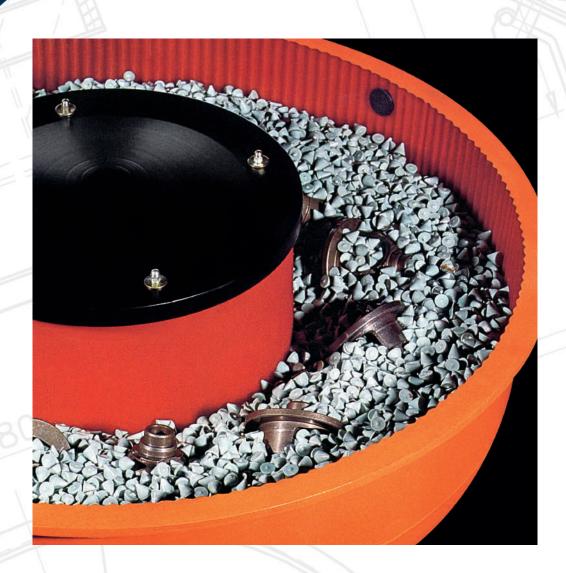


GENERAL CATALOGUE





INTRODUCTION

Vibrochimica Srl, founded in 1972, is located in Liscate, a small town near the Milan-Linate Airport.

Vibrochimica, from small beginnings, quickly became one of the foremost European manufactures of vibratory finishing machines and installations for the surface treatment and mass metal finishing markets.

Having, over the years, successfully solved a great number of finishing problems, Vibrochimica now presents itself as a global supplier, able to propose complete, creative and innovative process solution on the basis of the customer's needs,

High-Tech vibratory finishing machines and fully automatic installations to meet the ever changing demands of the international finishing market.

A wide range of media (chips) and compounds to suit different process requirements. Waste water treatment systems to clean and recycle effluents. In short, Vibrochimica is a Global partner for Global mass finishing solutions.

Our extensive laboratory testing facilities are at your disposal for sample testing. We will demonstrate to you how to achieve the required finish for your product.

Vibrochimica can guarantee a perfect integration between the requests of the Customers and the choice of the process, the consumables, the safety, the environmental aspects, the economy of the treatment.

RANGE OF MACHINERY

The choice of the machine or the best plant solution is based on a complete, flexible and versatile range of equipments. Vibrochimica can satisfy every kind of request.

ROTARY VIBRATORS SYSTEMS:

- VBT
- VBTA
- VBTH
- VBTS
- VBTSA

TUB VIBRATORS SYSTEMS:

- VBL
- VBL-E

BALL BURNISHING MACHINES:

- VB
- VBR
- MINOX

HIGH ENERGY DISC:

- SC

DRYING UNITS:

- VBTD-DRV
- AST-RS
- -\AST-E

PROCESS WATER CIRCULATION:

- SA-CA

LINEAR FLOW CONTINUOS SYSTEMS:

- VBLS
- VBLA

NOISE PROTECTION SYSTEMS COMPLETE PLANT SOLUTIONS



ROTARY VIBROFINISHING MACHINES VBT RANGE

TECHNICAL DATA

GENERAL DATA

The VBT machine is one of the most simple, economical and robust of all the machines on the market today. The flat sided, semi-toroidal bottomed working area of the bowl ensures a perfectly homogeneous distribution of the components and media making for optimum use of the bowl.

Parts are extracted manually.

APPLICATIONS

The surface treatments which can be performed are:

- Deburring
- Cleaning
- Derusting
- Smoothing
- Sharpening
- Polishing
- Superfinishing

CONSTRUCTIVE DATA

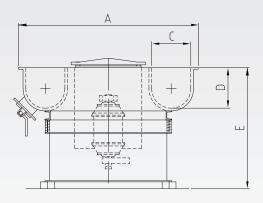
- Bowl in hard steel welded material with stiffening ribs, with heat treatment in oven (stress relieving).
- The bottom of the bowl in one enbloc produced by shear spinning in order to ensure a perfect control of the lining thickness.
- Lining in hot casted polyurethane with different thickness for a maximum abrasive resistance.
- Vertical motovibrator studied for high centrifugal force with possibility of regulation of eccentric mass (angular and weight).
- Suspension system with helicoidal springs.
- The carrying structure stands on special vibration insulators able to avoid foundation works on the floor.

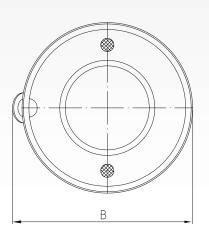
ROTARY VIBROFINISHING MACHINES

ACCESSORIES

- Noise cover with manual or automatic opening.
- Dosing system of chemical compound and water.
- Magnetic separator and demagnetizer.
- Tank with pump for liquid recirculation.
- Recirculation plant for water and sludge separation.
- Motion reverse in order to get easier the discharge of pieces.
- Control board with inverter and PLC.

MODEL		VBT 100	VBT 150	VBT 300	VBT 600	VBT 1100			
Dimensions A	mm	Ø840	Ø1115	Ø1320	Ø1690	Ø1920			
В	mm	880	1150	1370	1740	2050			
C	mm	250	240	330	430	550			
D	mm	280	280	355	450	570			
E	mm	890	870	985	1055	1190			
Development tub	mm	1500	2400	2775	3475	3800			
Total capacity	Ι	100	150	285	620	1100			
Nett capacity	Ι	70	110	220	510	860			
Motovibrator power	kW	0.75	1.1	3.7	5.5	5.5			
Speed of rotation	RPM		1500						
Feeding	٧			400V/50 Hz					







ROTARY VIBROFINISHING MACHINES VBTA RANGE

TECHNICAL DATA

GENERAL DATA

The VBTA vibratory bowl incorporate a spiral which gives the fastest and most efficient unloading characteristics. Machine VBTA guarantee the best performance in many applications, as:

- Easy and complete separation of the pieces.
- Efficient movement of the mass chips/pieces for a fast treatment avoiding damages to delicated pieces.
- Machine can be adapted for operation in delicate systems or automatic production lines and manufacturing cells to suit customer requirements.
- Treatment of delicate pieces in many specific fields like aircraft components, sanitary fittings, medical instruments, car industry, with the minimum of impingement.
- The movement of the separation flap can be manual or automatic by a pneumatic cylinder. In this last case the functioning, if supported by electronic programmer, can be completely automatic.

APPLICATIONS

The surface treatments which can be performed are:

- Deburring
- Cleaning
- Derusting
- Smoothing
- Sharpening
- Polishing
- Superfinishing and chemical accelerated process

CONSTRUCTIVE DATA

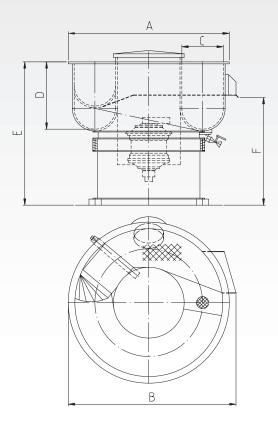
- Bowl in hard steel welded material with stiffening ribs, with heat treatment in oven (stress relieving).
- The bottom incorporates a long spiral section, able to guarantee a good distribution of the pieces and a perfect complete separation.
- The bottom of the bowl is an enbloc produced by shear spinning in order to ensure a perfect control of the lining thickness.
- Lining in hot casted polyurethane with different thickness for a maximum abrasive resistance.
- Large surface of separation with a screen grid integrated in the bowl for a easy changing.

- Vertical motovibrator studied for high centrifugal force with possibility of regulation of eccentric mass (angular and weight).
- Suspension system with helicoidal springs.
- The carrying structure stands on special vibration insulators able to avoid foundation works on the floor.

