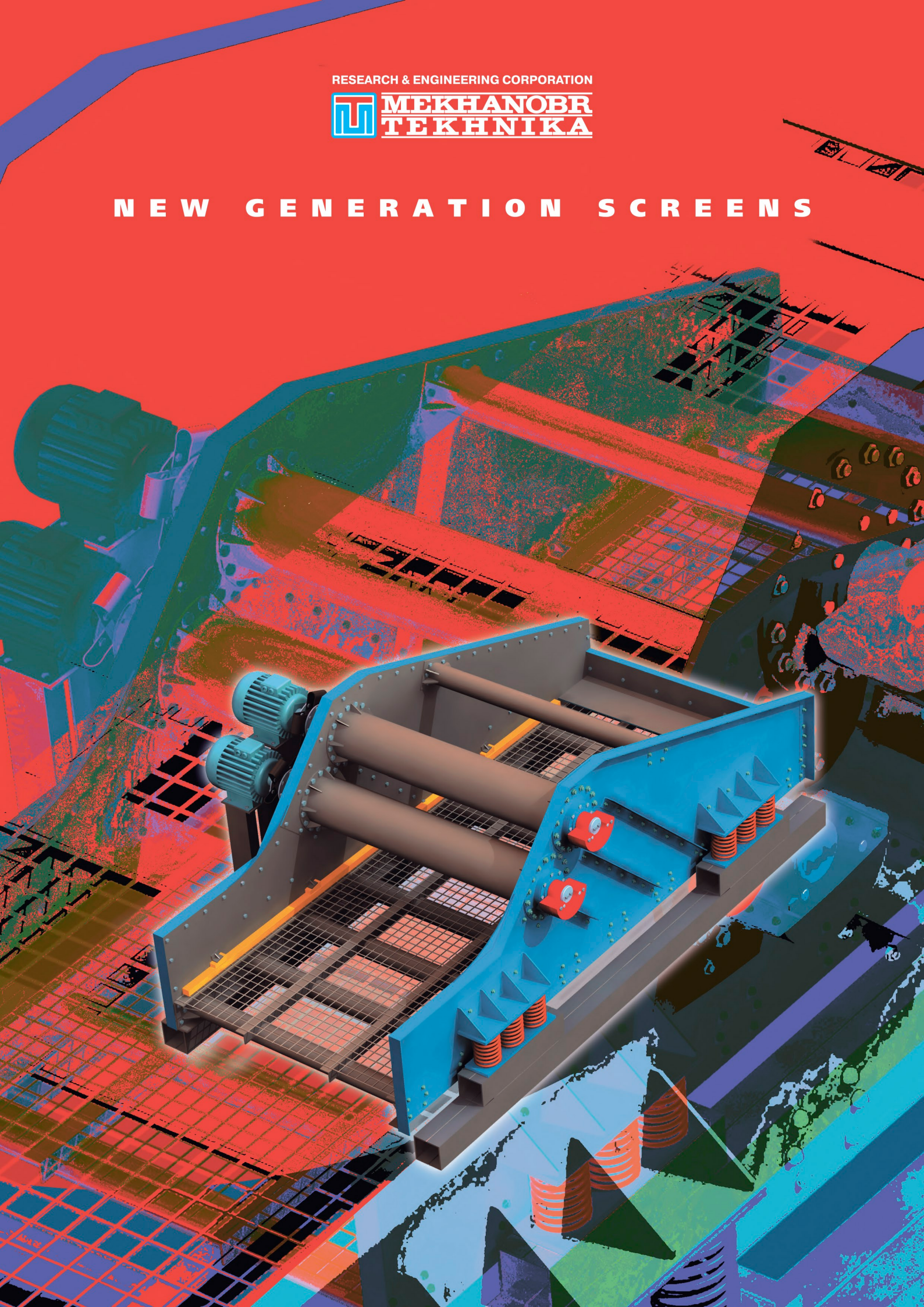


RESEARCH & ENGINEERING CORPORATION



NEW GENERATION SCREENS





We were the first to manufacture screens! Then we taught the others to do it...

L.A. Vaisberg,
Prof. D.E.
Chairman of the Board of Directors of Mekhanobr-Tekhnika Corp.,
Winner of the RF State Prize,
The Bearer of the
"Merited Builder of RF" badge

FACTS FROM HISTORY

The interest to screening process and commitment to development of new screening machines has been characteristic for Mekhanobr since the moment of its foundation. The first monograph devoted to the screens was written by Prof. L.B. Levenson, one of the Mekhanobr Institute founders.

