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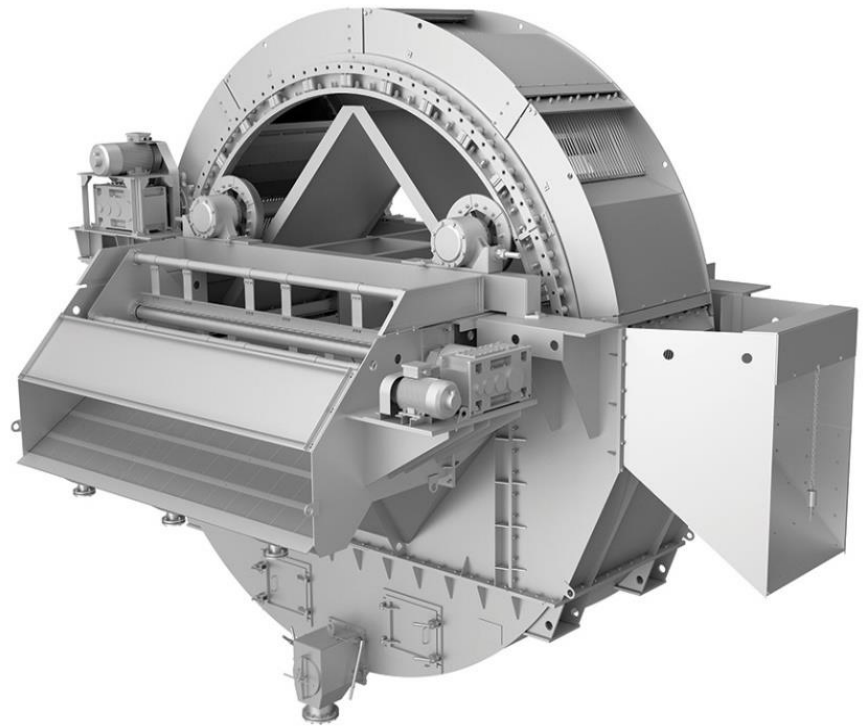
#### GENERAL INFORMATION

#### PRODUCTION CAPACITIES

#### PRODUCTION

- Centrifuges
- Screens
- Waste recycling screens
- Feeders PEV, PK
- Separators
- Elevators
- Concentration plants
- Sample conditioners
- Spare parts
- Spare parts and accessories for centrifuges
- Spare parts and accessories for screens
- Spare parts and accessories for elevators
- Spare parts and accessories for separators

#### INNOVATIONS





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The machine-building enterprise, founded in 2013, manufactures and develops equipment for the fuel and energy, mining and processing, metallurgical and gold mining complex of Ukraine, Georgia, Poland, Kazakhstan, Uzbekistan, Belarus, Azerbaijan and South Africa.

Our activity is focused on the technical re-equipment of concentration plants, quarries, mines, pits.

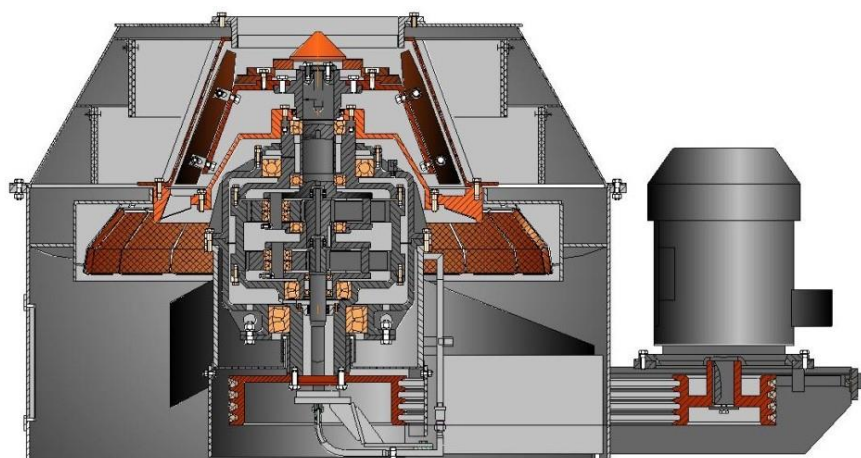
The professionalism and qualifications of employees, combined with a modern scientific and technical base, allow the company to comply with the most stringent requirements for product quality to be quick about the tasks set by the customer for the processing of solid minerals in order to obtain technically valuable products suitable for industrial use.

The design-engineering department develops equipment using modern software, new production technologies make it possible to manufacture equipment with minimal time costs.

The products meet the global performance, safety, reliability and quality requirements.



## Centrifuge TsfShnV-1,00-VM-01

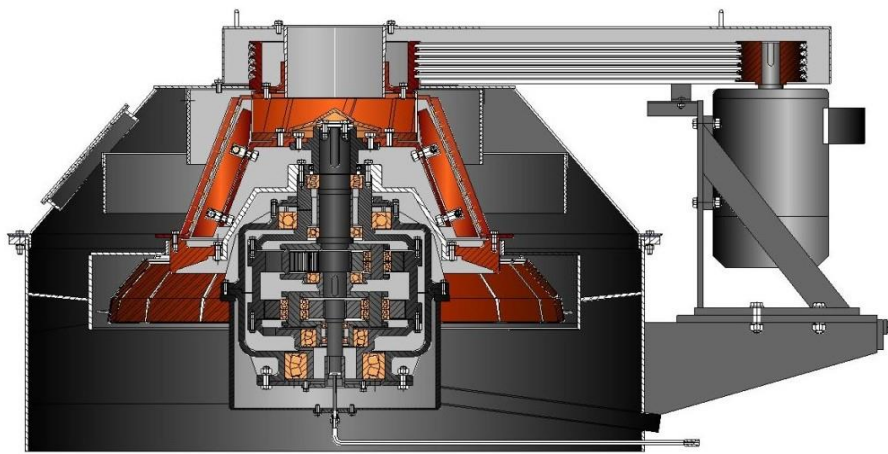


The centrifuge is designed and suitable for dewatering of 0-13 mm grade coal concentrate and other fine-grained materials

Parameter and size name	Value
1 Feed capacity, t/h	80-100
2 Sludge capacity, t/h	60-70
3 Raw material moisture content, % not more	25
4 Dewatered material moisture content, %	6-8*
5 Rotor angular spin rate, $c^{-1}$ (rpm)	58,3±02(566±5)
6 Auger angular spin rate, $c^{-1}$ (rpm)	57,1±0,8 (555±5)
7 Maximum inner diameter of the rotor, mm	1000±3
8 Electric motor power, kW	37
9 Overall dimensions, mm, not more	
length	2800
width	2100
height	1550
10 Weight, kg, not more	4400
<p>** With an internal moisture content of no more than 3% by mass, with a content of particles of a class from 0 to 0.5 mm in the feed stock, no more than 5% by mass and a solid phase content in circulating water up to 50 kg/m<sup>3</sup>. With an increase in the content of particles of the class from 0 to 0.5 mm in the feed stock and the solid phase in the circulating water in excess of the above, the moisture content of the sludge should not increase by more than 1% for every 5% by weight of the content in the feed stock of particles of the class from 0 to 0.5 mm or every 100 kg/m<sup>3</sup> of solids content in circulating water.</p>	



## Centrifuge FVSh-950-2M

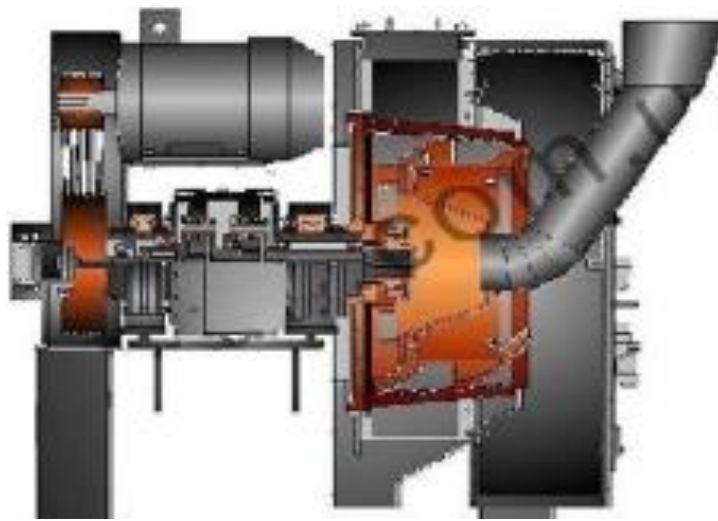


The centrifuge is designed and suitable for dewatering coal slime with a particle size of 0-3 mm; it is used at concentrating plants and units with a wet method of coal beneficiation under UHL4 operating conditions in accordance with GOST 15150-69, production category B, room class II-IIa at an ambient temperature of + 5 °C to + 40 °C.

