

# KENSAN





# about us

Our company has been manufacturing stone crushing, screening and washing machines for mines since its inception.

Our company, which adopted the honest work and making high-quality reliable machines as principles, is advancing rapidly by being loyal to total quality understanding, doing continuous research and development in its sector and complying with quality standards to become an important and outstanding name in its sector. Our company makes all its activities professionally, works with all energy during and after the service in order not to disappoint you.



## our vision

To be at the top of the mining machinery market with its qualified and expert personnel, without sacrificing quality, by using all the opportunities provided by technology, and by never giving up on safety.

In this direction, our aim is to say that when KENSAN MAKINA is mentioned in our country and in the world, no negativity is considered, customer relations are kept at the highest level, R & D studies are constantly carried out, open to development, closely following technology, providing all kinds of material and moral support to its employees, and their value. At the same time, it is to bring to mind a company where engineering services are kept at a high level, and to ensure that our company reaches the point it deserves in our country and in the world.

# our mission

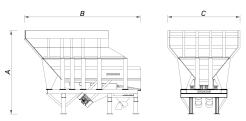
- Keeping technology always at the forefront,
- Ensuring that customer relations are at the highest level,
- To value its employees,
- To keep after-sales services and customer satisfaction at the highest level,
- To adopt the principle of honesty,
- To be an institution that is mentioned very well in the sector.

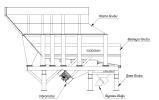


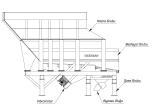
# ROCKFEEDERSDER

These are the feeders driven by two each robust-type vibroEngines working synchronized with each other supported by the heavy - duty type helical springs ensuring regular transmission of the raw material coming from the guarry to the primary crushers. Thanks to the manganese grids found at its front section, the clearance sizes of which can be adjusted, the earthy substances in the raw material are thrown out of the system before it enters the primary machine. In parallel to the request, the materials that come out hereof can be re-sieved with a suitable sieve and any material escaped during such discharge can be re-included into the system. Feeding capacity in the vibratory feeders we manufacture with the vibroEngine - oscillating feeders we have manufactured can be adjusted.

# **TECHNICAL DRAWING**







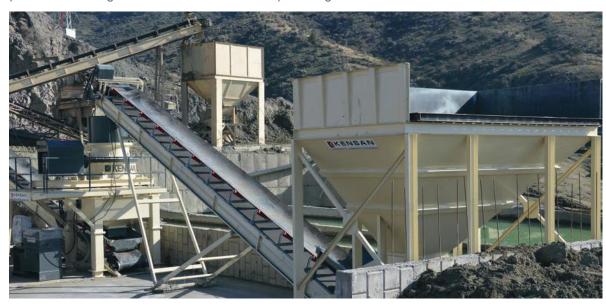
	KG11	KG10	KG09	KG13
Feeder Width (mm)	600	950	1200	1350
Feeder Length (mm)	3000	4000	5000	5000
Capacity (t/h)	45 - 100	100 - 200	120 - 300	300 - 600
Bunker Volume(m³)	12	25	35	45
Propulsion (Kw)	2x2	2x4	2x7,5	2x9,8
Weight(kg)	9500	13000	17000	18000
Dimension A (mm)	4000	4500	4600	4600
Dimension B (mm)	4800	5800	6800	6800
Dimension C (mm)	3000	3600	3820	3970





# FEED BUNKERKER

KENSAN series vibro-feeders have been designed as to be suitable for the versatile applications in order to be able to meet the needs of customers. These vibratory feeders in the secondary group are suitable for feeding the materials in the range of 0-200 mm. All surfaces of these feeders run by the powerful vibroEngines are coated with Hardox primer against abrasion.



	BB07	BB09	BB11	BB13
Feeder Width (mm)	700	900	1100	1300
Feeder Length (mm)	1600	1600	1800	1800
Capacity (t/h)	100-150	150-200	200-250	250-300
Bunker Volume(m³)	12	25	35	45
Propulsion (kW)	2 X 1.1	2 X 1.6	2 X 2.2	2 X 3.8
Max Feeding Size (mm)	150	150	250	250