Following the institute traditions and 90 years of experience Mekhanobr-Tekhnika Research & Engineering Corp. has been steadily improving the designs of the screens. While not much different from the conventional screens in terms of size and motor power, our machines exceed them in power saving, screening efficiency and trouble-free operation. It is not unfrequently that Mekhanobr-Tekhnika screens turn out to be the only solutions capable of performing special screening duties on difficult-to-screen materials.



DECISIVE ADVANTAGES

The widest range of screen sizes

- From the smallest 0,5 m² screens to the large ones with 18 m² screening area, their capacities ranging from 0,01 t/h to 1000 t/h to be used for dry and wet high efficiency screening of any bulk materials and mineral pulps.

Wide range of parameter adjustment

- Vibration amplitude and frequency adjustable up to 24 Hz.
- Variable screen slope.
- High separation accuracy achieved by individual selection of screening parameters.

Robust structure and high maintainability

- Modular vibration exciters fitted with long service vibration-resistant bearings.
- No stresses in screen box structure due to bolt fastening of cross bars and vibrators.

Screening media of any choice

- Metallic, rubber, polyurethane sieves outsourced from the best world manufacturers.
- Simple and reliable sieve fastening.

Low operational expenses

- Owing to longer operation between the repair shut-downs and individual selection of dynamic parameters.

Optional approach to the scope of delivery

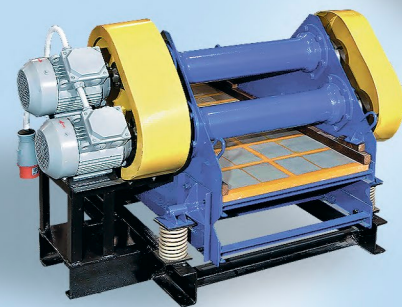
- Sound-proof and dust enclosures, spray nozzles.
- Test facilities for pre-sale investigations.
- On-site design changes on Customer's requests.
- Commissioning.
- After-sale servicing, spare and wear parts delivery.

SOME OF THE CUSTOMERS:

- Magnitogorsk Metallurgical Complex JSC
- ALROSA AK
- Almazy Anabara JSC
- Nijne-Lenskoye JSC
- Russian Railways JSC
- Kamenogorsky KNM JSC
- ORSK Quarry Management JSC
- Granite-Kuznechnoye JSC
- Karel Invest JSC
- Sylvinit JSC
- Uralkali JSC
- Rusal-Boxitogorsk JSC
- Gomel Chemical Plant JSC (Belarus)
- Erdenet JV (Mongolia)
- Catoca GRO (Angola)
- Kaz-zink JSC

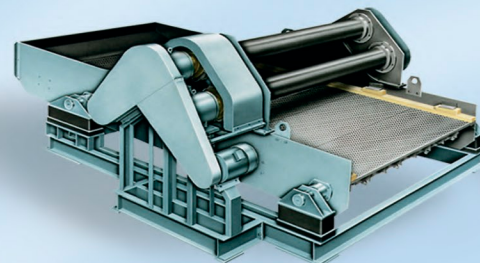
GSL

GSL-052
Fractions: 0,1-25 mm
GSL-12
Fractions: 0,1-20 mm
GSL-31; 41
Fractions: 2-25 mm