Parameter and size name	Normal value
1 Feed capacity, m <sup>3</sup> /h	100
2 Raw material moisture content, % not more	45
3 Sludge moisture content, %	8-12
4 Maximum inner diameter of the rotor, mm	1000
5 Electric motors power, kW	37,25
6 Overall dimensions, mm, not more	
length	2400
width	2400
height	2050
7 Weight, kg, not more	5200
8 Corrected sound power level, dBA, not more	105



## Centrifuge FGSh-1000 (TsfShnG-1,00-VM-07)



The centrifuge is designed and suitable for dewatering coal slime with a particle size of 0-3 mm; it is used at concentrating plants and units with a wet method of coal beneficiation under UHL4 operating conditions in accordance with GOST 15150-69, production category B, room class II-IIa at an ambient temperature of + 5 °C to + 40 °C.

Parameter and size name	Normal Value
1 Feed capacity, m <sup>3</sup> /h	100-120
2 Raw material moisture content, % not more	45
3 Sludge moisture content, %	8-12
4 Maximum inner diameter of the rotor, mm	1000
5 Electric motors power, kW	37,25
6 Overall dimensions, mm, not more	
length	2400
width	2400
height	2050
7 Weight, kg, not more	5200
8 Corrected sound power level, dBA, not more	105

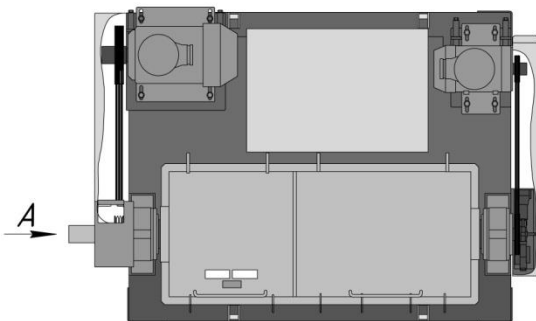
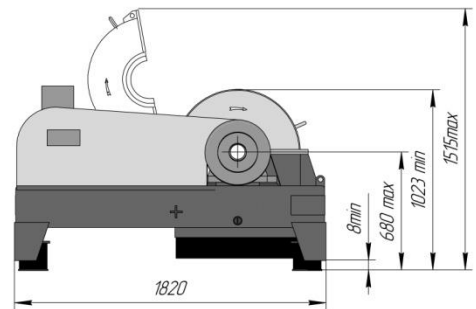
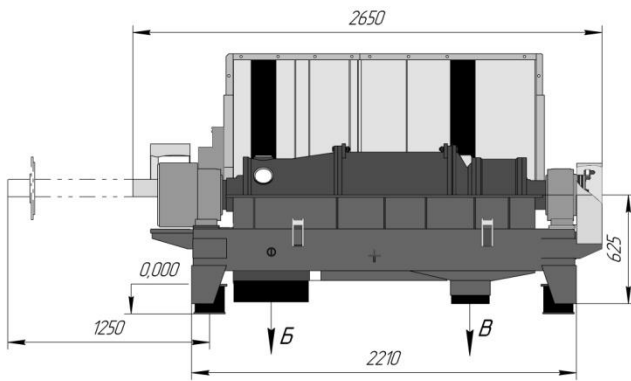




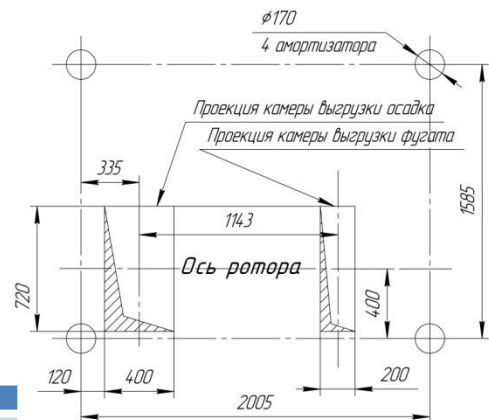
## Centrifuge unit OGSН 467-11 (ОГШ 467-11)

Size output, %	Size, mm			Allowable frequency of rotor rotation, max., rot/min
	0,5±1	0,2±0,5	0±0,2	
<3	<10	<15	remains	2500
<8	<10	<15	remains	1900
<10	<18	<20	remains	1700
<12	<20	<30	remains	1400
<30	<30	<30	remains	1200

Operating mode depends on the sieve composition of the feeding



План расположения амортизаторов, камер выгрузки осадка и фугата



Indication	Purpose	Dimensions
A	Feed supply connection	Du80
Б	Dewatered cake discharge chamber	400x720mm
B	Chamber of fugate discharge	200x720mm



## Centrifuge unit OGSB 467-11 (ОГШ 467-11)

Designed for dewatering coal preparation products and waste of metallurgical plants , particle size 0 ... 0.5 mm.

Available in three versions (as per material): L; K, LK

L - material of rotor and frame parts in contact with the processed product - steel 09G2S or 10HSND

K - material of rotor and frame parts in contact with the processed product – steel 08X18H10 or 08X18H10T

LK - material of rotor parts - steel 08X18H10T, material of frame parts - steel 09Г2С or 10ХСНД

Manufactured in general industrial and explosion-proof design.

### Technical Characteristics

Rotor diam., inner, max, mm .....	460	Weight of centrifuge without control cabinet and spare parts, max., kg .....	3500
Rotor working length ratio to inner max. diameter.....	1,78	Vibration isolators A1000, pcs.....	4
Rotor speed, max rot/min.....	2500	Vertical static loading onto building construction, H.....	35000
Separation factor, max.....	1597	Vertical dynamic loading onto building construction, max., H.....	260
Drain radius, mm (changeable).....	190;195;200	Rotor drive power.....	37 kWt
Rotor speed control ....smooth due to frequency converter		Screw drive power.....	7,5.... 11 kWt
Reducer gear ratio .....	77,5		
Screw speed control ... ..smooth due to the frequency converter			

### Technological Characteristics

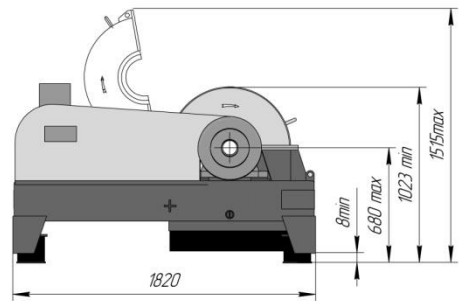
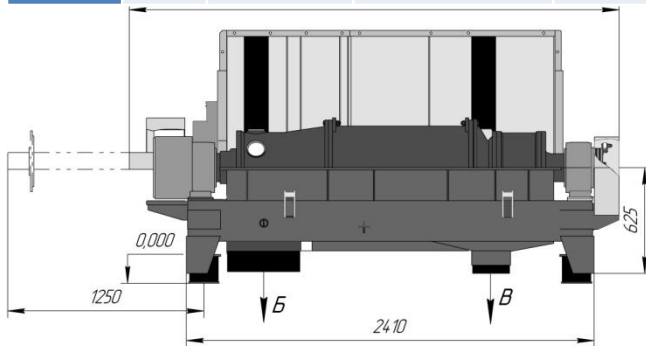
Water throughput m3 / hour .....	50
Feeding performance with solid content, (approx.) m3 / hour:	
- up to 100 g/l.....	40
- 200 g/l.....	30
- 250 g/l.....	24
- 300 g/l.....	20
Technological efficiency of capturing suspended solids into sediment depends on liquid properties, density and particle size distribution of solid, feeding performance and selected operating mode .	