ACCESSORIES

- Noise cover with manual or automatic opening.
- Dosing system of chemical compound and water.
- Magnetic separator and demagnetizer.
- Tank with pump for liquid recirculation.
- Recirculation plant for water and sludge separation.
- Motion reverse in order to get easier the discharge of the pieces.
- Motovibrator with double speed.
- Rinsing and drying plant.
- Control board with inverter and PLC.

MODEL		VBTA 100	VBTA 150	VBTA 300	VBTA 600	VBTA 1100			
Dimensions A	mm	Ø840	Ø1110	Ø1320	Ø1690	Ø1920			
В	mm	900	1170	1400	1800	2100			
С	mm	250	220	330	430	550			
D	mm	390	460	550	660	770			
E	mm	1000	1030	1190	1280	1400			
F	mm	820	815	900	995	1090			
Development tub	mm	1500	2400	2750	3450	3800			
Total capacity	ı	85	150	300	620	935			
Nett capacity	Ι	50	90	165	380	760			
Motovibrator power	kW	0.75	1.1	3.7	5.5	7.5			
Speed of rotation	RPM		1500						
Feeding	٧			400V/50 Hz					





ROTARY VIBROFINISHING MACHINES VBTH RANGE

TECHNICAL DATA

GENERAL DATA

Main features of this type of machines are versatility of employment and a functional system of separation chips/pieces and pieces discharge.

The movement of the separation flap can be manual or automatic by a pneumatic cylinder. In this last case the functioning, if supported by electronic programmer, can be completely automatic.

APPLICATIONS

The surface treatment which can be performed are:

- Deburring
- Cleaning
- Derusting
- Smoothing
- Sharpening
- Polishing
- Superfinishing

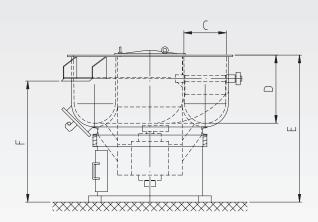
CONTRUCTIVE DATA

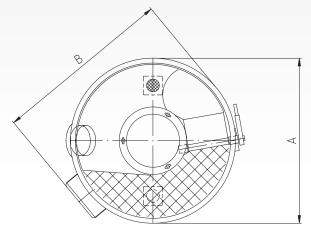
- Bowl in hard steel welded material with stiffening ribs, with heat treatment in oven (stress relieving).
- The bottom of the bowl is one enbloc produced by shear spinning in order to ensure a perfect control of the lining thickness.
- Lining in hot casted polyurethane with different thickness for a maximum abrasive resistance.
- Vertical motovibrator studied for high centrifugal force with possibility of regulation of eccentric mass (angular and weight).
- Suspension system with helicoidal springs.
- The carrying structure stands on special vibration insulators able to avoid foundation works on the floor.

ACCESSORIES

- Noise cover with manual or automatic opening.
- Dosing system of chemical compound and water.
- Magnetic separator and demagnetizer.
- Tank with pump for liquid recirculation.
- Recirculation plant for water and sludge separation.
- Motion reverse in order to get easier the discharge of the pieces.
- Motovibrator with double speed.
- Rinsing and drying plant.
- Control board with inverter and PLC.

MODEL		VBTH 150	VBTH 300	VBTH 600	VBTH 1100				
Dimensions A	mm	Ø1110	Ø1320	Ø1690	Ø1920				
В	mm	1185	1425	1800	2100				
C	mm	220	330	430	540				
D	mm	460	540	670	720				
E	mm	1030	1185	1285	1380				
F	mm	815	975	1010	1100				
Development tub	mm	2400	2775	3475	3800				
Total capacity	_	150	300	600	980				
Nett capacity	_	105	200	440	760				
Motovibrator power	kW	1.1	3.7	5.5	7.5				
Speed of rotation	RPM	1500							
Feeding	٧		400V/50 Hz						







ROTARY VIBROFINISHING MACHINES VBTS RANGE

TECHNICAL DATA

GENERAL DATA

The main characteristic of the VBTS machine is the toroidal bowl shape. The immense benefit of the characteristic is that it makes possible to guarantee perfect uniformity of media roll even with reduced vibration amplitudes, this reducing part on part impingement and drastically increasing loading factors.

The VBTS is therefore especially suitable for special projects and also for particularly delicate parts or when is requested a very low roughness on the surface of the pieces.

Naturally, when you consider the delicate nature of the parts for which the VBTS is suitable, manual unloading is a must.

APPLICATIONS

The surface treatments which can be performed are:

- Superfinishing
- Chemical accelerated process
- Fine deburring
- Polishing
- Smoothing

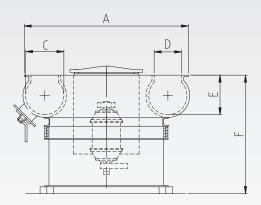
CONTRUCTIVE DATA

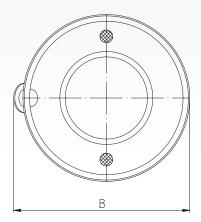
- The bowl is made using commercial curves of strong thickness.
 The structure is very rigid and this ensure the best performance in the application field. The bowl is treated in oven (stress relieving)
- The internal lining is in spray polyurethane at high resistance.
- Vertical motovibrator studied for high centrifugal force with possibility of regulation of eccentric mass (angular and weight).
- Suspension system with helicoidal springs.
- The carrying structure stands on special vibration insulators able to avoid foundation works on the floor.

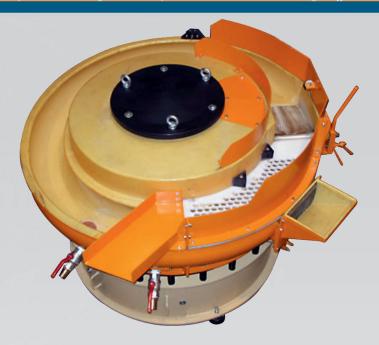
ACCESSORIES

- Noise cover with manual or automatic opening.
- Dosing system of chemical compound and water.
- Magnetic separator and demagnetizer.
- Tank with pump for liquid recirculation.
- Recirculation plant for water and sludge separation.
- Motion reverse in order to get easier the discharge of pieces.
- Control board with inverter and PLC.

MODEL		VBTS 40	VBTS 102	VBTS 151	VBTS 201	VBTS 381	VBTS 651	VBTS 1101	
Dimensions A	mm	Ø626	Ø745	Ø1000	Ø1220	Ø1420	Ø1450	Ø1720	
В	mm	670	845	1110	1300	1510	1670	1880	
C	mm	190	260	230	270	330	440	560	
D	mm	155	170	140	210	225	245	330	
E	mm	170	245	255	285	335	480	570	
F	mm	850	845	860	880	990	1075	1190	
Development tub	mm	1275	1500	2400	2870	3350	3500	3800	
Total capacity	1	35	80	120	200	315	550	955	
Nett capacity	1	27	70	103	160	275	505	795	
Motovibrator power	kW	0.3	0.75	1.1	1.1	3.7	5.5	7.5	
Speed of rotation	RPM		1500						
Feeding	٧			-	100V/50 H	Z			







ROTARY VIBROFINISHING MACHINES VBTSA RANGE (LONG RADIUS)

TECHNICAL DATA

GENERAL DATA

The machine series VBTSA was designed as a modern and functional solution in order to solve some specific problems in the vibrofinishing field.

The bowl has a spiral development with one important length of processing channel.