GSS

GSS-32, 42
Fractions: 2-25 mm



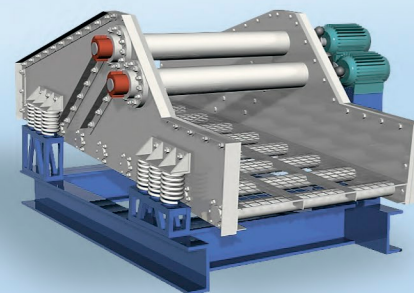
GST

GST-31, 41
Fractions: 2-25 mm
GST-61
Fractions: 2-50 mm

GPKT-72U

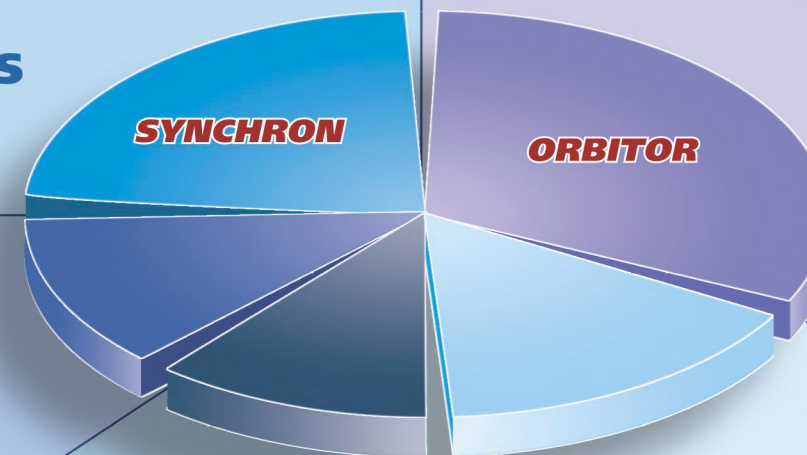
Fractions: 15-50 mm

GST-72MT



STRAIGHT LINE MOTION SCREENS

For dry and wet screening, dewatering, desliming and washing of ores and other minerals.



GIL

For screening chemical, pharmaceutical and food industries products.

GIL-051; 052; 053
Fractions: 0,1-15 mm
GIL-11; 12; 13; 14
Fractions: 0,1-20 mm
GIL-21; 22; 23
Fractions: 0,1-30 mm
GIL-31; 32; 33
Fractions: 0,5-30 mm
GIL-42; 43; 51; 52; 53
Fractions: 0,5-40 mm

GIS

For difficult-to-screen and wet materials

GIS-31; 32; 33; 42; 43
Fractions: 1-40 mm
GIS-51; 52; 53
Fractions: 2-60 mm
GIS-62
Fractions: 3-70 mm

GIT

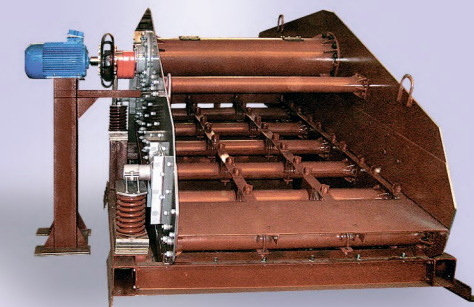
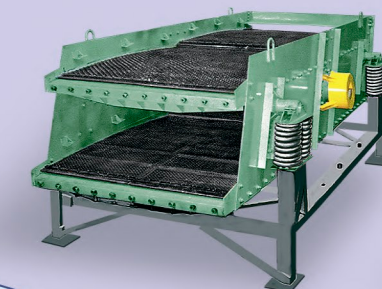
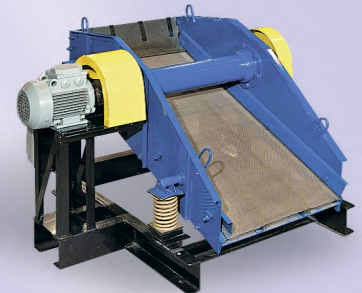
For ore screening in medium and fine crushing circuits

GIT-41; 42
Fractions: 20-80 mm
GIT-51; 52
Fractions: 20-100 mm



CIRCLE-THROW VIBRATING SCREENS

For screening ores, aggregates, industrial minerals and wastes



HYDRAULIC SCREENS FOR FINE SCREENING

Screening of finely ground iron, non-ferrous and diamond-bearing ores

GSS-0,8; GSS-1,25

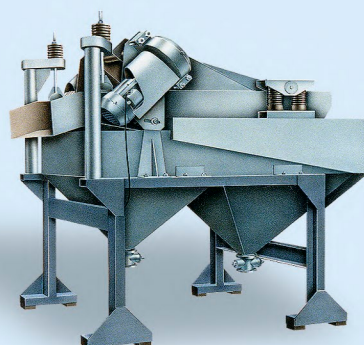
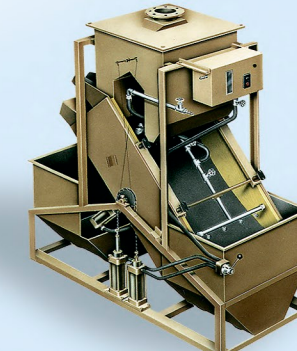
With a flexible synthetic sieve