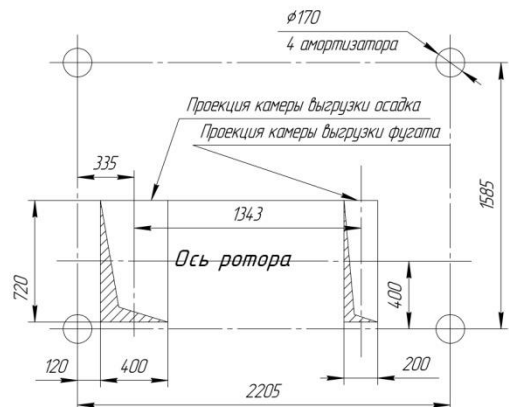
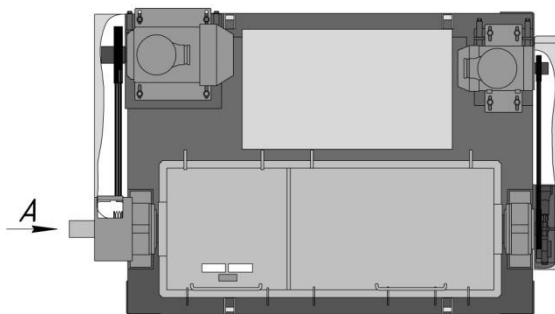
## Centrifuge unit OGSН 467-12 (ОГШ467-12)

Size output, %	Size, mm			Allowable frequency of rotor rotation, max., rot/min
	0,5±1	0,2±0,5	0±0,2	
<3	<10	remains	2500	
<8	<15	remains	1900	
<10	<18	remains	1700	
<12	<20	remains	1400	
<30	<30	remains	1200	

Operating mode depends on the sieve composition of the feeding



План расположения амортизаторов, камер выгрузки осадка и фугата



Indication	Purpose	Dimensions
A	Feed supply connection	Du80
Б	Dewatered cake discharge chamber	400x720mm
B	Chamber of fugate discharge	200x720mm





## Centrifuge unit OGSН 467-12 (ОГШ467-12)

Designed for dewatering coal preparation products and waste of metallurgical plants, particle size 0 ... 0.5 mm.

Available in three versions (as per material): L; K, LK

L - material of rotor and frame parts in contact with the processed product - steel 09G2S or 10HSND

K - material of rotor and frame parts in contact with the processed product – steel 08X18H10 or 08X18H10T

LK - material of rotor parts - steel 08X18H10T, material of frame parts - steel 09Г2С or 10XCHД

Manufactured in general industrial and explosion-proof design.

### Technical Characteristics

Rotor diam., inner, max, mm .....	460	Weight of centrifuge without control cabinet and spare parts, max., kg .....	3700
Rotor working length ratio to inner max. diameter.....	2,26	Vibration isolators A1000, pcs.....	4
Rotor speed, max rot/min.....	2450	Vertical static loading onto building construction, H.....	37000
Separation factor, max.....	1534	Vertical dynamic loading onto building construction, max., H.....	274
Drain radius, mm (changeable).....	190;195;200	Rotor drive power.....	37..45 kWt
Rotor speed control ....smooth due to frequency converter		Screw drive power.....	7,5... 11 kWt
Reducer gear ratio .....	77,5		
Screw speed control ... ..smooth due to the frequency converter			

### Technological characteristics

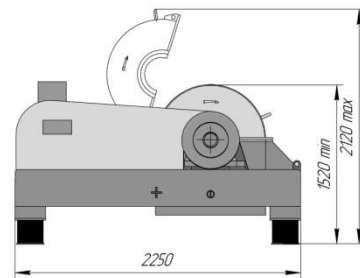
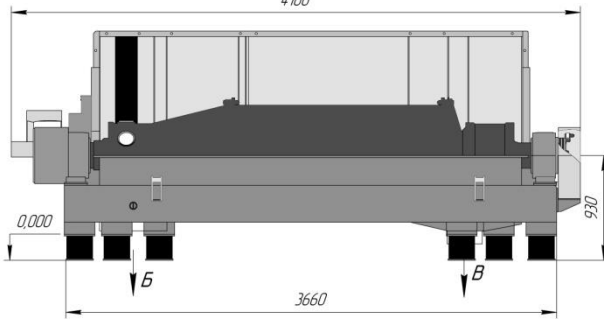
Water throughput m3 / hour .....	50
Feeding performance with solid content, (approx.) m3 / hour:	
- up to 100 g/l.....	40
- 200 g/l.....	30
- 250 g/l.....	24
- 300 g/l.....	20
Technological efficiency of capturing suspended solids in the sediment depends on liquid properties, density and particle size distribution of solid, feeding performance and selected operating mode .	



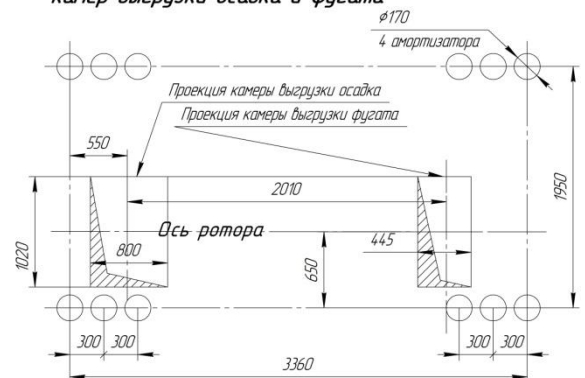
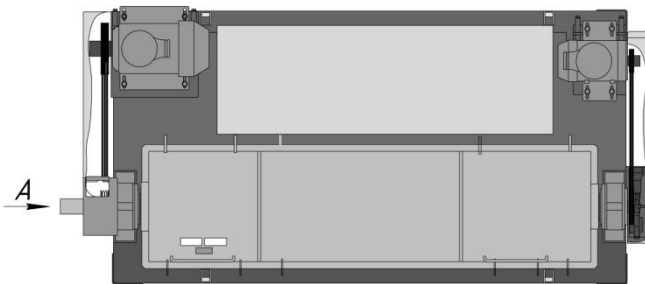
## Centrifuge unit OGSН 807-11 (ОГШ807-11)

	Size, mm			Allowable frequency of rotor rotation, max., rot/min
	0,5±1	0,2±0,5	0±0,2	
Size output, %	<3	<10	remains	1570
	<8	<15	remains	1450
	<10	<18	remains	1300
	<12	<20	remains	1200
	<30	<30	remains	1000

Operating mode depends on the sieve composition of the feeding



План расположения амортизаторов, камер выгрузки осадка и фугата



Indication	Purpose	Dimensions
A	Feed supply connection	Du125
Б	Dewatered cake discharge chamber	1020x800mm
B	Chamber of fugate discharge	1020x400mm



## Centrifuge unit OGSН 807-11 (ОГШ807-11)

Designed for dewatering coal preparation products and waste of metallurgical plants, particle size 0 ... 0.5 mm.

Available in three versions (as per material): L; K, LK

L - material of rotor and frame parts in contact with the processed product - steel 09G2S or 10HSND

K - material of rotor and frame parts in contact with the processed product – steel 08X18H10 or 08X18H10T

LK - material of rotor parts - steel 08X18H10T, material of frame parts - steel 09Г2С or 10XCHД

Manufactured in general industrial and explosion-proof design.