This give some considerable advantages in comparison with traditional solutions as:

- Complete separation.
- Absolute best performances during treatment.
- Very long process time (until 14 minutes in the bigger size) with possibility to work with continuous flow of the pieces.
 For this reason the VBTSA range is appreciated also for ball burnishing process.
- Reduced space.
- High through put rate.

The integrate separation flap provides to work in continuous or in batch mode.

APPLICATIONS

The surface treatments which can be performed are:

- Ball burnishing
- Deburring of light metals in continuos flow
- Derusting
- Smoothing
- Sharpening
- Polishing
- Superfinishing

CONSTRUCTIVE DATA

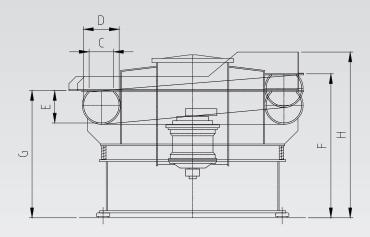
- The bowl is made using commercial curves of large thickness.
 The structure is very rigid and this ensure the best performance in the application field. The bowl is treated in oven (stress relieving)
- The particular length of process chamber can guarantee a perfect rotation and distribution of the pieces.
- The lining in spray polyurethane at high resistance or in antiabrasive rubber.
- Large surface of separation with a screen grid integrated in the bowl for a easy changing.
- Vertical motovibrator studied for high centrifugal force with possibility of regulation of eccentric mass (angular and weight).
- Suspension with helicoidal springs.
- The curring structure stands on a special vibration insulator able to avoid foundation works on the floor.
- Very low noise level even with ball burnishing process.

ACCESSORIES

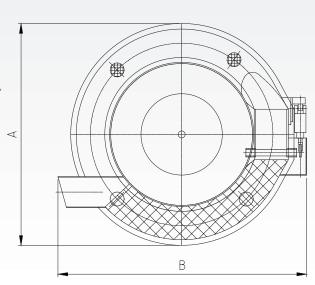
- Noise cover with manual or automatic opening.
- Dosing system of chemical compound and water.
- Magnetic separator and demagnetizer.
- Tank with pump for liquid recirculation.
- Recirculation plant for water and sludge separation.
- Motion reverse in order to get easier the discharge of the pieces.
- Motovibrator with double speed.
- Rinsing and drying plant.
- Control board with inverter and PLC.



MODEL		VBTSA 70	VBTSA 150	VBTSA 300	VBTSA 580	VBTSA 751		
Dimensions A	mm	Ø1260	Ø1580	Ø1890	Ø2430	Ø2030		
В	mm	1450	1850	2080	2900	2320		
С	mm	125	170	230	300	335		
D	mm	186	240	290	350	460		
E	mm	180	234	273	320	420		
F	mm	945	1025	1120	1360	1280		
G	mm	870	905	1015	1100	1180		
Н	mm	1070	1070 1250		1515	1430		
Development tub	mm	3200	4080	4870	6095	4790		
Total capacity	1	75	150	300	580	750		
Nett capacity	1	65	120	250	490	670		
Electric motor power	kW	1.1	3.7	5.5	7.5	7.5		
Speed of rotation	RPM	1500						
Feeding	٧			400V/50 Hz				









VIBROFINISHING MACHINES VIBRAX VBL RANGE

TECHNICAL DATA

GENERAL DATA

The machines Vibrax VBL are utilized for the treatment of pieces with big dimension. The working bowl has a rectangular section and the finishing process has a quite strong effect with a important quantity of material removed from the pieces. The internal lining is in casted polyurethane and the machines can be supplied with a single or double-sided profile wall, following the best choice for the final application.

The components can be treated fixing them on a round frame in order to increase the production avoiding contacts between the pieces and to increase the final quality in a shorter time.

Also for Vibrax VBL machines Vibrochimica has adopted the concept of "Axial vibration" by positioning the vibration units on the rotation axis of the vibrofinishing mass.

In case the customer works with the pieces positioned on a frame, are available specific equipment for the introduction or extraction of the same frames from the bowl.

APPLICATIONS

- Finishing process like cleaning, derusting, descaling, polishing, smoothing, grinding, brightening for components of a big dimension.
- Treatment of gears, shafts, components of aircraft and military industry.
- Antique look and finishing on marble components, stone processing.

CONSTRUCTIVE DATA

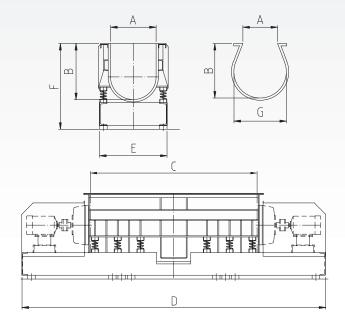
- Process bowl of very solid construction strong thickness in order to guarantee the best performance and a long life.
 The bowl is treated in oven (stress relieving)
- Lining in casted polyurethane.
- N°2 Axial vibrating units with adjustable eccentric mass, connected to the electric motors (1500 RPM) by flexible couplings.
- Very efficient suspension with helicoidal springs.
- The carrying structure stands on special vibration insulators able to avoid foundation works on the floor.

ACCESSORIES

- Separators inside the bowl with possibility to fix them in different positions.
- Is possible to install one inverter inside the control board in order to choose the best rotation speed for the process.
- Noise cabinet with opening of the door in manual or automatic way.
- Is possible to fix the components on round frames in order to guarantee a good rotation of big pieces or to treat many pieces avoiding all contacts between them.
- Equipment for introduction/extraction of the frames.

MODEL		VBL 600	VBL 751	VBL 700	VBL 850	VBL 1000	VBL 1200	
Dimensions A	mm	620	490	620	620	600	620	
В	mm	800	635	800	800	740	800	
C	mm	1100	2300	1300	1600	2160	2160	
D	mm	2940	4070	3140	3440	4000	4000	
E	mm	950	800	950	950	900	1000	
F	mm	1240	1070	1240	1240	1130	1240	
G	mm	810		810			810	
Total capacity	1	600	690	700	850	905	1150	
Nett capacity	Ι	520	570	620	750	770	1000	
Motovibrator power	kW	2x5.5	2x5.5	2x5.5	2x5.5	2x5.5	2x5.5	
Speed of rotation	RPM	1500						
Feeding	٧			400V/	50 Hz			

MODEL		VBL 1250	VBL 1260	VBL 1300	VBL 1650	VBL 1800	VBL 1950	
Dimensions A	mm	610	800	910	620	1100	1000	
В	mm	740	800	990	800	1200	1200	
C	mm	3000	2160	1610	3000	1500	1800	
D	mm	4850	4000	3450	4850	3350	3650	
E	mm	900	1000	1050	1000	1300	1200	
F	mm	1130	1240	1435	1240	1615	1615	
G	mm				810			
Total capacity	1	1250	1260	1300	1650	1800	1950	
Nett capacity	1	1070	1100	1150	1400	1650	1600	
Motovibrator power	kW	2x5.5	2x5.5	2x5.5	2x5.5	2x7.5	2x7.5	
Speed of rotation	RPM	1500						
Feeding	٧			400V/	50 Hz			





VIBROFINISHING MACHINES VIBRAX VBL-E RANGE

TECHNICAL DATA

GENERAL DATA

The machines Vibrax VBL-E represent one economical and efficient solution for vibrofinishing process with rectangular bowls. This machines have one single motorvibrator positioned below the bowl. This solution is quite cheap but has some limits considering the maximum length of the bowl.

APPLICATIONS

- Finishing process for metallic components as shafts, component positioned on a frame.
- Finishing for pieces in light alloy WITH medium-big dimension.