GGP-2,5; 299-GrA

Sieve bends with curved or flat surfaces

GST-21

With a screen deck partially submerged in water



MULTI-DECK VIBRATING SCREENS

GST-14; 16

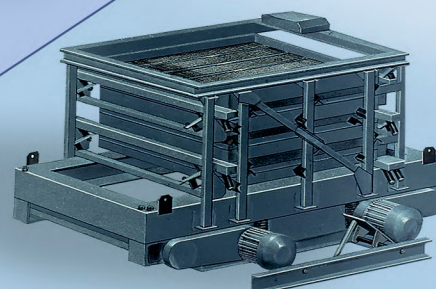
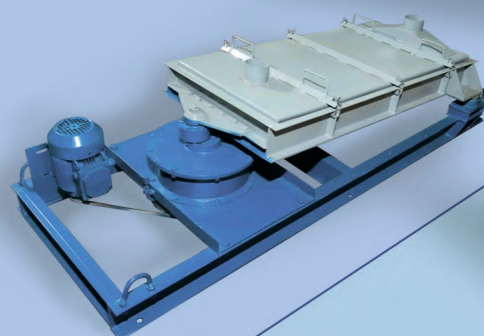
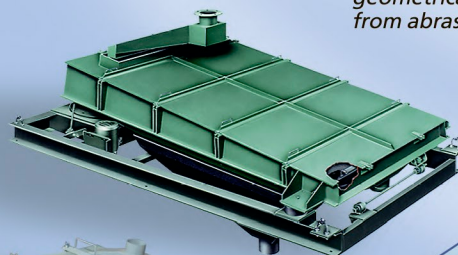
*Used for size separation of dry fine materials (producing up to 7 size fractions from -2 to +0,05 mm)
For refractory and ceramic materials, dry construction mixtures, chemical and pharmaceutical industry products.*

OSCILLATING ORBITAL MOTION SCREENS

Size classification of light bulk materials – dry construction mixtures, food products, fragile and easily destructible materials keeping the lumps of complex geometrical shape intact from abrasion and destruction.

V 1; V 1M

Fractions: 0,1-5 mm
V 05; V 052; V 053
Fractions: 0,1-10 mm
V 11; V 12
Fractions: 0,1-20 mm
V 21; V 22; V 23; V 31; V 32
Fractions: 0,1-30 mm



Mekhanobr Tekhnika Research & Engineering Corp. possesses as compared to other Russian manufacturers the widest and most complete range of screen types and sizes from laboratory units

to heavy-duty industrial screens ranging in capacity from 10 kg/h to 1000 t/h, the screens equipped with specially selected sieves – metallic, rubber and PU-supplied by the best world sieve manufacturers.

The screens of Mekhanobr-Tekhnika Corp. are made in compliance with ISO 9001 and Russian safety standards and possess all relevant RF Certificates and licences.

ORBITOR circle-throw vibrating screens

Model	Screening surface sizes, mm	Separation size, mm	Vibration amplitude, mm	Vibration frequency, Hz	Drive motor, kW	Feed capacity, t/h	Mass, kg
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Light duty screens for ores and other materials with up to 1,4 t/m³ bulk density

GIL 051	500x1030	0,1-15	3-5	16	0,55	0,02-4	180
GIL 052	500x1030	0,1-15	3-5	16	0,55	0,02-5	210
GIL 053	500x1030	0,1-15	3-5	16	0,55	0,02-6	220
GIL 11	750x1700	0,1-20	3-5	16	1,5	0,05-8	440
GIL 12	750x1700	0,1-20	3-5	16	1,5	0,05-10	520
GIL 13	750x1700	0,1-20	3-4	16	1,5	0,05-12	580
GIL 14	750x1700	0,1-20	3-4	16	1,5	0,05-14	680
GIL 21	1000x2000	0,1-30	3-5	16	3,0	0,1-20	760
GIL 22	1000x2000	0,1-30	3-5	16	3,0	0,1-25	825
GIL 23	1000x2000	0,1-30	3-4	16	3,0	0,1-30	1100
GIL 31	1240x2700	0,5-30	3-5	16	5,5	1,5-50	1450
GIL 32	1240x2700	0,5-30	3-5	16	5,5	1,5-55	1700
GIL 33	1240x2700	0,5-30	3-4,5	16	5,5	1,5-60	2000
GIL 42	1500x3700	0,5-40	(3-4);(1-2)	(16;24)	11	0,5-30	2400
GIL 43	1500x3700	0,5-40	(3-4);(1-2)	(16;24)	11	0,5-30	2600
GIL 51	1750x4650	0,5-40	3-5	16	15	15-150	2650
GIL 52	1750x4650	0,5-40	1-4,5	(16;24)	15	20-170	3450
GIL 53	1750x4650	0,5-40	3-4,5	16	15	20-200	4000
GIL 62	2000x4650	2-50	3-4,5	16	15	30-250	4000