### Technical Characteristics

Rotor diam., inner, max, mm .....	800	Weight of centrifuge without control cabinet and spare parts, max., kg .....	11500
Rotor working length ratio to inner max. diameter.....	2,2	Vibration isolators A1000, pcs.....	12
Rotor speed, max rot/min.....	1570	Vertical static loading onto building construction, H.....	112700
Separation factor, max.....	1095	Vertical dynamic loading onto building construction, max., H.....	210
Drain radius, mm (changeable).....	330;340;350	Rotor drive power.....	132 kWt
Rotor speed control ....smooth due to frequency converter		Screw drive power.....	22 kWt
Reducer gear ratio .....	77,5		
Screw speed control ... ..smooth due to the frequency converter			

### Technological characteristics

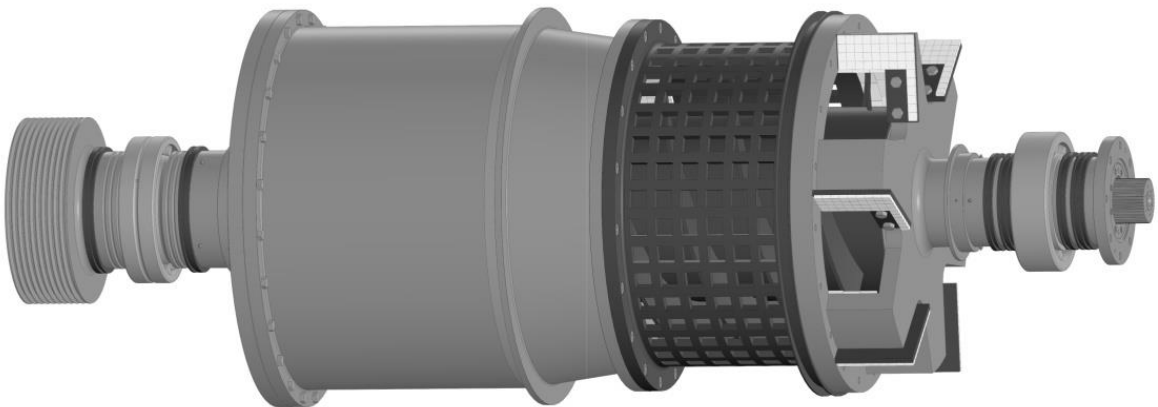
Water throughput m3 / hour .....	110
Feeding performance with solid content, (approx.) m3 / hour:	
- up to 100 g/l.....	100
- 200 g/l.....	100
- 250 g/l.....	90
- 300 g/l.....	70
Technological efficiency of capturing suspended solids into sediment depends on liquid properties, density and particle size distribution of solid, feeding performance and selected operating mode .	



## Centrifuge Rotor OFTS 40x72 (OΦЦ40x72)

We are overhauling screen bowl centrifuge rotors OFTS 40x72 (precipitation and filtration centrifuge) as well.

Rotor rotation speed	980	rot/min
Screw rotation speed	940	rot/min
Rotor weight	3860	kg
Overall dimensions	3341x1144	mm





## High Frequency Screens (GVCh) updated



Designed and suitable for wet or dry screening of bulk materials with a bulk density of no more than 2.8 t/m<sup>3</sup>, dehydration, desludging, as well as washing suspension from beneficiation products.

Increased vibrodynamic screening mode and high operating efficiency due to mode control are the distinctive features of these screens.

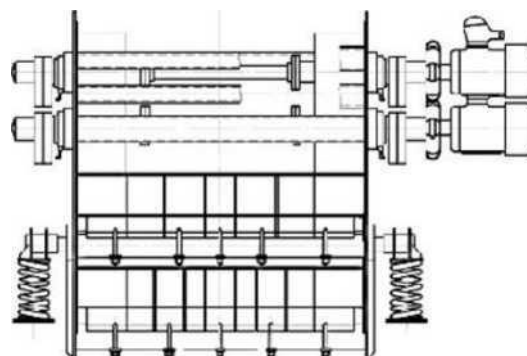
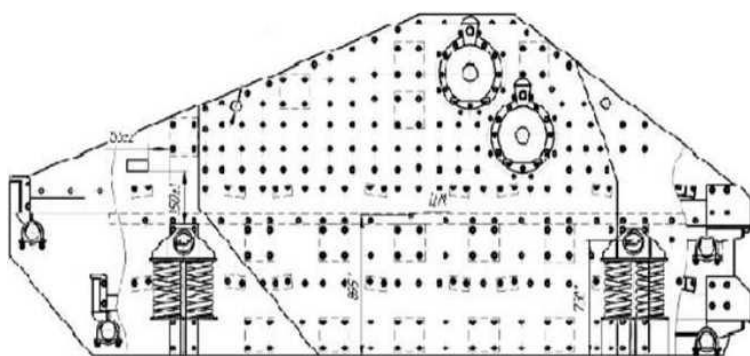
Parameter and size name	GVCh-10	GVCh-20	GVCh-30	GVCh-41	GVCh-61	GVCh-61M	GVCh-71	GVCh-81
Screening surface dimensions, mm, not more								
width	1250	1400	1510	1600	1920	2120	2400	3000
length	2400	2500	3600	3750	4200	4200	6250	8000
Screening surface area, m <sup>2</sup>	3,0	3,5	5,5	6,0	8,0	9,0	15,0	24
Oscillation frequency, c-1	24,5... 38,0	24,5... 38,0	24,5... 38,0	24,5... 35,0	16,2... 24,5	16,2... 24,5	16,2... 24,5	16,2... 24,5
Rated power of the electric motor, kW	4,4 (2x2,2)	8 (2x4,0)	11 (2x5,5)	15 (2x7,5)	15 (2x7,5)	22 (2x11,0)	37 (2x18,5)	2x22
Overall dimensions of the screen oscillating part, mm, not more								
length	2860	3300	4200	4200	4430	4430	6330	8100
width	2270	2500	2700	2900	3470	3670	4070	3670
height	1410	1550	1800	1800	1550	1550	2050	1850
Screen weight, kg, not more	1800	3000	3700	3800	5400	6000	9600	12000





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## High Frequency Screens (GVCh) updated



Parameter and size name	GVCh-42	GVCh-52	GVCh-62	GVCh-72
Screening surface dimensions, mm, not more				
width	1510	1750	1920	2400
length	5300	5200	5500	6250
Screening surface area, m <sup>2</sup>	8,0	9,0	10,5	15,0
Oscillation frequency, c-1	16,2...24,5	16,2...24,5	16,2...24,5	16,2... 24,5
Rated power of the electric motor, kW	30 (2x15,0)	30 (2x15,0)	30 (2x15,0)	37 (2x18,5)
Overall dimensions of the screen oscillating part, mm, not more				
length	5550	5550	5550	6250
width	3150	3380	3550	4100
height	2200	2200	2200	2280
Screen weight, kg, not more	7800	8500	9200	13400



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## Heavy Inertial Screens - GIT



Designed and suitable for separation of bulk materials by size with a bulk density of no more than  $2.8 \text{ t/m}^3$  at an angle of inclination of the screening surface of  $10 \dots 30^\circ$  in dry screening operations with surface moisture of the material no more than 5%, the size of pieces of feed stock no more than 300 mm. Manufactured in support and suspended versions.





## Heavy Inertial Screens - GIT

Parameter name	GIT31	GIT-41M	GIT-51M	GIT-51	GIT-51	GIT-51	GIT-61	GIT-71
Feed capacity, t/h	200	400	450	500	550	750	900	1300
Screening surface dimensions, mm, not more								
width	1250	1500	1750	1750	1750	1750	2000	2500
length	2700	3450	3600	3600	4270	4500	4800	5300
Screening surface angle of inclination, grade	10...20	10...25	15...25	15...25	10...30	10...30	15...25	15...30
Screening surface area, m <sup>2</sup>	3,3	5,2	6,3	6,3	7,4	7,8	9,0	13,3
Box oscillatory amplitude, mm	2,5...4,5	3,0...5,0	4,5...6	4,5...6	3,0...6,0	4,5...6	4,5...6	4,5...6
Oscillation frequency, c-1	16	16	12,25...16	12,25...16	16,2	16	16	12,25
Rated power of the electric motor, kW	5,5	11	18,5	18,5	18,5	18,5	30	30
Overall dimensions of the screen oscillating part, mm, not more								
length	3200	3500	3990	4100	4270	5350	5500	52000
width	2000	1980	2990	2467	2460	3380	4042	4200
height	1100	1160	1500	1500	1450	1720	1800	1700
Screen weight, kg, not more	2400	2300	5000	5000	5200	5200	8800	11000