CONSTRUCTIVE DATA

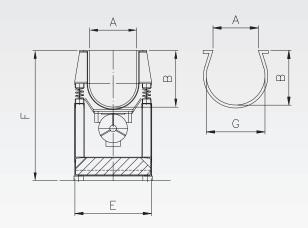
- Process bowl of a very solid construction, strong thickness in order to guarantee a long life.
- The bowl is treated in oven (stress relieving).
- Lining in casted or spray polyurethane.
- Motovibrator at 1500 RPM flanged below the bowl with possibility of regulation of the eccentric mass.
- Very efficient suspension with helicoidal springs.
- The carrying structure stands on special vibration insulators able to avoid foundation works on the floor.

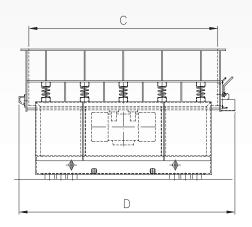
ACCESSORIES

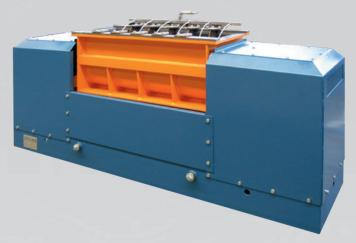
- Separator inside the bowl with possibility to fix them in different positions.
- Is possible to install one inverter inside the control board in order to choose the best rotation speed for the process.
- Noise cover or noise cabinet.
- Frame as support of the pieces.

MODEL		VBL-E 131	VBL-E 220	VBL-E 250	VBL-E 280	VBL-E 310	VBL-E 320	
Dimensions A	mm	380	400	380	400	400	500	
В	mm	560	500	600	500	500	600	
С	mm	670	1200	1000	1500	1700	1200	
D	mm	930	1470	1270	1800	2000	1470	
E	mm	780	710	822	730	750	950	
F	mm	1170	1190	1390	1190	1190	1340	
G	mm	495		500				
Total capacity	1	155	220	250	275	310	320	
Nett capacity	Ι	130	170	215	215	240	250	
Motovibrator power	kW	0.9	1.6	1.9	1.9	2.2	2.2	
Speed of rotation	RPM	1500						
Feeding	٧			400V/	50 Hz			

MODEL		VBL-E 400	VBL-E 500	VBL-E 550	VBL-E 750	VBL-E 950	VBL-E 1400	
Dimensions A	mm	750	500	500	480	750	900	
В	mm	750	600	600	580	750	900	
C	mm	1100	1500	2000	1970	1970	1970	
D	mm	1380	1810	2270	2250	2250	2250	
E	mm	1080	830	810	950	1080	1200	
F	mm	1515	1410	1370	1370	1675	1800	
G	mm				620			
Total capacity	-	570	450	600	620	975	1415	
Nett capacity	-	400	340	450	520	825	1240	
Motovibrator power	kW	3	3.6	6	7	10	11	
Speed of rotation	RPM	1500						
Feeding	٧			400V/	50 Hz			







BALL BURNISHING MACHINES VIBRAX VB RANGE

TECHNICAL DATA

GENERAL DATA

The Vibrax VB machines are the result of a long experience in the production of trough vibrators. The result is a very efficient circulation of the mixture of components/media and a high quality result of the finishing process even in machines of bigger dimension. This is obtained by a "Axial vibration" studied for every size of machine positioning the vibration units on the rotation axis of the mass media/components.

The machines Vibrax VB are used for ball burnishing process. The surfaces of the treated pieces are very shining without any damage due to the contact between the components.

VB machines produced by Vibrochimica are particularly strong in order to work at 3000 RPM.

Internal lining is in antiabrasive rubber.

APPLICATIONS

- Ball burnishing process with balls and/or satellites for pieces of little or big dimension in steel, inox, ligh alloys.
- Ball burnishing on cooking utensils and furniture components, parts of bearings, decorative components, coffee-pots.

CONTRUCTIVE DATA

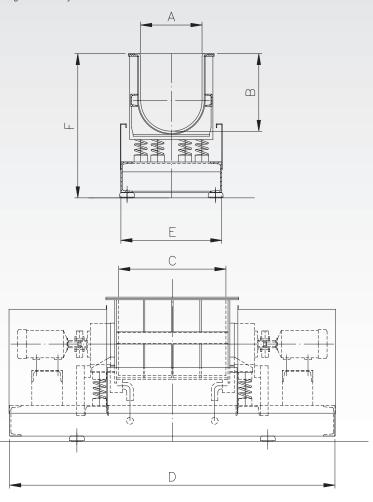
- Process bowl is built in high quality steel with stiffening ribs with heat treatment (stress relieving).
- Internal lining with antiabrasive and acid proof rubber at different thickness.
- N°2 Axial vibrating units with adjustable eccentric mass, connected to the electric motors (3000 RPM) by flexible couplings.
- Perfect support of the process bowl by helicoidal springs.
- The carrying structure stands on special vibration insulators able to avoid foundation works on the floor.

ACCESSORIES

- Separator inside the bowl with possibility to fix them in different positions.
- Is possible to install one inverter control board in order to choose the best rotation speed for the process.
- Noise cabinet.

MODEL		VB 122	VB 135	VB 142	VB 1242	VB 150	VB 1550	
Dimensions A	mm	220	350	420	420	500	500	
В	mm	330	430	520	520	585	585	
С	mm	960	960	980	1180	980	1500	
D	mm	2250	2250	2400	2600	2400	3200	
E	mm	510	610	660	660	750	750	
F	mm	980	1030	965	965	1040	1030	
Total capacity	1	65	135	190	230	260	390	
Nett capacity	1	50	100	150	175	200	300	
Stainless steel balls	kg	200	400	600	700	800	1200	
Motovibrator power	kW	2x2.2	2x3	2x4	2x4	2x4	2x5.5	
Speed of rotation	RPM	3000						
Feeding	٧			400V/	50 Hz			

MODEL		VB 875	VB 170	VB 1270	VB 1560	VB 1470	VB 1290	
Dimensions A	mm	750	700	700	590	700	900	
В	mm	850	805	750	750	750	1000	
C	mm	800	940	1190	1500	1400	1190	
D	mm	2470	2600	2850	3160	3240	2860	
E	mm	1100	1100	1020	1020	1110	1130	
F	mm	1310	1250	1175	1185	1340	1455	
Total capacity		460	470	530	600	660	970	
Nett capacity	1	370	385	430	490	580	860	
Stainless steel balls	kg	1400	1500	1600	1700	2200	3400	
Motovibrator power	kW	2x5.5	2x5.5	2x5.5	2x5.5	2x5.5	2x5.5	
Speed of rotation	RPM	3000						
Feeding	٧			400V/	50 Hz			





AUTOMATIC BALL BURNISHING MACHINES VIBRAX VBR RANGE

TECHNICAL DATA

GENERAL DATA

Automatic ball burnishing vibratory system with tilt separation for rapid batch polishing of components machines Vibrax VBR are manufactured in various different models and can be equipped with drying equipment for a continuous discharge and drying mass in this the production rate is very hight and the process time is very low.

The axial vibration is obtained by positioning of the vibrating units on the rotation axis. The result is a very bright finishing without damages on the surface of the pieces.

The tilting of the bowl with the separation mesh is obtained by pneumatic or hydraulic cylinders.

At the end of every cycle a spraying system with spray nozzles guarantee the accurate final polishing of the components.