Medium duty screens for ores and other materials with up to 1,8 t/m³ bulk density

GIS 31	1240x2700	1-40	(3-4,5)*	(16)*	5,5	3-60	(1430-1480)*
GIS 32	1240x2700	1-40	(3-4)*	(16)*	5,5	3-65	(1680-1870)*
GIS 33	1240x2700	1-40	(3-4)*	(16)*	5,5	3-70	(2045-2090)*
GIS 42	1500x3700	1-40	(3-4,5)*; (1-2)*	(16;24)*	11	15-200	(2330-2500)*
GIS 43	1500x3700	1-40	(3-4)*; (1-2)*	(16;24)*	11	15-200	(2900-3120)*
GIS 51	1750x4650	2-60	(3-4,5)*; (1-2)*	(16;24)*	15	20-220	(2700-2800)*
GIS 52	1750x4650	2-60	(3-4,5)*; (1-2)*	(16;24)*	15	20-250	(3500-3600)*
GIS 53	1750x4650	2-60	(3-4)*	(16)*	18,5-22	20-250	(4100-4300)*
GIS 62	2000x4650	3-70	(3-4,5)*	(16)*	15	40-300	4300

* This value is variable depending on the customer specifications.

Heavy-duty screens (for ores and other materials with up to 2,8 t/m³ bulk weight)

Model	Screening surface sizes, mm	Separation size, mm	Vibration amplitude, mm	Vibration frequency, Hz	Motor power, kW	Feed capacity, t/h	Screen mass, kg
GIT- 51	1750x4000	20-100	3-5	16	15	350-900	3500
GIT- 52	1750x4000	20-100	3-5	16	15	350-1000	4500

SYNCHRON STRAIGHT LINE MOTION VIBRATING SCREENS

Model	Screening surface sizes, mm	Separation size, mm	Vibration amplitude, mm	Vibration Frequency, Hz	Motor power, kW	Feed capacity, t/h	Screen mass, kg
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Heavy duty screens for screening ores and other materials with up to 2,8 t/m³ bulk density

GST 31	1250x2800	1-50	3-4,5	16	2x3,0	110	1600
GST 41	1500x4000	1-50	3-4,5	16	2x3,0	160	2200
GST 61	2000x6300	5-50	3,5-6	12,5	2x11,0	100-500	4700
GPKT 72U	2500x7200	15-50	4-6	12	2x22,0	1000	16000

Light duty screens for screening ores and other materials with up to 1,4 t/m³ bulk density

GSL 052	500x1000	0,1-15	2-4	16	2x0,375	0,02-4	260
GSL12	750x1500	0,1-20	3-4,5	16	2x0,75	0,05-14	510
GSL 31	1250x2800	0,5-25	3-4,5	16	2x3,0	10-100	1500
GSL 32	1250x2800	0,5-25	3-4,5	16	2x3,0	10-120	1800
GSL 41	1500x4000	0,5-30	3-4,5	16	2x3,0	10-150	2000
GSL 42	1500x4000	0,5-30	3-4,5	16	2x5,5	10-170	2600

MULTI-DECK HORIZONTAL VIBRATING SCREENS

For screening finely ground dry materials with up to 1,6 t/m³ bulk weight

Model	Screening surface sizes, mm	Separation size, mm	No. of decks	Drive motor, kW	Feed capacity, t/h	Mass, kg
GST 14	990x1510	0,05-2,00	4	2x2,2	2,0	1250
GST 16	990x1510	0,05-2,00	6	2x2,2	2,0	1550

HYDRAULIC SCREENS

for fine size classification

Model	Feed size, mm	Separation size, mm	Sieve dimensions, mm	Slope angle, degrees	Solids capacity, t/h	Screen mass, kg
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With flexible synthetic sieve (for ores)

GSS -0,8	3,0	0,07-1,0	760x1550	30-40	2,5-30	288
GSS-1,25	3,0	0,07-1,0	1250x2000	30-40	5-40	645

Underwater screen for size classification of 0,1-0,2 mm size particles in water medium

GST-21	3,0	0,1-0,5	1000x1500	3-8	1,5-10	1400
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With self-replacement of flexible sieve (for ores)

299 Gr-A	3,0	0,05-0,5	720x1200	45	6-15*	588*
GGP -2,5	3,0	0,05-0,5	720x1200	45	6-15*	600*

* The sizes refer to a single section. 299Gr-A screen can be assembled of 1 to 6 sections, while GGP-2,5 screen can include 1 to 3 sections.

