
Surface Finishing Barrels

Process barrel of Kromaş DM 400 Surface Finishing and Polishing Barrel is lined with elastomer polyurethane.

DM 400 is a versatile machine suitable for wet or dry barrel finishing processes.

Bu makineler, plastik ve metal parçaların yüzey işlemleri için dizayn edilmiştir.

Internal polyurethane form of DM400 Surface Finishing and Polishing Barrel is very efficient. It allows the users to have fast and economic production.



Capacity	Length	Height	Width	Process Area Height	PU Thickness	Steel Thickness	Rotation Motor Power	Centrifuge Cycle	Motor Cycle (At 50 Hz)	Water Inlet	Weight	
litre	mm	mm	mm	mm	mm	mm	kW	d/d	d/d	bar	kg	
	A	B	C	D								
DM 400	400	2240	1918	1256	950	15	6	4	1-40	1500	2-4	920

MAGNETIC SEPARATORS

Magnetic Drum Separator



Magnetic Belt Separator



HOPPER ELEVATOR LOADING SYSTEMS

CHN-BUN 150
Chain Driven Hopper
Elevator Loading System



HID-BUN 350
Hydraulic Hopper Elevator
Loading System

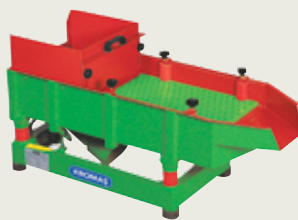


VIBRATORY SEPARATORS

VE 14
Vibratory Separator



VE 50
Vibratory Separator



VE 75
Vibratory Separator



Universal Mobile Hot
Air Blower for
Conveyors



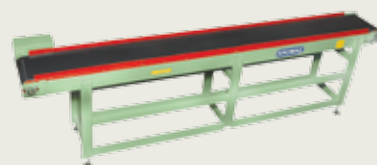
BELT WASHING MACHINES

TNY 3000
Belt Washing
Machine



FEEDING & LOADING CONVEYORS

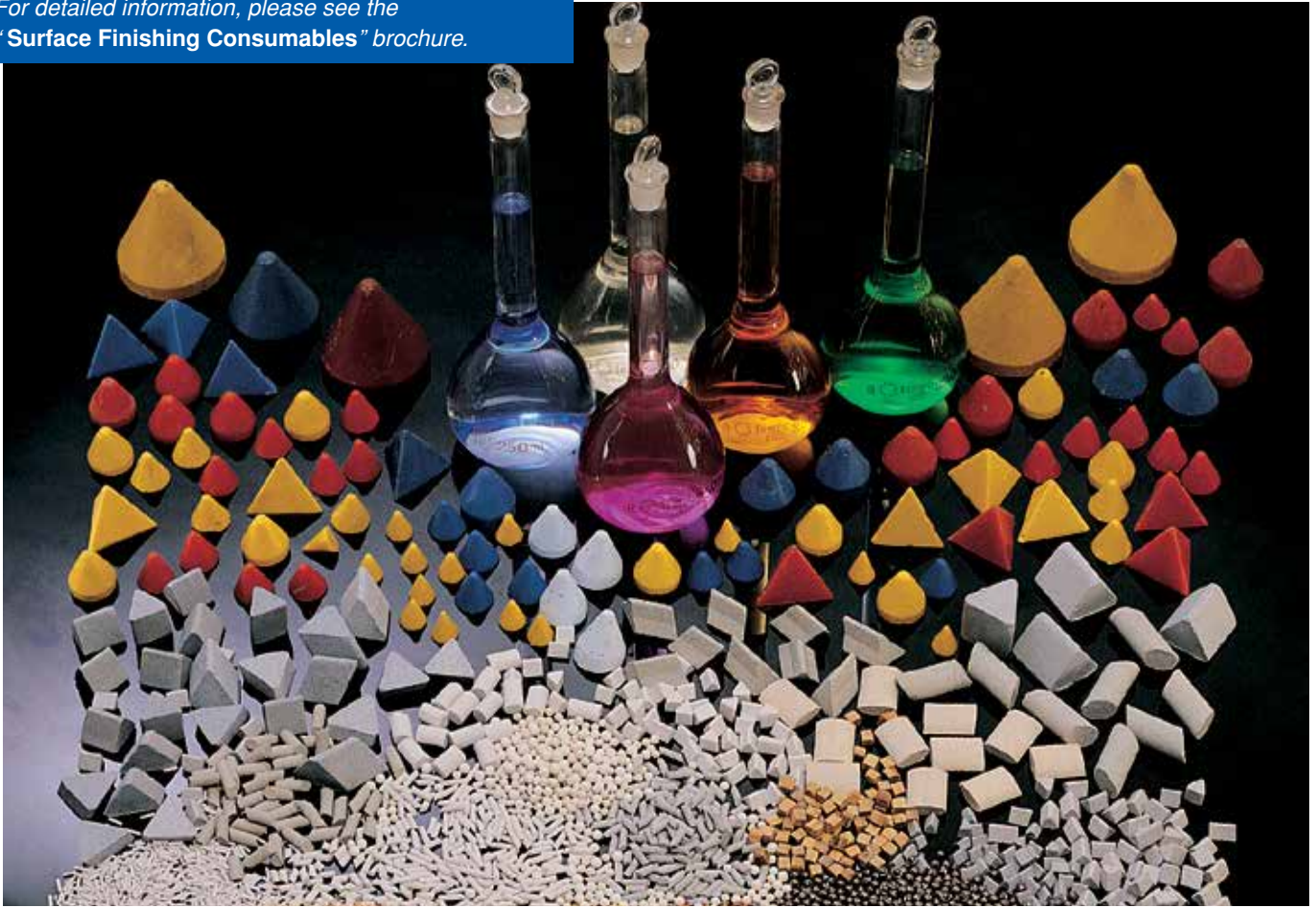
PVC Belt Conveyor



Belt Conveyor With Palette



For detailed information, please see the
"Surface Finishing Consumables" brochure.



Ceramic Media:

Ceramic media is used for rounding sharp edges and corners, surface grinding of hard ferrous materials such as iron, steel and its derivatives. Ceramic media has different classes and each class has different usage purpose.

Media shape and class are determined according to part dimensions, shape, surface finishing quality etc.



Porcelain Media:

This media has low porosity and high density. It is used for polishing of all metals and non-metallic parts.

Wearing out rate of this media is nearly 0.



Plastic Media:

Plastic grinding media are used for the surface finishing of softer non ferrous materials such as brass, aluminum, xamac, stainless steel and copper.

Plastic media also has different classes and each class has different usage purpose.

Media shape and class are determined according to part dimensions, shape, surface finishing quality etc..



Drying and Polishing Granules:

Corn cob granule: This granule is completely natural and used for drying and polishing processes. It absorbs water fast at high level.

Nut granule: It is used with suitable surface finishing pastes to reach high level polishing results of various metals.



Stainless Steel Media:

Stainless steel media with the appropriate compound are used for the burnishing process for most metals.

Stainless steel media has different shapes such those, balls, pins, satellites etc.

Single shape or mix of different shapes can be used depending on part type.



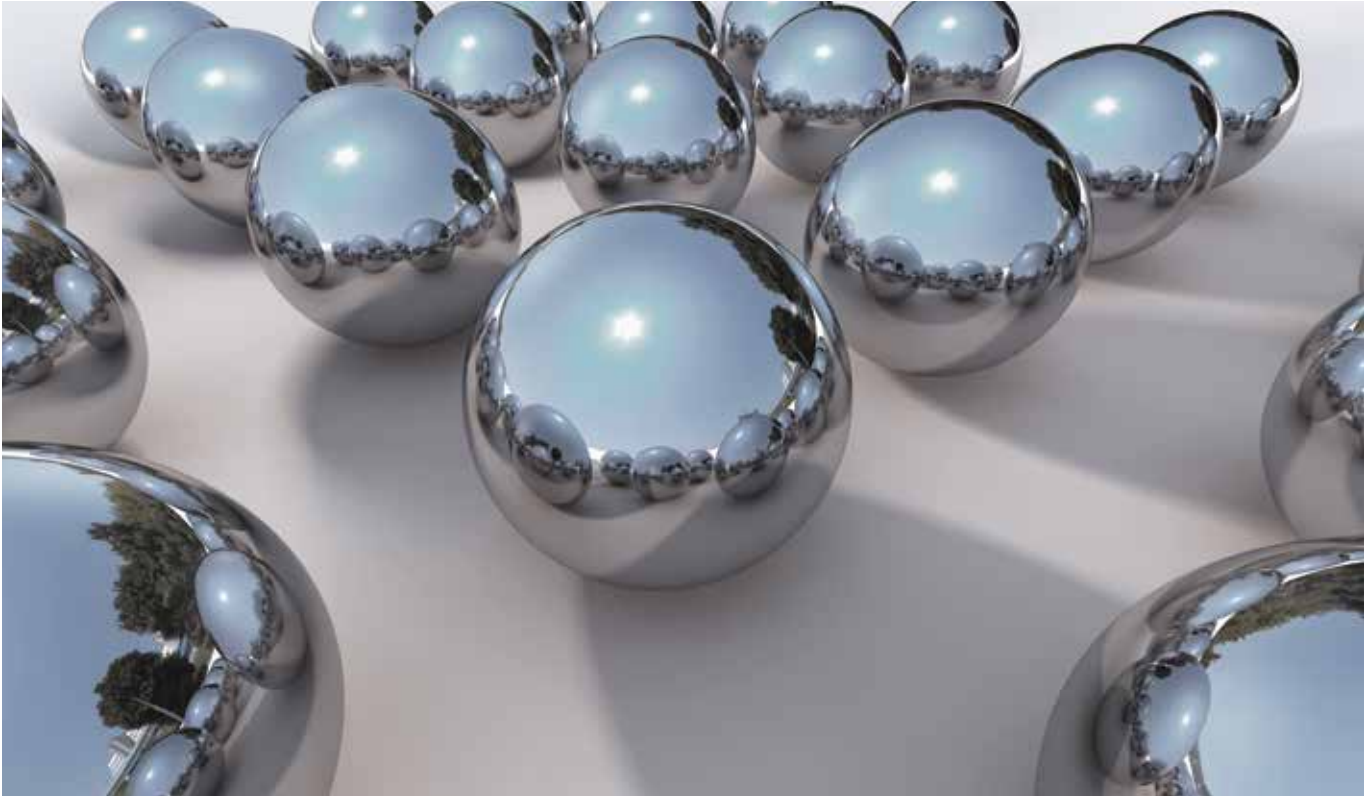
Compounds:

Compounds are used with ceramic, plastic and porcelain media as liquid, powder and paste. The processes that are made with these compounds are metal cleaning, derusting, deoiling, deburring and polishing. Compound type is determined according to metal type and required surface quality.

KROM-X® Process

The shining star of surface finishing

Eco friendly surface finishing for mirror finish quality



Kromaş, is one of a few worldwide producers in surface finishing field who has an R&D team.

“Surface finishing” solutions are one of the primary problems of industrial production of different sectors.

The Krom-X process which is developed by Kromaş completes other process and cancels electropolishing by taking surface polishing quality to the highest level.

Krom-X® process is used for surface finishing of steel, stainless steel, copper, brass, xamak, gold, silver, plastic, semi precious stones and many other different parts.



After Sales Services

Kromas continues to support their customers with after sales services. Our experienced and competent team gives the below after sales services as fast as possible.

Installation and Training:

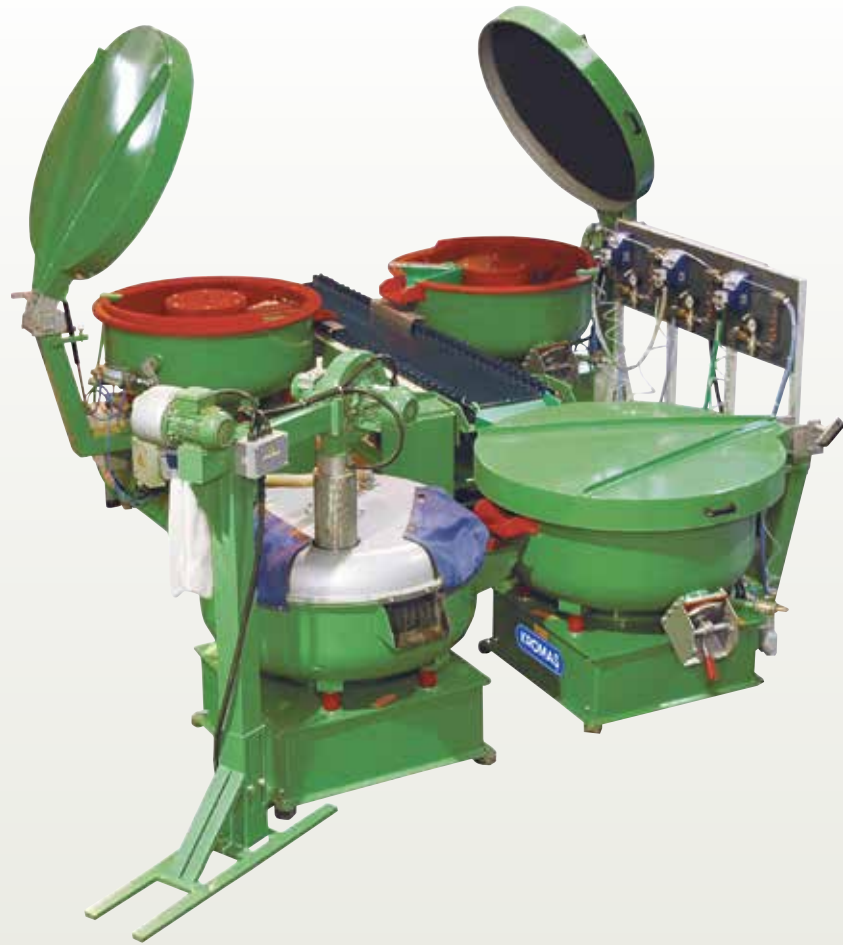
Machine installations and operator training are provided by our professional technical team at our customers' plants.

Spare Parts:

We provide all of the Kromas machines spare parts to our customers. Parts are either delivered and installed by our own after sales service personnel or shipped to our customer's location fast in order to minimize downtime.

Maintenance and Repair Service:

We support our customers with an experienced field service personnel at customers' own location as well as our factory.







Kromaş Makine Sanayi ve Ticaret Limited Şirketi

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