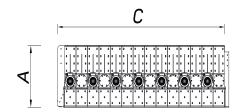


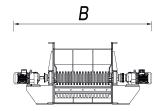


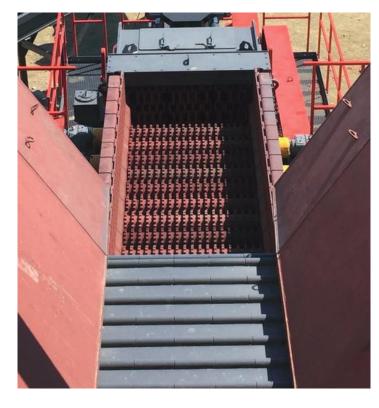
# WOBBLEREEDERSEDERS

Vibrating feeders are with each other synchronized two pieces of feeders which built solidly, supported with heavy duty suspension springs, driven/actuated by vibroEngine, these feeders enable the transmission of the tuvenane materials, brought from the quarry, into the primer crushers in an orderly manner. They throw the mixed soil part of the tuvenian material outside of the system through the intermediate size adjustable grids on the front part of the feeders which coated with mangan. By demand, the loss of materials can be included in the system again after screening them with a suitable screen it is possible.

## **TECHNICAL DRAWING**







	WB-1025 - 1000 X 2500 X 10	WB-1230 - 1200 X 3000 X 14	WB-1435 - 1450 X 3500 X 18	WB-1640 - 1600 X 4000 X 22
Engine (kw - d/d)	3 X 10 / 1500	3 X 14 / 1500	3 X 18 / 1500	3 X 22 / 1500
Drive System	Shaft	Shaft	Shaft	Shaft
Weight (kg)	3000	4500	6000	8500
Dimension A (mm)	1050	1050	1450	1450
Dimension B (mm)	2700	2900	3150	3300
Dimension C (mm)	2500	3000	3500	4000



# JANCRUSHERSHER

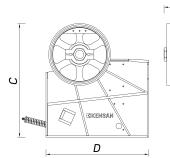
These breakers, which are used as primary and secondary, are ideal crushers to break the materials with high mohs hardness (materials of river and basalt). They break the materials by compressing them with two fixed and movable jaws. If the materials in to the machine are hard to be broken, then the jaw crushers do not harm themselves through the safety plates which will be broken in a certain load.

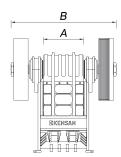
The main body is manufactured from tension and high-pressure resistant sheets/materials. Material crusher jaws and side liners are produced from the 16% - 18% manganese, 1.5% molybdenum alloy steel castings.



# **TECHNICIAL SPECIFICATIONS**

		Primary Jaw Crusher			Secondary Jaw Crusher		
	K03	К07	K11	K04	K12		
Inlet Port(mm)	900 X 650	1100 X 850	1300 X 1000	900 X 200	1100 X 350		
OutletPort (mm)	50 - 150	100 - 300	125 - 300	20 - 80	25 - 75		
Capacity (t/h)	50 - 200	100 - 300	260 - 385	10 60	40 - 125		
Propulsion (kW)	75	132	160	30	55		
Weight (kg)	11400	33000	42800	5600	9300		
Dimension A (mm)	860	1000	1200	860	1000		
Dimension B (mm)	2050	2800	2950	1850	2600		
Dimension C (mm)	2200	2900	3500	1500	2100		
Dimension D (mm)	2000	2650	3100	1400	1900		







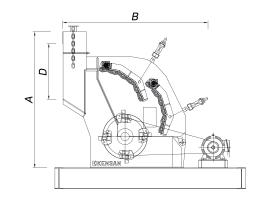
# PRIMARY IMPACT CRUSHER C

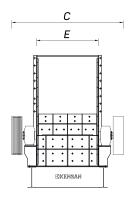
The primary impact crushers make the less abrasive materials of medium hardness smaller with a high ratio. The materials from the quarry are processed with the primary impact crushers firstly. They have the ability to crush the materials up to 1 meter x 1 meter size to a size of 25 mm. There are 2 pieces of manganese coated adjustable crushing chamber. All surfaces that come into contact with broken stone covered with manganese undercoats. Crushing process is done with the 4 palettes of high-alloy manganese in a rotor weighing 8500 kg and rotating with 450 revolutions per minute.