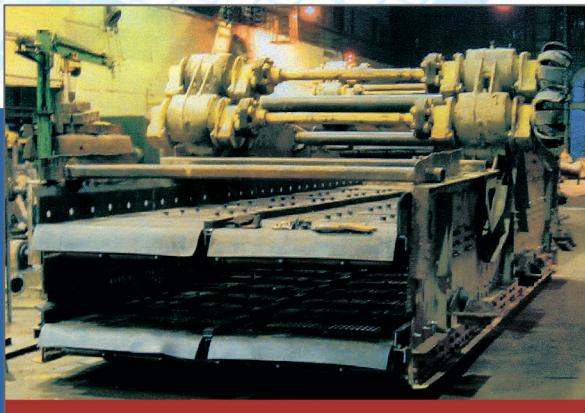
OSCILLATING ORBITAL MOTION SCREENS

Model	Screening surface sizes, mm	Separation size, mm	No. of sieves	Oscillation frequency, Hz	Drive motor, kW	Feed capacity, t/h	Screen mass, kg
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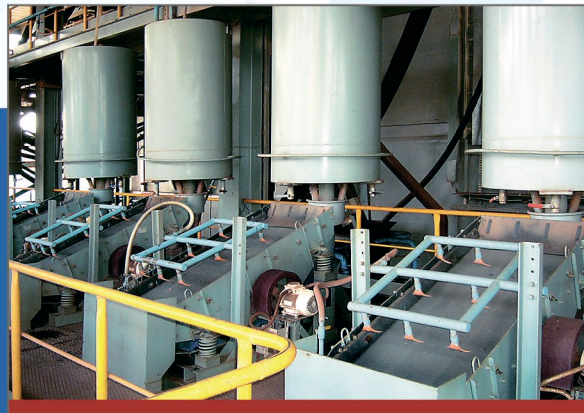
V 1	200x500	0,1-5	1	4	0,37	0,5	63
V 1M	200x500	0,1-5	2	4	0,37	0,5	65
V 05	500x1000	0,1-10	1	4	0,55	0,01-2	210
V 052	500x1000	0,1-10	2	4	0,55	0,01-2	215
V 053	500x1000	0,1-10	3	4	0,55	0,01-2	220
V 11	750x1370	0,1-20	1	4	1,1	0,03-4	435
V 12	750x1370	0,1-20	2	4	1,1	0,03-4	440
V 21	1000x2000	0,1-30	1	4	1,5	0,05-7	800
V 22	1000x2000	0,1-30	2	4	1,5	0,05-7	800
V 23	1000x2000	0,1-30	3	4	1,5	0,05-7	850
V 31	1250x2400	0,1-30	1	4	1,5	0,1-10	950
V 32	1250x2400	0,1-30	2	4	1,5	0,1-12	950

COMMERCIAL APPLICATION

Mine-and-mill complexes: iron-, copper-, gold-, diamond- bearing ores, industrial, rare-earth minerals and other raw materials.

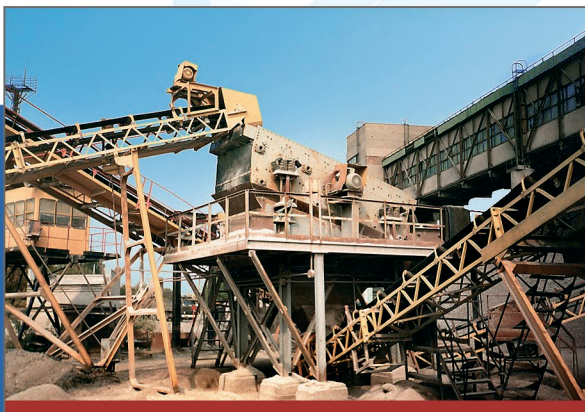


GPKT-72U screen at Erdenet JV, Mongolia



GIS-11 screens at Catoca Ore Mining Ass. (GRO), Angola

Aggregate industry: stone and gravel crushing plants, building waste recycling plants.



GIS-52 screen, Pavlovskgranite JSC, Voronezh Region, Russia



GIS-53 screen, «Nurlytas-2002» quarry, Kazakhstan



GIS-53 screen, TSM-N quarry, St.Petersburg



GIS-53T screen, Olvex JSC, St.Petersburg