## Heavy Inertial Screens - GIT

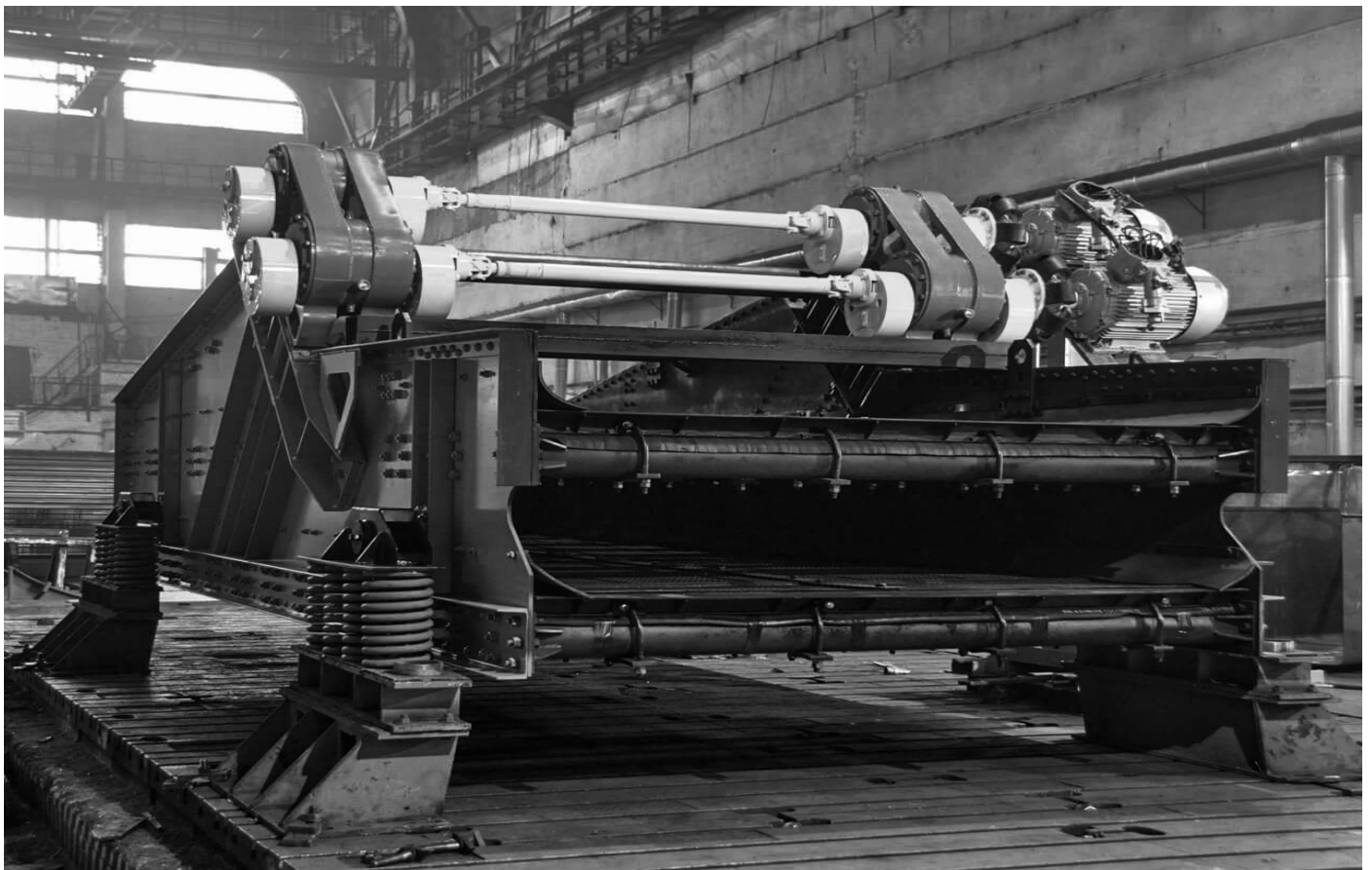
Parameter name	GIT-32	GIT-34	GIT-42	GIT-52	GIT-52M	GIT-53	GIT-62M	GIT-72	GIT-73
Feed capacity, t/h	300	350	400	500	600	620	1200	1300	2000
Number of tiers of sieves, pcs.	2	4	2	2	2	3	2	2	3
Screening surface dimensions, mm, not more									
width	1250	1200	1500	1750	1750	1750	2000	2470	2420
length	3000	2995	3300	4475	4000	4400	6000	6300	6250
Screening surface angle of inclination, grade	10...25	0...15	15...25	20...25	10...25	15...25	15...30	5...25	5...30
Screening surface area, m <sup>2</sup>	3,75	3,6	4,5	8	7	8	12	15,6	15
Box oscillatory amplitude, mm	1,6...3,7	1,2...3,0	2,0...4,0	4,6...5,5	2,2...4,7	5...7	2...4,5	3...7	3...7
Oscillation frequency, c-1	16	16,7	16	12,25	12,25	12,25	12,25	12,25	12,25
Rated power of the electric motor, kW	11	11	11	22	18,5	18,5	22	30	30
Overall dimensions of the screen oscillating part, mm, not more									
length	3485	3400	3680	4885	4295	4450	5900	6790	6790
width	1900	2500	2220	2470	3360	3000	2500	2950	2950
height	1160	3000	1700	1550	2070	2000	1500	2000	2300
Screen weight, kg, not more	2900	4580	4520	6290	6900	5800	5000	11200	11700



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## Inertial Self-Balancing Screens - GIST, GISL

Screens GIST, GISL are designed for screening bulk materials with a bulk density ( $1.4 \text{ t/m}^3$  - light self-balancing,  $2.8 \text{ t/m}^3$  - heavy self-balancing) with an inclination angle of  $0 \dots 25$  degrees, used in dewatering operations, wet and dry desludging, screening of coal, anthracite and oil shale, as well as for separating suspension from beneficiation products.







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## Inertial Self-Balancing Screens - GIST, GISL

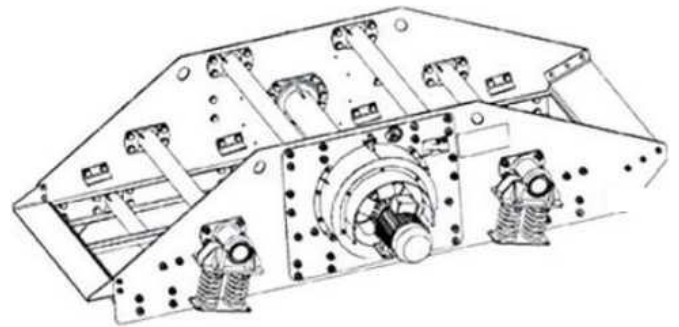


Parameter name	GISL-42	GIST-52	GIST-52M	GISL-62U	GISL-72	GIST-72	GISL-82A
Feed capacity, t/h	260	450	450	400...700	450	500	900
Screening surface dimensions, mm, not more							
width	1500	1750	1750	2000	2500	2500	3040
length	5605	5400	6450	5600	6890	6675	7990
Screening surface angle of inclination, grade	0...25	0...10	0...10	0...25	0...25	0...10	0...25
Screening surface estimated area, upper tier, m <sup>2</sup>	8,4	9,45	10,2	10,9	16,6	16,6	22,5
Rated power of the electric motor, kW	2x15	2x15	2x15	2x15	2x22	2x22	2x37
Overall dimensions of the screen oscillating part, mm, not more							
length	5700	5700	6400	5700	6970	6810	8200
width	2530	2450	2170	2700	3760	3487	4250
height	2461	2570	2180	2650	2500	2420	2700
Screen weight, kg, not more	7680	9300	7500	9445	13980	14900	17800



## Light Inertial Screens GIL

Designed and suitable for separation of bulk materials by size with a bulk density of no more than  $1.4 \text{ t/m}^3$  in operations of dry (with surface moisture of the material no more than 5%) screening of coals, anthracites and oil shale with a feed lump size of no more than 100 mm.