# **TECHNICIAL SPECIFICATIONS**

	PDK01	PDK02	PDK03
Rotor Diameter (mm)	1400	1400	1600
Rotor Width (mm)	1500	1250	2000
Capacity (t/h)	250 - 500	200 - 300	400 - 1000
Propulsion (kW)	250	200	2 X 250
Weight (kg)	28500	22000	53000
Dimension A (mm)	3700	3700	5200
Dimension B (mm)	3850	3850	5000
Dimension C (mm)	2900	2650	3400
Dimension D (mm)	1500	1500	2000
Dimension E (mm)	1700	1450	2200





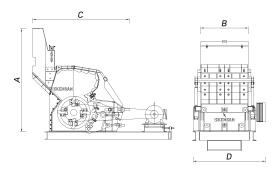


# SECONDARY IMPACT CRUSHER

The DMK series of jaw crushers counted as the impact crushers with adjustable jaws are the crushers which can break the materials with middle and high hardness (such as limestone, dolomite, granite and basalt). To be fed with coarse material, cubic product acquisition, having a high reduction ratio, ability to work at high capacity, low investment and operating costs, has made this type of breakers an ideal secondary crusher in crushing and screening facilities.

The stone put into the crusher, crash to the crushing elements of the first region through the throw of rotor hammers, and a first crushing step takes place. In this region consist a high pressure and crushing power which can even break very hard materials. The desired sizes of the broken material pass through the second region. The material in second area passes through another crushing stage and reduced to smaller dimensions. Then, the material passes through the third and final area and crushing process takes place the last time. Now the material is reduced to the smallest sizes (which the machine is able to crush).

# **TECHNICAL DRAWING**



	DMK01	DMK02	DMK03	DMK04
Rotor Diameter (mm)	1120	1120	1120	1120
Rotor Width (mm)	1000	1250	1500	750
Capacity (t/h)	120 -180	150 - 250	175 - 350	100-150
Drive (kW)	160	200	250	110
Weight (kg)	16500	18500	21000	14000
Dimension A (mm)	3150	3150	3150	3150
Dimension B (mm)	1150	1400	1650	900
Dimension C (mm)	3450	3450	3450	3450
Dimension D (mm)	2140	2390	2640	1940





# PRIMARY SECONDARY CRUSHER

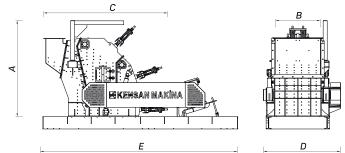
The PSK series of jaw crushers counted as the impact crushers with adjustable jaws are the crushers which can break the materials with middle and high hardness (such as limestone, dolomite, granite and basalt). To be fed with coarse material, cubic product acquisition, having a high reduction ratio, ability to work at high capacity, low investment and operating costs, has made this type of breakers an ideal secondary crusher in crushing and screening facilities.

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### **TECHNICIAL SPECIFICATIONS**

	PSK-1110	PSK-1113	PSK-1115	PSK-1165
Rotor Diameter (mm)	1150	1150	1150	1150
Rotor Width(mm)	1000	1300	1500	650
Capacity (t/h)	100 -200	200 - 300	300 - 400	80 - 130
Dimension A (mm)	2950	2950	2950	2950
Dimension B (mm)	1040	1340	1540	690
Dimension C (mm)	3800	3800	3800	3800
Dimension D (mm)	2060	2360	2560	1710
Dimension E (mm)	6030	6030	6030	6030



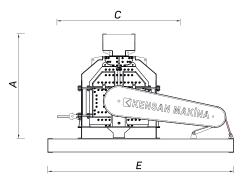


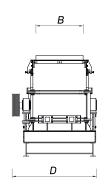
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# TERTRARY IMPACT CRUSHER

Tertiary impact crushers are high-speed machines that are used to obtain sand. The material entered into the machine, exits the machine after that it is hit against the walls and crushed by a high-speed (800 r / min) rotor. The material generally left over the screen is broken in these crushers, which usually are used to obtain 0-5 mm sand.