APPLICATIONS

- Ball burnishing of steel and light alloys
- Soft pickling
- Polishing
- Derusting

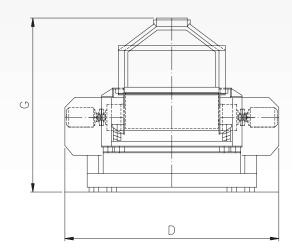
CONSTRUCTIVE DATA

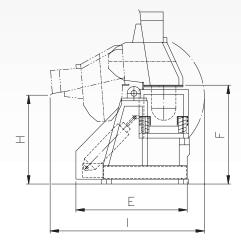
- Process bowl and upper-tube are built in high quality steel with stiffening ribs with heat treatment in oven (stress relieving).

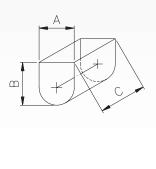
- Internal lining in antiabrasive and acid proof rubber.
- Automatic separation and rinsing of the components.
- N°2 Axial vibrating units with adjustable eccentric mass, connected to the electric motors (3000 RPM).
- Perfect support of the process bowl by helicoidal springs and rubber puffers.
- Possible supply of noise protection cabinet with movement of the doors synchronized with the movements of the bowl.
- The carrying structure stands on special vibration insulators able to avoid foundation works on the floor.

MODEL		VBR 122	VBR 125	VBR 135	VBR 142	VBR 1342	VBR 150		
Dimensions A	mm	220	250	350	420	420	500		
В	mm	330	360	435	520	520	580		
С	mm	960	960	960	960	1300	960		
D	mm	2150	2210	2370	2410	2660	2570		
E	mm	1110	1110	1190	1235	1235	1410		
F	mm	935	1015	1015	1000	1000	1070		
G	mm	1440	1780	1850	1890	1890	1990		
Н	mm	1050	920	880	860	865	1090		
1	mm	1315	1590	1660	1830	1830	1925		
Total capacity	1	65	80	135	190	260	250		
Nett capacity	1	50	60	100	150	200	205		
Stainless steel balls	kg	200	250	400	600	850	800		
Motovibrator power	kW	2x2.2	2x3	2x3	2x4	2x4	2x5.5		
Speed of rotation	RPM		3000						
Feeding	٧			400V/	50 Hz				

MODEL		VBR 1250	VBR 1460	VBR 175	VBR 180	VBR 1565
MODEL		VDK 1250	VDK 1400	VDK 1/5	VDR 100	VDN 1909
Dimensions A	mm	500	600	750	800	650
В	mm	585	750	840	900	750
C	mm	1230	1400	950	950	1500
D	mm	2700	3085	2600	2600	3160
E	mm	1480	1995	2140	2140	2275
F	mm	1230	1305	1365	1435	1315
G	mm	2200	2435	2730	2840	2725
Н	mm	1070	1115	1040	1090	1095
I	mm	2130	2590	2800	2875	2840
Total capacity	1	320	560	525	610	660
Nett capacity	I	275	425	400	460	480
Stainless steel balls	kg	1100	1600	1500	1700	1800
Motovibrator power	kW	2x5.5	2x5.5	2x5.5	2x5.5	2x5.5
Speed of rotation	RPM	3000				
Feeding	٧	400V/50 Hz				







VIBROFINISHING MACHINE



VIBROFINISHING MACHINES MINOX RANGE

TECHNICAL DATA

GENERAL DATA

Machines like Minox type represent one economical and versatile solution for many vibrofinishing problems. Minox machines are utilized for treatment of pieces with little dimensions with a batch process.

They can work for deburring cycle with motovibrator ar 1500 RPM or for ball burnishing process at 3000 RPM. The possibility of eccentric mass regulation on the motovibrator allows to adapt the machine to the most convenients working conditions.

The process bowl can be lined with casted polyurethane or with antiabrasive rubber.

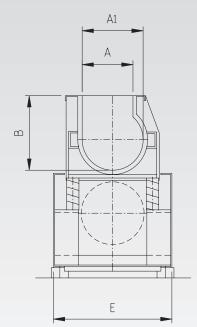
APPLICATIONS

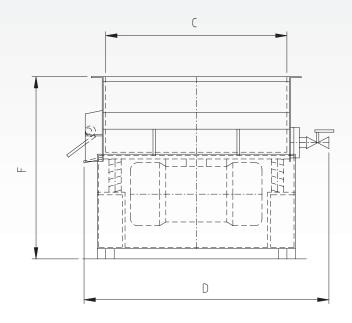
- · Vibrofinishing treatment for little components in different fields, like:
 - Decorative articles
 - Metallic little components
 - Electric components
 - Spectacle frames
 - Button factory
 - Furniture articles
 - Coin blanks and medals
- Ball burnishing process with S.S. balls for steel, stainless steel or light alloy components.

CONSTRUCTIVE DATA

- Bowl in hard steel welded material with heat treatment (stress relieving).
- Internal lining of the bowl with casted polyurethane or rubber.
- Motovibrator at 1500 or 3000 RPM with possibility of mass regulation.
- Suspension system with helicoidal.
- Is possible to install separators inside the bowl springs.

MODEL		MINOX 19	MINOX 40	
Dimensions A	mm	150	236	
A1	mm	180	266	
В	mm	225	296	
С	mm	535	686	
D	mm	720	1010	
E	mm	360	430	
F	mm	535	862	
Total capacity	ı	19	46	
Nett capacity	ı	14	40	
Stainless steel balls	kg	55	160	
Chips	kg	15/20	35/45	
Motovibrator power	kW	0.95	2.2	
Speed of rotation	RPM	1500/3000		
Feeding	V	400V/50 Hz		







HIGH ENERGY DISC SYSTEMS-TURBOPOOL **MACHINES SC RANGE**

TECHNICAL DATA

GENERAL DATA

The working bowl of these machines includes a static cylinder section and a lover rotating spinner able to accelerates the components and the media to the vertical wall. The mass is pushed upwards and, due to the increasing of the gravity, slides back to the rotating section. The movement is such to guarantee a very high performance and is regulated by rpm of the spinner and from internal water level.

The high energy of turbofloc machines allow to reach the same results obtained by a traditional vibrofinishing process in a timing reduced of 4 or 6 times.

ADVANTAGES

- Automatic discharge.
- Shorter timing for a large number of process.
- Limited area.
- Easy to use.
- Strong construction and easy and cheap manutention.
- Possibility to have a fully automatic grinding performance.

APPLICATIONS

Turbopool machines are applied in all finishing process where a short process timing is one important value for the customer. High degree of automation and strong cutting effect are others important Benefits.

The application gilds are:

- Deburring
- Radiusing
- Surface grinding
- Polishing
- Sharpening
- Derusting
- Smoothing

CONSTRUCTIVE DATA

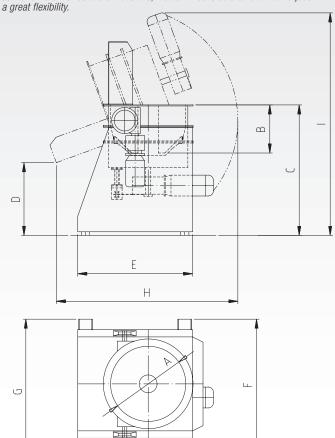
Internal lining in hot casted long life polyurethane with increased thickness in the area with higher wearing.

- Manual or automatic upsetting.
- Rotation of spinner with gear.
- Media return conveyor.
- Process water supply

ACCESSORIES

- Automatic gentle separation media/components and automatic reloading of media/new components to the process bowl.
- Automatic separation screen.
- Magnetic separation of components from media.
- Control board with PLC.
- Inverter for speed control of the spinner.
- Intermediate vibratory hopper.
- Undersize media removal.
- Possibility of tandem operation.