Parameter and size name	GIL-31	GIL-41	GIL-51	GIL-61
Feed capacity, t/h	60	100	120	250
Screening surface dimensions, mm, not more				
width	1250	1500	1750	2000
length	3000	4530	4775	6000
Screening surface angle of inclination, grade	10...25			
Screening surface area, $\text{m}^2$	3,75	6,8	8,3	10
Box oscillatory amplitude, mm	4,3	3,2	3,0	3,0
Oscillation frequency, c-1	16,2			
Rated power of the electric motor, kW	5,5	7,5	7,5	11
Overall dimensions of the screen oscillating part, mm, not more				
length	3200	4565	5050	6300
width	2351	2170	2550	2750
height	700	1280	850	1700
Screen weight, kg, not more	850	2890	2600	3500



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## Light Inertial Screens GIL



	GIL-32	GIL-42	GIL-52	GIL-52A	GIL-52M	GIL-52-2M	GIL-62
Feed capacity, t/h	100	100	150	130	300	350	100
Screening surface dimensions, mm, not more							
width	1250	1500	1750	1750	1750	1750	2000
length	3000	4500	4775	4654	4700	4500	5000
Screening surface angle of inclination, grade	10...25						
Screening surface area, m <sup>2</sup>	3,75	6,5	8,3	8,14	8,14	7,8	10
Box oscillatory amplitude, mm	3...3,5						
Oscillation frequency, c-1	16,2						
Rated power of the electric motor, kW	7,5	5,5	7,5	7,5	7,5	11	15
Overall dimensions of the screen oscillating part, mm, not more							
length	2590	3200	4580	5050	4880	5055	5755
width	2400	1900	2170	2550	2480	2480	3410
height	1340	1250	1200	1140	1200	1200	1330
Screen weight, kg, not more	2000	1990	3502	3240	3195	4100	4250

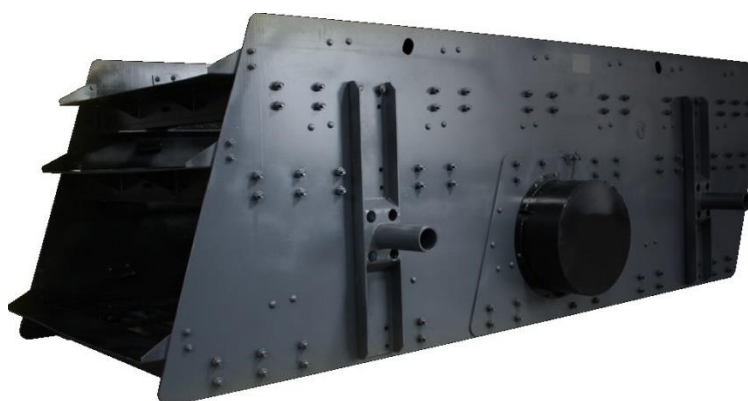
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## Light Inertial Screens GIL



	GIL-33	GIL-43	GIL-53	GIL-63
Feed capacity, t/h	40	100	300	450
Screening surface dimensions, mm, not more				
width	1250	1500	1750	2000
length	3000	4000	4745	5000
Screening surface angle of inclination, grade	10...25			
Screening surface area, m <sup>2</sup>	3,75	6,0	8,3	10
Box oscillatory amplitude, mm	3...4,5			
Oscillation frequency, c-1	16,2			
Rated power of the electric motor, kW	5,5	11	15	15
Overall dimensions of the screen oscillating part, mm, not more				
length	3200	4580	5065	5700
width	2351	2800	2500	3400
height	1500	1580	1750	1500
Screen weight, kg, not more	1950	3420	3900	7500





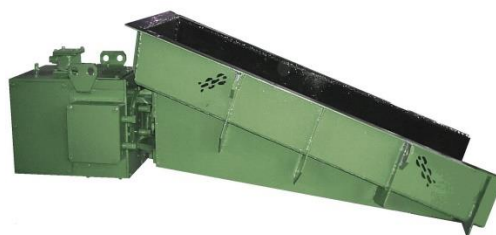
## Vibrating Feeders PEV

Electromagnetic vibrating feeders are designed and suitable for uniform feeding with adjustable performance of non-sticky bulk materials for installation under hoppers on horizontal sections of material lines as loading devices, batchers of mills, sieves and other technological devices.

The advantages of PEV-type feeders are the possibility of smooth regulation of productivity, the availability of components (a standard asynchronous electric motor is used as a vibration exciter), an instant cessation of the material supply when the vibration exciter is turned off.

Technical specifications

	PEV-0,3	PEV-0,5	PEV-0,7	PEV- 0,95	PEV- 1,3	PEV-2,0
Productivity, m/h	30	50	90	130	250	350
Material size, mm	80	150	220	300	400	500
Width of the working part of the tray, mm	300	500	700	950	1300	2000
Length of the working part of the tray	1200	1300	1600	2000	2000	2000
Power, kW	0,3	0,5	1,0	2,0	4,0	6,0
Overall dimensions, mm:						
length	1700	1900	2200	2750	3000	3200
width	600	800	1000	1250	1600	2200
height	680	750	900	1000	1250	1600
Weight, kg	280	380	690	1430	2320	3500







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## Swinging Feeders PK

Designed and suitable for uniform delivery of non-sticky bulk materials with a bulk density of up to 1200 kg/m<sup>3</sup>, PK-2.6 type - up to 2600 kg/m<sup>3</sup> and a size of no more than half the width of a tray from hoppers, funnels and other containers into technological machines or transporting devices.



Technical specifications	PK-1,2-8	PK-1,2-10	PK-1,2-12	PK-2,6-10	PK-2,6-12	PK-2,6-14
Productivity, m <sup>3</sup> /h	320	420	630	265	350	650
Tray width, mm	800	1000	1250	1000	1250	1400
Tray length, mm	1800	2060	2500	1900	2240	2650
Drive rated power, kW	4	7,5	15	15	18,5	30
Overall dimensions, mm						
Length	3600	4000	4400	4000	4300	5100
Width	1600	1750	1950	1700	2200	2300
Height	1500	1500	1750	1600	1800	1800
Weight, kg, no more:	1500	1900	2500	3250	4500	6500

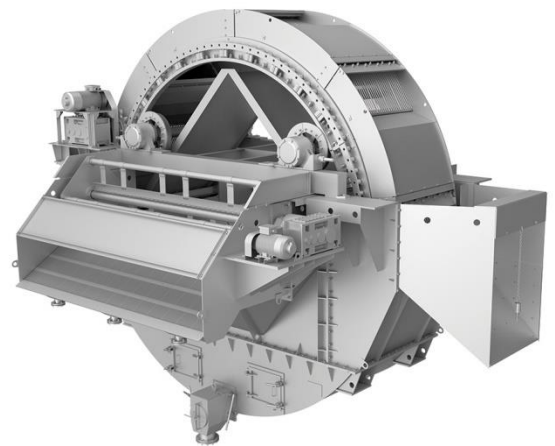


## Wheeled Separator SKVP

Designed and suitable for the beneficiation of coals, anthracites and shale with a size of 13 - 300 mm in a difficult environment with separation into two products: concentrate and beneficiation waste. They are used in the process flow diagrams of the chain of the processing plants and units.

The separators are equipped with a receiver with a tray that reciprocates in a bath with a suspension and mixes the sunken product, which increases the efficiency of work and eliminates the stratification of the suspension along the height of the bath. The SKVP-32 separator is produced in two versions: with a capacity of 500 t/h and 380 t/h.

Parameter and size name	SKVP-20	SKVP-32-500	SKVP-32-380
Bath width, mm	2000	3200	3200
Initial product capacity, t/h:			
with a particle size of 13-300 mm	215	400	300
with a particle size of 25-300 mm	270	500	380
Electric motors power, kW:			
elevator wheel drive	5,5	11 (2x5,5)	11 (2x5,5)
stroke mechanism drive	2,2	2,2	2,2
tray	-	4	-
Overall dimensions, mm			
length	4500	7000	5900
width	4700	6400	6400
height	4100	5800	5800
Weight, kg	15800	31200	27800





## Elevators

Bucket elevators of the EO4S, EO6S, EO8S, EO10S, EO12S, EO4, EO6, EO8, EO10, EO12 types are designed and suitable for inclined transportation with associated dewatering of various products of coal and anthracite processing at an angle of 65°-75°.