	TK-1105	TK-1110	TK-1113	TK-1115
Rotor Diameter (mm)	1100	1100	1100	1100
Rotor Width (mm)	500	1000	1300	1500
Capacity (t/h)	100 - 130	180 - 210	220 - 250	270 - 300
Propulsion (Kw)	160	200	250	315
Dimension A (mm)	2820	2820	2820	2820
Dimension B (mm)	520	1020	1320	1520
Dimension C (mm)	3300	3300	3300	3300
Dimension D (mm)	1550	2050	2350	2550
Dimension E (mm)	5000	5000	5000	5000







# **KENSAN**

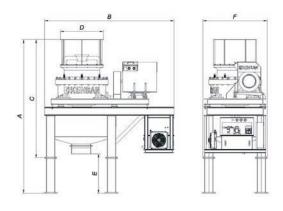
# CONECRUSHERSHER

Today, while the factors such as wear and tear in a short time, time elapsing for replacing the parts worn, daily greasing cost and time, daily pauses, number of days allocated for monthly repairs in the ongoing mining activities significantly decrease the production quantities, they increase the costs directly. They are the ideal crushers for breaking materials with high abrasive properties. (Basalt, Granite, Stream Material, Iron, Chromium, Copper, Zinc, Bauxite). Thanks to its advanced crushing chamber design, it works with maximum efficiency. The product size which can be adjusted with the hydraulic system also allows adjustment while the machine is running.

The automation system made of high-quality materials is manufactured in a way being resistant to dust and rain under heavy conditions.

We offer our cone crushers as a whole together with a complete body, chassis, engine, automation system and switchgear components.

# **TECHNICAL DRAWING**



KC1000	KC1400
1000/39"	1420/56"
200	300
132( kw)	250( kw)
12800/28219	18500 kg / 40785
5200/11464	7350 kg/16203
4500/177.16"	5040/198.42"
3800/149.6"	4500/177.16"
3460/136.22"	4000/157.48"
1300/51.18"	1500/59.05"
1250/49.20"	1250/49.20"
1890/74.4"	2240/88.18"
	1000/39" 200 132( kw) 12800/ 28219 5200/11464 4500/177.16" 3800/149.6" 3460/136.22" 1300/51.18"





# VERTICAL SHAFTCRUSHER F

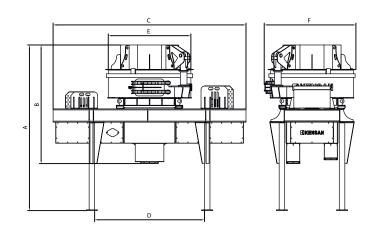
VSI crushers are the tertiary type of crushers used to crash the hard and abrasive materials between 0-45 mm, bring them into cubic shape and obtain sand. VSI crushers are produced in two types as closed rotor and open rotor. The vertical shaft types of crushers with closed rotor are fed with stones maximum size of 0-45 mm. because some large material in return of the crashed material can leave on the screen; these types of crushers are not suitable for crashing the returned material.

VSI crushers shoot and crush the material, which entered into the rotor, by throwing them to the lining of stones "stone box" which formed in the stator naturally and to the materials which entered in the system from the outside of the rotor with a speed of  $67 - 80 \, \text{m}$  / s approximately (crushing stones by hitting stones). VSI crushers are used to crush the materials having hardness lower than the grade 9 with a moisture content of less than 9%. Non-flammable and non-explosive mining materials have to be used.



# **TECHNICIAL SPECIFICATIONS**

	VSI1000	VSI900	VSI800	VSI700
Rotor Diameter (mm)	1000	900	900	700
Engine (kW)	2 x 250	2 X 200	200	132
Feed Material (mm)	0 - 100	0 - 40	0-38	0-30
Capacity (t/h)	400	250	180	80
Weight (kg)	17000	1400	12000	8000
Dimension A (mm)	5000	4490	4490	3750
Dimension B (mm)	3600	3220	3220	2540
Dimension C (mm)	6650	5230	5230	3100
Dimension D (mm)	2700	2980	2980	2400
Dimension E (mm)	2150	2240	2240	1800
Dimension F (mm)	2300	2490	2490	1875





# KENSAN

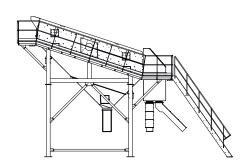
# VIBRATING SCREEN CREEN

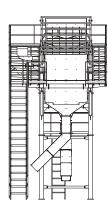
Free vibrating screens are produced with 1,2,3,4 layers in every theoretically possible dimension. They are used to separate the broken material inside the plant. The capacity of the screen can vary depending on the size of the desired product. Free vibrating screens operate an average of 7 mm in width. Gradation and moisture of the material, which will be eliminated plays an important role in the capacity of the screen.