MODEL		SC 70	SC 151	SC 252	
Dimensions A	mm	Ø550	Ø720	Ø870	
В	mm	380	460	545	
C	mm	1200	1250	1530	
D	mm	370	750	450	
E	mm	700	1100	1510	
F	mm	970	1240	1585	
G	mm	1050	1390	1880	
Н	mm	950	1800	2000	
I	mm	1250	2200	2300	
Total capacity	- 1	70	150	230	
Nett capacity	- 1	35	100	175	
Motovibrator power	kW	2.25+0.12	5.5+0.75	11+1.5	
Speed of rotation	RPM	150/200	150/200	150/200	
Feeding	٧	400V/50 Hz			





CONTINUOUS FLOW MACHINES FOR BALL BURNISHING PROCESS VBLS RANGE

TECHNICAL DATA

GENERAL DATA

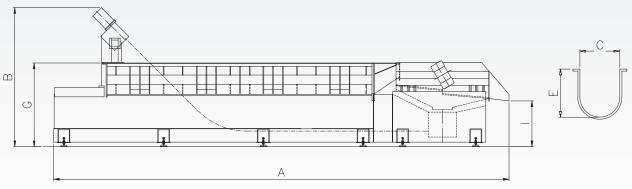
The advantages of a continuous flow machines with ball burnishing process are the high range and productivity on the low exercise costs. In order to obtain the above results the machines must have a strong structural characteristic and a perfect movement of the mix components/balls. Vibrochimica made the project of VBLS machines with great accuracy and with a great effort of research and development.

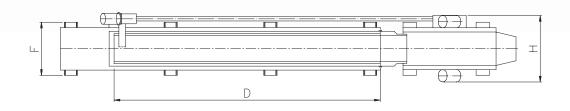
The movement of the balls is uniform for all the length of the bowl without resonance effect and with a constant and high production rate. For a very efficient separation between balls and components, Vibrochimica has developed in addition to the traditional vibrating screen separator, a rotating separator in order to turn the pieces and allow to empty them from the balls. A great number of available accessories can improve the performances of the machines and complete the automatic functioning.

APPLICATIONS

- Ball burnishing process with balls and/or satellites for pieces of little or big dimension in steel, stainless steel light alloys.
- Ball burnishing on utensils and furniture components, parts of bearings, decorative components, coffee-pots.









CONSTRUCTIVE DATA

- Process bowl of very solidity construction strong thickness in order to guarantee the best performance and a long life.
- The bowl is treated in oven (stress relieving).
 The connection surface between bowl and vibrating units is tooled.
- Internal lining with antiabrasive and acid proof rubber at different thickness.
- Vibrating units connected by shafts and elastic joints perfectly aligned.
- Driving electrical motor positioned on independent base with possibility of regulation of the level.
- Suspension system with helicoidal springs.
- The carrying structure stands on special vibration insulators able to avoid foundation works on the floor.
- Single or double recirculation system for the balls.
- The exit section of the bowl and the separation system can be dimensioned and designed on the basis of the needs of the Customer.

ACCESSORIES

- Inverter inside the control board in order to adjust the speed of mass rotation.
- Noise-proof cabinet
- Automatic charge of the components.
- Installation of a PLC inside the control board with operating panel and easy management of process parameters.
 Is also possible to fix inside the PLC/panel various and different working
 - program with all the parameters already fixed, defined and tested.
- Additional washing tunnel on the exit of components.
- Additional drying unit with electrical heating or by a gas burner.
- Dosing plant for liquid compound.

MODEL		VBLS 1530	VBLS 2330	VBLS 3030	VBLS 3035
Dimensions A	mm	3850	4820	5850	5850
В	mm	2100	2100	2090	2090
C	mm	300	300	300	350
D	mm	1500	2300	3000	3000
E	mm	425	425	425	450
F	mm	800	800	800	800
G	mm	1340	1340	1235	1260
Н	mm	945	945	1090	1090
1	mm	760	735	690	690
Total capacity	ı	180	270	380	480
Nett capacity	1	125	190	260	320
Stainless steel balls	kg	600	900	1200	1500
Motovibrator power	kW	5.5	7.5	11	11
Speed of rotation	RPM	3000			
Feeding	٧	380V/50 Hz			

MODEL		VBLS 4030	VBLS 4032	VBLS 4035	VBLS 4042
Dimensions A	mm	6850	6850	6850	7340
В	mm	2090	2090	2090	2185
C	mm	300	320	350	420
D	mm	4000	4000	4000	4000
E	mm	425	425	450	450
F	mm	800	800	800	870
G	mm	1235	1235	1260	1260
Н		1090	1090	1090	1175
I		690	690	690	690
Total capacity	Ι	500	540	630	720
Nett capacity	_	340	360	430	550
Stainless steel balls	kg	1600	1700	2000	2550
Motovibrator power	kW	15 15		15	22
Speed of rotation	RPM	3000			
Feeding	V		380V/	50 Hz	



CONTINUOUS FLOW MACHINES VBLA RANGE

TECHNICAL DATA

GENERAL DATA

The machines type VBLA are utilized for deburring, smooting, sharpening polishing process in a continuous flow with automatic charge of media. They allow to guarantee a precise production rate and for this reason are installed in line with a continuous production mechanical process.

Vibrochimica has in the production program machines VBLA with big size bowls (lenght from 4000 to 6000 mm). The components to be treated are loaded at one end of the bowl and by a special vibration range and the slope of the process bowl are discharged from the opposite end.

By the modification of the slope is possible to modify the process time following the required production rate.

The components are discharged and automatically separated from the media.

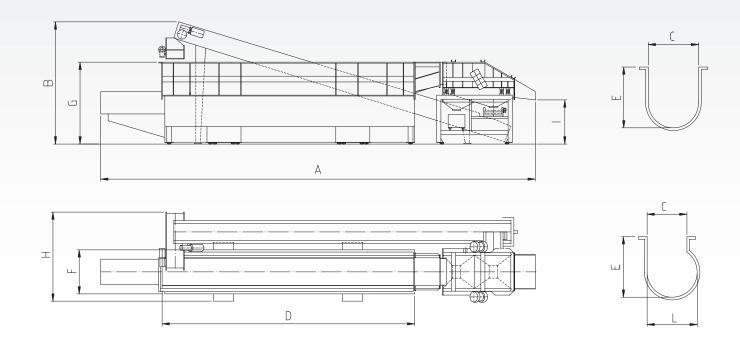
The media is recirculated after the separation by two belt to the opposite edge of the bowl.

One typical application of VBLA machines is the deburring process between two transfer lines in order to allow a perfect positioning of the components on the second line.

The deburring machines VBLA can represent the final step of a production process. In this case the machine can be connected with a degreasing unit or a washing tunnel, a dryer, a oiling stage, the final result is one fully automatic line with a high production are rate and a very limited productive labour.

APPLICATIONS

- Treatment of deburring, smoothing, polishing in a continuous flow of pieces with little or big dimension especially for light leagues.
- Treatment of deburring as part of one automatic line with continuous flow.
- Treatment in continuous flow with automatic and safe regulations of working parameters.
- Treatment for antique look and finishing on marble components, stone processing.





CONSTRUCTIVE DATA

- Process bowl of very solidity construction strong thickness in order to guarantee the best performance and a long life.
- The bowl is treated in oven (stress relieving).
- Lining in casted polyurethane.
- Vibrating units designed by Vibrochimica flanged on the bottom of the bowl able to guarantee a uniform movement of the mass balls/components.
- Absence of resonance effect.
- The bowl is supported by air rubber springs or with metallic springs.
 The air springs allow to modify the slope of the bowl and to modify the working conditions (time of process cycle, discharge conditions) in every time or when the component to be treated are changed.
- Coupling between motovibrators and motor by elastic joints flanges and shafts.
- The main motor is external and positioned on the support frame.
- The carrying structure stands on special vibration insulators able to avoid foundation works on the floor.