Two types of elevators are manufactured:

1- with a concentrated disposition of buckets at each step EO4S, EO6S, EO8S, EO10S, EO12S;

2- with a distributed disposition of buckets through a chain pitch EO4, EO6, EO8, EO10, EO12

Main parameter name	Unit	Normal value for standard sizes				
		EO 4 C	EO 6 C	EO 8 C	EO 10 C	EO 12 C
Productivity at a bulk density of 1 t/m <sup>3</sup>	t/h	17,2-38,4	34,8-77	61-137	77-171	123-280
Bucket belt speed	m/sec	0,17 ... 0,38				
Inclination to the horizon	degree	65				
Bucket width,	mm	400	650	800	1000	1250
Bucket pitch	mm	320	400	400	400	500
Bucket capacity	m <sup>3</sup>	0,018	0,045	0,08	0,1	0,2
Chain pitch	mm	320	400	400	400	500
Power consumption of the electric motor	kW	22	30	30	65	75
Elevator length, not more	m	30		25		





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## Units for Concentration

"CH.E-INDUSTRY GROUP" LLC designs and builds modular, mobile and stationary units for the processing of solid minerals with the aim of obtaining technically valuable products suitable for industrial use.

The demands of foreign consumers, as well as the future increase in railway tariffs, the efficiency of energy capacities and environmental requirements within the country are already forcing coal companies to develop their own beneficiation of energy-grade coals.

At this stage, the export orientation dictates the trend of increasing power coals beneficiation. Coal that does not meet certain parameters cannot be sold on the world market. A company that has its own beneficiation plant becomes less dependent on fluctuations in market conditions.

The smallest possible calorie content that is exported is 5 800 kilocalories. However, for the exported coal, the basic parameter in terms of calorific value is 6 000 kilocalories with a moisture content of 8-9% and an ash content of 12-14%. In ports of shipment, coal of various parameters can be mixed under contracts, on average creating a product with a calorific value of about 6 000 at the output. Nevertheless, it is believed that it is most profitable to clean coals to an ash content of 6-7%. Then the calorie content of the product will be equal to 6 600-6 700 k/cal.







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## Samplers

Designed and suitable for grinding bituminous and brown coals, anthracites, oil shale and their beneficiary with a particle size of 150 and 300 mm, respectively, and for separating laboratory samples, as well as grinding and separating samples of materials with similar characteristics to the specified ones (size, abrasiveness, strength, etc.).

They have the form of stationary units, including a belt feeder, impact mill, bucket distributor-splitter, drives and control cabinet. All machine units are mounted on a frame. Control cabinets are manufactured in IP20 design for inexplusive premises.

Designated area: CPP facilities, mines and other enterprises.





## Samplers MPL

Parameter and size name	MPL-150M	PL-300
Productivity, t/h, not more	22	6...10
Feed stock size, mm, not more	150	300
Size of the dispensed product for samples, mm.	0...3	10
Number of samples dispensed by the machine, pcs.	3	3
Moisture content, %, not more		
brown coal	60	60
bituminous coal and anthracite	18	18
oil shale	17	17
Installed power, kW, not more	18 (15/1,5/1,5)	21,5(18,5/1,5/1,5)
Overall dimensions, mm, not more		
Length	2000	2600
Width	1100	1415
Height	1800	2600
Operational conditions	Premises of B-IIa class	
Working mode with sampler unit	Manual / Automatic	
Main voltage, V	380	380
Current frequency, Hz	50	50
Weight, kg	1750	3567
Weight with electrical equipment and a set of spare parts, kg	2120	3887





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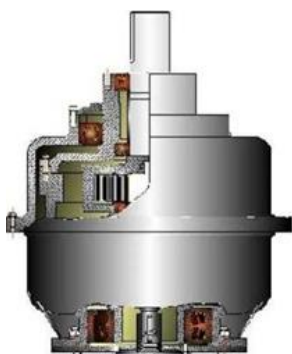
## Spare Parts for Centrifuges

### Gearbox of centrifuge TsfShnV-1,00-VM-01 (FVSh-1000)

Parameter and size name	
1 Rated power of the electric motor, kW	30
2 Gear ratio	48
3 Torque rating transmitted by the gearbox, kgm	2925
4 Permissible short-term overload,% no more	20



### Gearbox of centrifuge FVSh-950, FVSh-1320



The gearbox is an integral unit of the centrifuge and is designed to communicate different angular speeds to the rotor and auger.

The delivery set of the gearbox includes assembled gearbox, passport

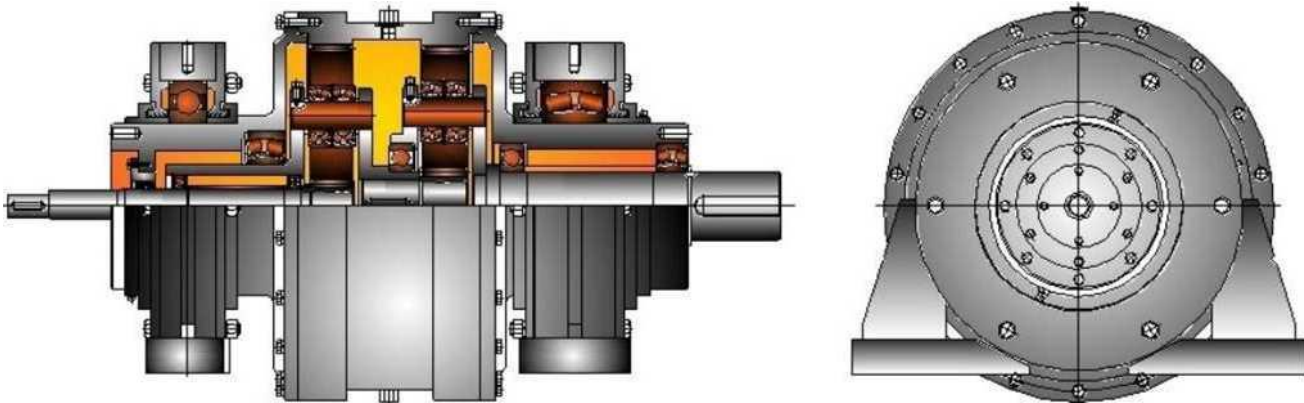




## Spare Parts for Centrifuges

### Gearbox of centrifuge TsfShnH-1,00-VM-01

Parameter and size name	
1 Rated power of the electric motor, kW	30
2 Gear ratio	48
3 Torque rating transmitted by the gearbox, kgm	2925
4 Permissible short-term overload, % no more	20



The gearbox is an integral unit of the centrifuge and is designed to communicate different angular speeds to the rotor and auger.

The delivery set of the gearbox includes assembled gearbox, passport.





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## Spare Parts for Centrifuges

Auger of centrifuge TsfShnH-1,00-VM  
(FVSh-1000)

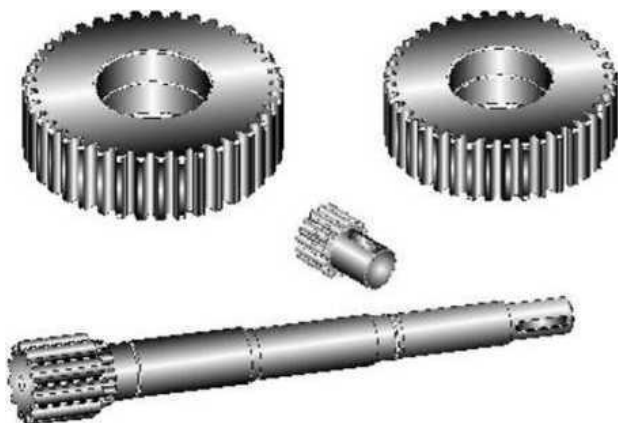


Auger of centrifuge TsfShnV-1,00-VM



The auger is designed and suitable for transporting dewatered material, it consists of auger body, scrapers and stands.