Vibration-resistant ball bearings and eccentric shaft which is placed on the screen body are driven with eccentric weights at the both end of the shaft. There are ellipsoid vibration in the front and rear parts of the screen and a circular vibration in the middle parts of the screen. Vibrating body sits on the main frame through a sufficient number of heavy-duty helical springs.



# **TECHNICAL DRAWING**





	TE 1030	TE1230	TE 1240	TE 1650	TE 2050	TE 2060	TE2070	TE 2460
Width (A) (mm)	1000	1200	1200	1600	2000	2000	2000	2400
Lenght (B) (mm)	3000	3000	4000	5000	5000	6000	7000	6000
Height C (mm)	2570	3850	4020	5600	5600	7000	7300	7000
Propulsion (kW)	5,5	7,5	7,5	11	18,5	22	30	30
Weight (kg)	3300	4250	5700	8250	12600	14800	15900	16100

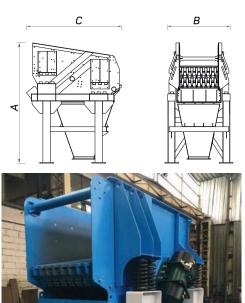


# GRIP-TYPE SCREENS CREEN

Materials broken down from the primary group may need to be sieved at different stages. In such cases, standard vibrating screens may not meet the required capacity and maintenance costs may be high. In KENSAN heavy-duty sieves, the upper layer is equipped with cast grate or Hardox-perforated metal sheet to prevent the large sized material – arisen damages and abrasions. The grid type vibrating sieves are manufactured theoretically in 1 or 2 – storey one in every possible size dimension.

The vibration-resistant special bearings and the shaft housed in the sieve body are driven by the oscillation-adjustable weights installed at both ends of the shaft. There is an ellipsoidal vibration in the back and front sections and circular vibration in the center of the sieve. The vibration body sits on the main chassis with a sufficient number of heavy-duty type helical springs. Generally, the product in the material crushed in the primary group is used to go directly to the product sieve without entering the secondary crusher. In this way, it prevents extra material to enter the secondary crusher and causes an augmentation in the capacity.

# **TECHNICAL DRAWING**





	ITE 1000x3000	ITE 1200x3000	ITE 1400x3000	ITE 1600×4000
Engine KW-D/D	11kw / 1000	15kw/1000	22kw / 1000	30kw / 1000
Drive System	Shaft	Shaft	Shaft	Shaft
Weight(KG)	3000	4000	5000	7500
Dimension A	3900	3900	3090	3090
Dimension B	1700	3900	2100	2300
Dimension C	3050	3050	3050	4050



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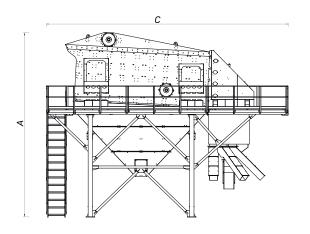
# HORFZONTAL SCREENCREEN

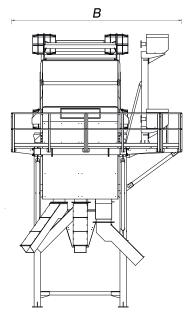
Horizontal screens are appropriate for trouble-free operation under heavy conditions. It allows achieving the highest efficiency and quality product thanks to elliptic impact action performed through double drive system and 8 bearings. Horizontal screens combine quality and performance. They ensure long service lives even under the harshest working conditions.



# **TECHNICIAL SPECIFICATIONS**

	TYE 1650	TYE 2050	TYE 2060	TYE 20602
Width	1600	2000	2000	2200
Length	5000	5000	6000	6000
Height	7500	7500	8500	8500
Drive System	2x15 kw	2x18,5 kw	2x22 kw	2x30 kw
Weight	17 ton	19 ton	21 ton	25 ton



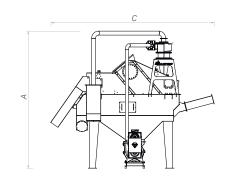


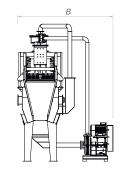


# HYDRO-CYCLONE SCREEN E AND DEWATERING SCREEN E AND D

It is a washing system used in washing plant to achieve maximum output. It allows washing stream sand and mountain sand down to 250 microns, and separates their clay, silt and sludge and makes the sand compatible with desired standards. The dewatering screen allows the material to have the least possible moisture thanks to its 3-degree reverse angle. It operates with hydro-cyclone and sludge pump and produces sand with maximum fineness.