MODEL		VBLA 4048	VBLA 4060	VBLA 1600	VBLA 6048	VBLA 6060	
Dimensions A	mm	8320	7900	9350	10320	10360	
В	mm	2900	2900	2950	2900	3050	
C	mm	400	600	500	400	600	
D	mm	4000	4000	5000	6000	6000	
E	mm	565	700	625	565	725	
F	mm	900	1000	1100	900	1100	
G	mm	1830	2070	2020	1830	2150	
Н	mm	2020	2300	2150	2020	2300	
I	mm	1065	1080	1080	1065	1030	
L	mm	480			480		
Total capacity	1	920	1600	1455	1450	2600	
Nett capacity	1	780	1300	1100	1040	2020	
Motovibrator power	kW	15	19	22	18.5	27	
Speed of rotation	RPM	1500					
Feeding	٧		400V/50 Hz				

The models indicated are only a part of the production range. The Customers can ask for different sizes and dimensions; Vibrochimica is able to follow all request with a great flexibility.

ACCESSORIES

- Inverter inside the control board in order to adjust the speed of mass rotation.
- Noise-proof cabinet
- Automatic charge of the components.
- Installation of a PLC inside the control board with operating panel and easy management of process parameters.
 Is also possible
 - to fix inside the PLC/panel various and different working program with all the parameters already fixed, defined and tested.
- Spray washing of the components on the separator.
- Additional washing tunnel on the exit of components for washing and passivation.
- Additional drying unit with electrical heating or by a gas burner.
- Dosing plant for liquid compound.
- Additional separator for the selection of media undersize.







DRYING UNITS VBTD-DRV RANGE

TECHNICAL DATA

GENERAL DATA

Many mass finishing applications require a drying process as final step of a wet treatment.

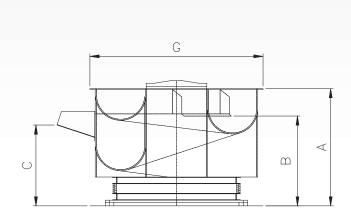
The driers VBTD-DRV range are operating with maize comb or similar media. During treatment are removed from the surface of the pieces spots of calcium salts or others salts present in the process water.

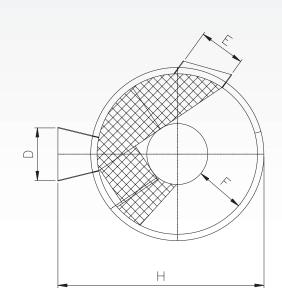
The movement of the separation flap can be manual or automatic by a pneumatic cylinder. In this last case the functioning, if supported by electronic programmer, can be completely automatic.

APPLICATIONS

The machine VBTD-DRV range was specifically designed for all drying operations after wet deburring process, ball burnishing process, chemically accelerated process.

MODEL		VBTD 40	VBTD 150	VBTD 300	VBTD 600	
Dimensions A	mm	895	870	900	1115	
В	mm	750	620	670	825	
С	mm	800	675	720	770	
D	mm	300	500	500	500	
E	mm	140	200	300	420	
F	mm	168	270	360	465	
G	mm	Ø685	Ø1100	Ø1310	Ø1650	
Н	mm	840	1320	1525	1950	
Development tub	mm	1500	2400	2800	3600	
Total capacity	Ι	45	150	300	600	
Nett capacity		30	70	130	300	
Installed thermal power (internal electric heating)	kW	1	3	3	4.8	
Installed thermal power (external electric heating)	kW		7.5+7.5	7.5+7.5	7.5+7.5	
Motovibrator power	kW	0.3	1.1	1.1	3.7	
Speed of rotation	RPM	1500				
Feeding	٧	400V/50 Hz				









CONSTRUCTIVE DATA

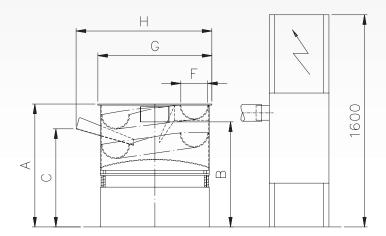
- Bowl in hard steel welded material with stiffening ribs, with heat treatment in oven (stress relieving).
- VBTD range incorporates a spiral witch gives the fastest and most efficient unloading characteristics.
- DRV range is built with complete multi spiral pitch with entrance of the pieces from the bottom.
- Lining can be in spray high resistance polyurethane or antiabrasive rubber.
- Large surface of separation with screen grid integrated in the bowl for one easy changing. In order to guarantee a good separation from the media the separation can be extended also around the external diameter of the bowl.
- The heating system can be placed in the internal part of the machine (with resistors) or can be external.
 In the last case the solution includes one insulated column with resistors, fan, valve, thermostat, flexible connection.
- The machines are equipped with motovibrator with possibility of regulation of eccentric mass, helicoidal springs, special vibrating insulators.

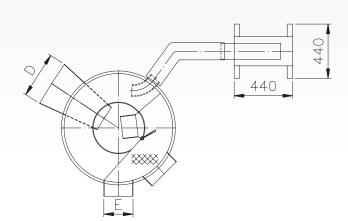
ACCESSORIES

- Cover with filter unit on the exhaust.
- External additional separation.

- Automatic movement of the flap (VBTD range) with pneumatic cylinder.
- Control board with PLC.
- External heating unit.

MODEL		DRV 5	DRV 10	DRV 40	DRV 50
Dimensions A	mm	885	925	1280	1175
В	mm	825	810	1150	955
С	mm	570	740	880	855
D	mm	120	350	350	500
E	mm	80	220	215	300
F	mm	94	207	207	360
G	mm	Ø630	Ø860	Ø1285	Ø1290
Н	mm	745	1025	1550	1500
Development tub	mm	4470	3830	8000	2700
Total capacity	_	13	75	120	150
Nett capacity	Ι	8	40	60	75
Installed thermal power (external electric heating)	kW	5	7.5	7.5+7.5	7.5+7.5
Motovibrator power	kW	0.3	0.75	3.7	3.7
Speed of rotation	RPM	1500			
Feeding	٧		400V/	50 Hz	







TECHNICAL DATA

GENERAL DATA

The belt dryers AST range are able to solve many process treatment problems after deburring of the pieces.

Tipical applications are:

- Rinsing with water and compounds
- Upsetting of the pieces
- Blowing with air
- Driyng with hot air

RANGE:

AST-RS: Machine useful for rinsing, blowing and drying in continuous flow of pieces coming from deburring or ball burnishing process. The heating system can be by electric resistors or burner working with gas.

AST-E: Unit with only drying section. The heating system is obtained by electrical resistors.

APPLICATIONS

The machine range AST can complete the process of surface finishing of the pieces after a cycle of vibrofinishing.

AST machine is the drying solution for all pieces witch cannot be treated with maize comb or similar materials due to presence of powder or media inside the holes.

The treatment with AST units is very soft because there are no contacts pieces on pieces.

CONSTRUCTIVE DATA

- Belt with mesh in stainless steel steel AISI 304 moved by gearmotor.
- Tank in carbon steel for water recirculation with pump, spray nozzles over and below the belt.
- Blowing with air at high pressure in order to remove drops of water present on the surface of the pieces.



- The rinsing and blowing sections are complete of dripping plate in AISI 304.
- All the drying section of the machine is completely insulated; the air recirculation is obtained by a fan and the temperature is fixed by a thermoregulator.