Spare parts for gearboxes: gears, pinion shaft, shafts



Crosspiece of centrifuge TsfShnV-1,00-VM





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## Rotor (Screens) for Centrifuges

### Rotor of centrifuge TsfShnV-1,00-VM, FVSh-950



### Rotor of centrifuge TsfShnH-1,00-VM





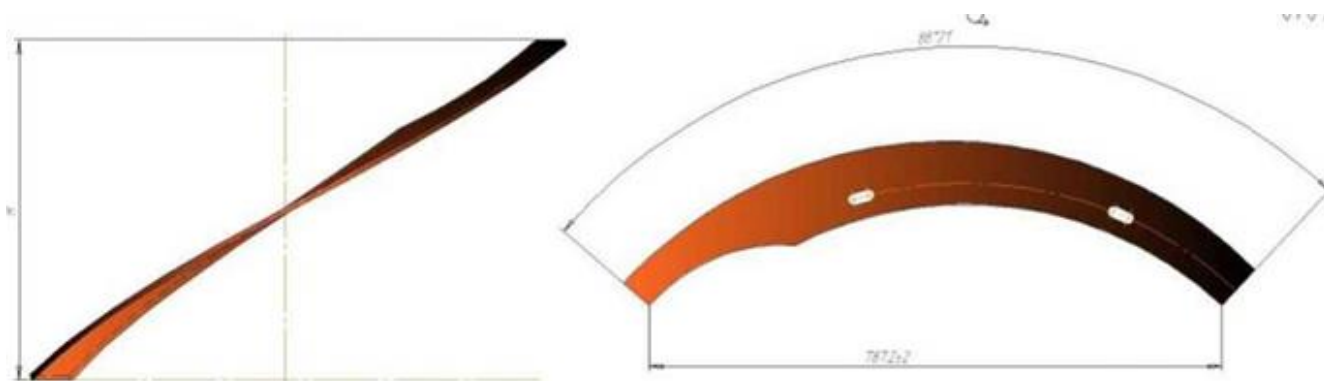
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## Rotor (Screens) for Centrifuges

### Rotor of centrifuge FVSh-1320



### Scrapers for centrifuges: FVSh-950, FVSh-1000, FVSh-1320





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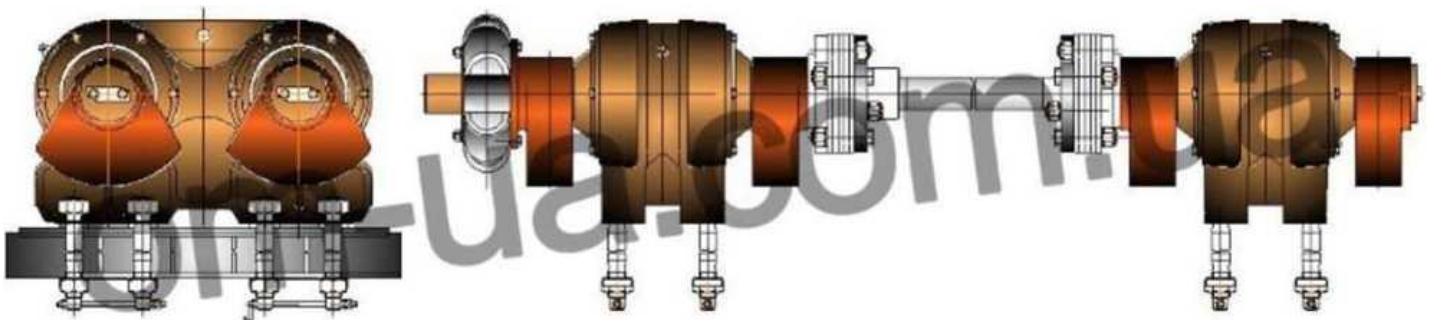
## Spare Parts for Screens

### Oscillators for high-frequency screens SHF



Rotation is transmitted from the electric motor through the petal clutch to the oscillator shaft, respectively, the unbalances develop centrifugal forces of inertia and bring the box into oscillatory motion.

### Oscillators for GISL, GIST screens







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## Screens mounting

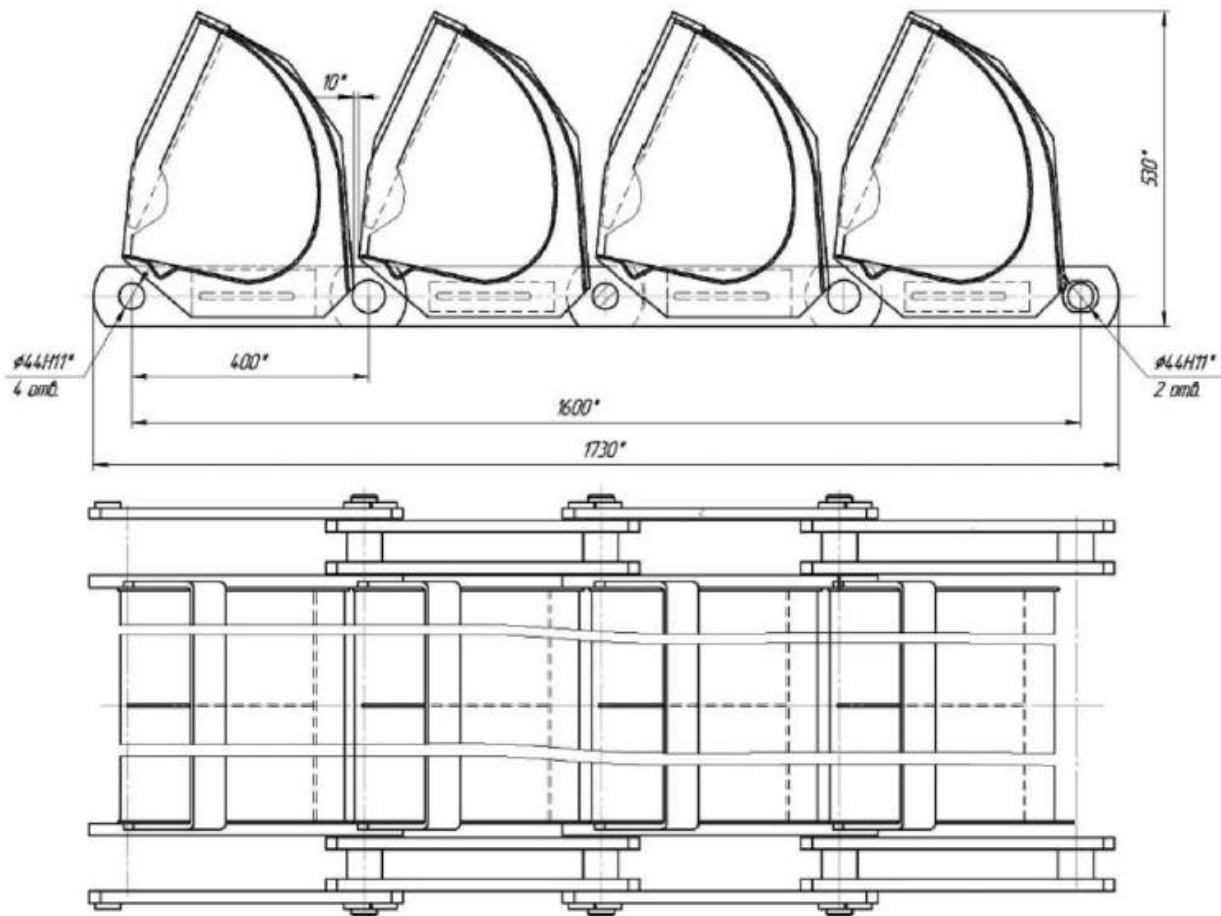




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## Spare Parts for Elevators

### The elevators bucket belt of EO4S, EO6S, EO8S, EO10S, EO12S



**types designed for transportation of beneficiary of coal and anthracite with simultaneous dewatering**





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## Spare Parts for Separators

**Concentrating Machines LLC manufactures spare parts for SKVP-20, SKVP-32-500, SKVP-32-380 wheel separators:**



- WHEEL ASSEMBLY
- BLADES
- STOPPERS - cementation operation (h 1,1...1,5, 54...62 HRC)
- PINWHEEL PINS - cementation operation (h 1,1...1,5, 54...62 HRC)