# **TECHNICAL DRAWING**







	SE-1030	SE-1635	SE-16352	SE-2040
Engine (kW - d/d)	2 X 5,5 / 1000	2 X 7,5 / 1000	2 X 7,5 / 1000	2 X 8,5 / 1000
Hydro-Cyclone (pump)	350 X 6/4-30KW	500 X 8/6-45KW	660 X 10/8-55KW	880 X 10/8-55KW
Weight (kg)	4500	7000	8000	8500
Dimension A (mm)	4850	5000	5000	5000
Dimension B (mm)	3350	4300	4300	4500
Dimension C (mm)	5750	6400	6400	6800



# SCREW WASHERVASHER

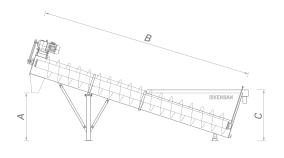
The materials are rubbed & dragged and the water flowed in the opposite direction inside of curved body which is made in the shape of a channel through the rotation of rubber covered shaft. The thin mud floating in the water is precipitated in the pool on the either side of this channel and the through the dirty water lost material are minimized. Screw washers are produced as single and double helical shafts are widely used machines to wash the materials between 0-10mm sizes.





# **TECHNICIAL SPECIFICATIONS**

	YH16	YH18	YH26	YH28
Helix Diameter (mm)	600	800	600	800
Lenght (mm)	6000	8000	6000	8000
Capacity (m3/h)	25 - 35	35 - 60	45 - 65	70 - 80
Propulsion (kW)	5,5	22	2 X 5,5	2 X 22
Weight (kg)	2500	4600	5250	7400
Dimension A (mm)	1500	1800	1500	1800
Dimension B (mm)	6300	8400	6300	8400
Dimension C (mm)	1450	2000	1450	2000
Dimension D (mm)	1500	1700	2200	2800







# NYSNUY

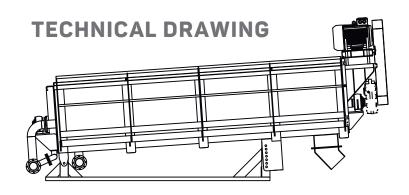
# LOGWASHERASHER

KENSAN Log washers are generally used in the washing system to increase the sieving efficiency and to break the clay in the material. It works before the washing sieves, to the sand outlet of the washing sieve and in front of the dewatering. It is used to separate the soil, clay and other unwanted materials in the stone or sand. It can be used in both coarse and fine materials.

It is produced as a double row. Spiral leaves and washing arms are arranged on the pipe in the most appropriate way. It is made in a bolted system, it is very easy and simple to disassemble and replace.



	LW - 2050	LW - 2060
Engine (kW - d/d)	2 × 37 / 1500	2 X 45 / 1500
Drive System	Outboard Bearing	Outboard Bearing
Weight (kg)	9000	12000
Dimension A (mm)	2800	2850
Dimension B (mm)	2200	2200
Dimension C (mm)	6200	7200



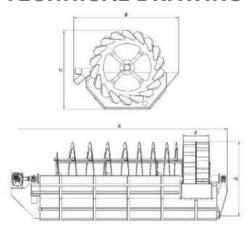


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# BUCKET-TYPE HELICAL WASHER

KENSAN Bucket Helical-Type Washers are the machines designed in order to clean and dewatering the minerals and sands being in sizes between 0.25 – 10 mm in higher capacity and higher quality. The fine material in the material washed in the bucket section is recycled to the system owing to the helices and the leakage ratio remains at a minimum level.

## **TECHNICAL DRAWING**



	KHY-150
Dimension (mm)	3000 x 6600
Engine (Kw - d/d)	15 Coupled
Drive System	Outboard Bearing
Weight (kg)	8000



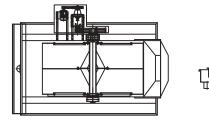


# BUCKETTWHEEE WASHER HER

Wheel (bucket) washer is a washing machine used for washing mountain and stream sand. The material is washed by wheeling of the drum at the washing stage. Thus, it is enabled to separate the clay stuck to sand and discharge it along with water. Thus, it is a very useful and cost-effective machine. Due to the nature of discharging buckets of the machine, discharging is performed both fast and with the lowest moisture ratio.