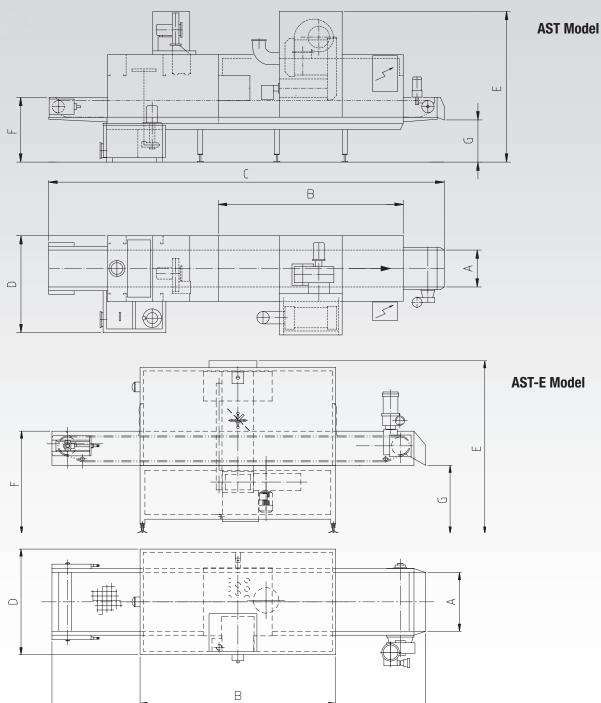
ACCESSORIES

- Recirculation tank in AISI 304.
- Installation of a hot degreasing.
- Extended length of loading/unloading sections.
- Control board with inverter and PLC.

MODEL		AST 2400	AST 2600	AST 3600	AST 4600	
Dimensions A	mm	400	600	600	600	
В	mm	2000	2000	3000	4000	
C	mm	5120	5120	6120	7120	
D	mm	1370	1570	1570	1570	
E	mm	2450	2450	2450	2450	
F	mm	1050	1050	1050	1050	
G	mm	700	700	700	700	
Operating temperature	°C	120	120	120	120	
Installed thermal power (electric heating)	kW	22.5	30	37.5	45	
Installed thermal power (gas heating)	Cal/h	20000	26000	32000	40000	
Electic power gear motor	kW	3.3	4.4	5.3	6.3	
Potentiality	m²/min	0.2	0.3	0.45	0.6	
Feeding	٧		400V/50 Hz			

The models indicated are only a part of the production range. The Customers	can
ask for different sizes and dimensions; Vibrochimica is able to follow all request v	vith
a great flexibility	

MODEL		AST-E 2600	AST-E 3600
Dimensions A	mm	600	600
В	mm	2000	3000
С	mm	3170	4170
D	mm	1080	1080
E	mm	1770	1770
F	mm	1000	1000
G	mm	700	700
Operating temperature	°C	100	100
Installed thermal power (electric heating)	kW	22.5	37.5
Total power installed	kW	27	42
Potentiality	m²/min	0.2	0.3
Feeding	٧	400V/	50 Hz





RECYCLING SYSTEM SA-CA RANGE FOR PROCESS WATER

TECHNICAL DATA

GENERAL DATA

The waste water recycling method is the preferred and cheapest process for mass finishing applications.

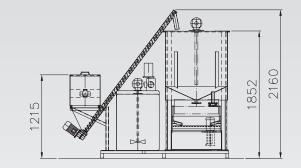
The principle is a sequence of the following working phases:

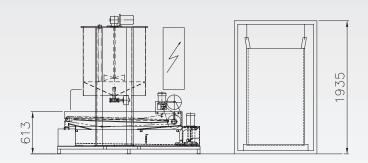
- Homogeneization
- Flocculation
- Sedimentation
- Separation of the solid phase
- Recycling of the clear water

The plant (in different versions, and capacity) works in fully automatic way by a PLC control and monitoring.

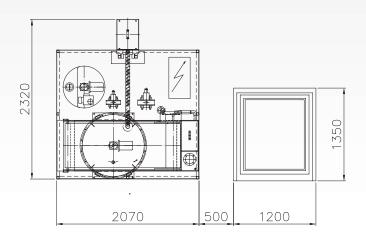
The functioning is very flexible even in continuous variation of the water discharge and the request of clean water. The plant can be easily adapted to the variation of the media utilized in the mass finishing process (ceramic, plastic, thermoplastic).

On the control board is installed one operating panel for the setting and the supervision of all equipment and working phases.





MODEL		PLANT 1000 SA
Treatment capacity	l/h	1000
Power installed	kW	1.7
Power installed with optional	kW	2.8
Nett weight	kg	700
Feeding	V	400V/50 Hz





ADVANTAGES

- Limited space.
- Easy management.
- Safe and continuous running.
- Full automatic concept.
- Possibility of a large number of accessories.
- Perfect integration with vibrofinishing production lines.

APPLICATIONS

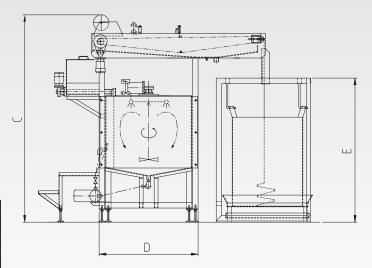
The plant can be installed in all fields where the water treatment is based on a clarification/ flocculation/ sludge separation process.

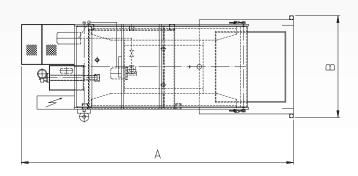
ACCESSORIES

The application of the recycling systems SA-CA range can be completed with a great number of accessories, like:

- Buffering and processing tanks for a complete recirculation circuit.
- Mechanical filter on dirty water inlet.
- MODEL 1000 CA Dimensions A mm 3000 3000 3470 1400 1400 mm 1400 C 1950 2050 2650 mm D 670 900 1260 mm Ε 1935 1935 1935 mm 1200÷1600 **Treatment capacity** (l/h) 300÷400 600÷800 Power installed kW 2.25 2.25 3 Nett weight kg 150 270 450 Weight during function 350 680 1260 kg Feeding ٧ 400V/50 Hz

- Activated carbon columns with gravity or forced circulation, with all possible levels of automation.
- PH-neutralization unit with storage of compounds, dosing pump, mixing equipment, full automatic mode.
- Automatic recycling equipment for clean water.
- Additional unit for the drainage of the sludge.
- Foot board for easy control and manutention.





VIBROCHIMICA NOISE INSULATION

Vibrochimica is specialist in the construction of very efficient noise absorbing systems. The quality of the materials used, they thickness, the type of construction, the finishing of the equipment, allow to obtain a product of high efficiency and very appreciated on the market.

The noise protection systems of Vibrochimica can be with movement of mobile parts:

- Manual
- Half automatic
- Full automatic

The possible of solution are:

- Sound absorbing covers
- Sound absorbing cabins
- Sound absorbing segments for working positions
- Sound absorbing walls and panels

All the system are supplied with security devices, protections, switches, ventilation, illumination.











SPECIAL VIBRATORY LINES AND SYSTEMS, FULL AUTOMATIC VIBRATORY FINISHING, TOTAL PROCESS SOLUTIONS

Vibrochimica is able to study and supply complete vibrofinishing lines starting from the request of the Customer and from the preliminary trials carried out in the laboratory.

The Enginering of Vibrochimica is supported by over 40 years of experience in all kind of machines. All solutions are based on a great flexiblility and capability to adapt standard and not standard machine in order to supply complete automatic lines, tailor made solutions, complete installations and systems.

Vibrochimica is able to offer unlimited possibilities starting from le selection of the best and more economical process and consumables.