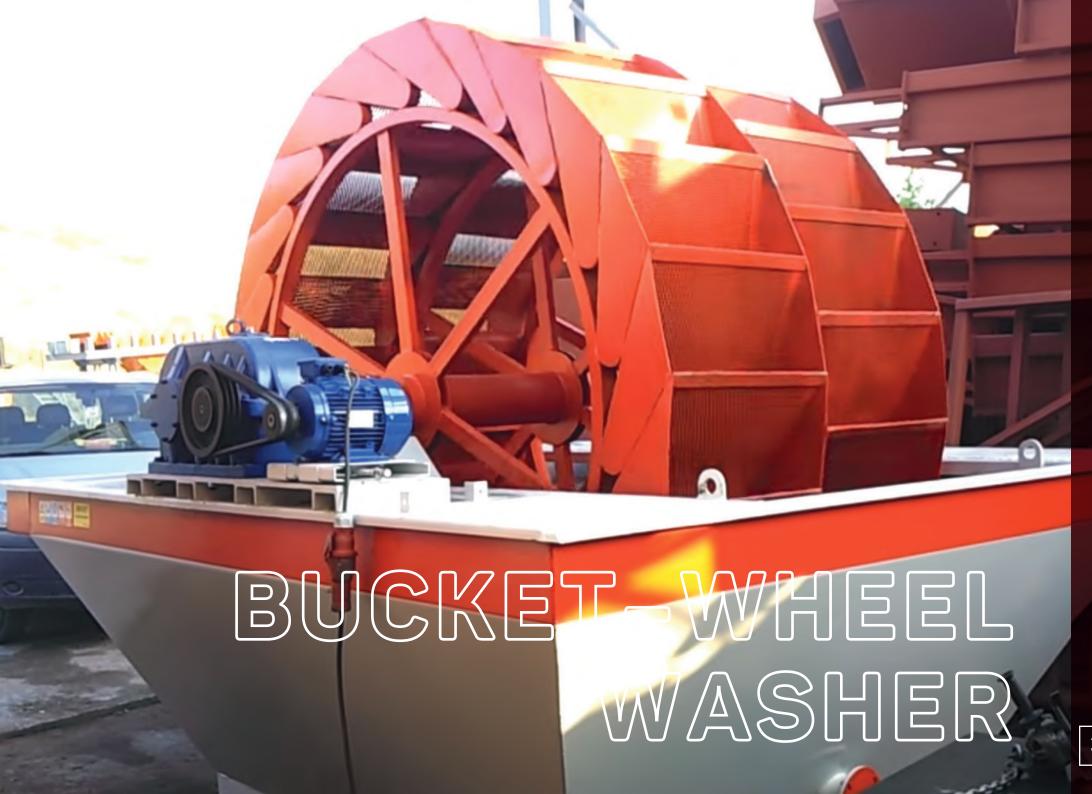


# **TECHNICAL DRAWING**





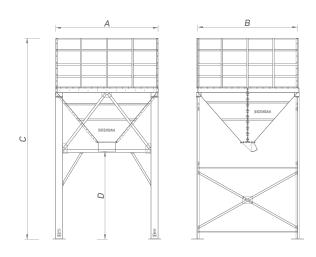
	KY 32
Body Dimensions	3000x1630
Engine	7.5 kw
Weight	5000kg



# STOCK BUNKER UNKER

Stock bunkers are collecting elements which do stock the crashed and then produced material through the pneumatic controlled covers without letting them fall down to the ground and load them to the truck. In addition to standard stock bunkers we produce bunkers in desired volume and sizes.

# **TECHNICAL DRAWING**





	SB25	SB45	SB75	SB100
Capacity (t/h)	25 m³	45 m³	75 m³	100 m³
Discharge Outlet(mm)	700 X 500	700 X 500	700 X 500	700 X 500
Dimension A (mm)	3820	4120	4620	5000
Dimension B (mm)	2800	4100	4600	5000
Dimension C (mm)	7750	8100	9000	9000
Dimension D (mm)	3720	3490	3670	3670





# BELTCONVEYOR VEY

Belt conveyor is major transmission element of mining facilities. They are manufactured in various widths and lengths according to capacitu and distance will he transmitted. the The belt conveyors can be manufactured in width of 500-600-650-750-800-1000-1200 mm and in desired length. They are driven by belt-pulley-reducer or by engine and reducer coupled directly.

