



An ISO 9001:2000 Company

McNally Sayaji Engineering Limited

A Subsidiary of McNally Bharat Engineering Company Limited



Roller Screen | For Primary Screening and Classifying

At MBE we believe in constantly reinventing ourselves. And in line with this we are always on the lookout for new avenues and opportunities.

McNally Sayaji Engineering Limited (MSEL), with factories in Kumardhubi, Asansol, Bangalore and Baroda, is one of the country's leading manufacturer of Crushing, Screening, Milling, Material Handling and other heavy equipment, serving the core sectors of the economy. These sectors include Coal, Mining and Mineral Processing, Power, Steel, Ports, Cement, Aluminium and Non-Ferrous Metals.

The manufacturing units have ISO 9000 certification.

We have marketing and branch offices at Kolkata, Baroda, Mumbai, Kumardhubi, Bangalore, Chennai,

Secunderabad, Cochin, Nagpur, Vizag and Vijaywada. This makes us capable of comprehensive customer support at all times.

MSEL has inducted technology over the years through strategic alliances and developed focused R&D and Design & Development teams, who offer optimum and cost effective solutions to meet customer needs.



Application

Roller screens are suitable for classifying coarse, moist, sticky or clayey raw materials. They are used for primary screening and crusher relief as well as for classifying/control screening after the crushing process.

The Feed Materials

Hard coal and lignite from coal plants, limestone, gypsum and other similar minerals.

The Mode of Operation

Roller screens are screening machines that have screening surface consisting of separate screen rolls which are driven in the same sense of rotation. They are equipped with curved triangular discs or as per requirement.

For separating special kinds of grain sizes the discs are arranged in a way that they are set either opposite to each other or with interstices. Thus, it is possible to form square or rectangular screen openings. The fine sized grains can now pass these screening openings.

The parts of the feeding material, that have not been screened are transported by the roller screen rolls to the roller screen discharge and then fed into the crusher.

Due to this process and the particular arrangement of the roller screen rolls, the feeding material is subject to a harmonic, gentle, rolling motion. Loamy particles, which stick to the coarse material, are separated and screened together with the final product. In case of very moist, sticky or clayey raw materials the roller screen rolls are fitted with scrapers, which clean the bottom of the rolls. They are individually adjustable. Another possibility is using surrounding scrapers being driven via gear motors including chains. The kind of scraper depends on the plant requirement.

Construction

Roller screens are arranged either horizontal or inclined. With the horizontal design, the drive of each roll is effected via bevel gear pair with common longitudinal shafts. Depending on the feeding material, one or two drives are provided. The drive for the longitudinal shafts is effected via front electro motors including fluid starter coupling, transmission gear and flexible coupling.

Alternatively, the roller screen rolls can either be driven via tooth chains running in an oil bath or individually. In case of roller screens in inclined arrangement, the drive is effected via tooth chains running in an oil bath.

Versatility

Depending on the kind of application, various machine design and | or accessories can be used :

- Roller screens with horizontal arrangement
- Roller screens with inclined arrangement
- Firmly installed adjustable scrapers
- Heated scrapers (stem-heated)
- Surrounding scrapers being linked via band chain

Advantages

High specific capacity at low power requirements

Low spare parts requirement

Smooth & quiet run

Adequate primary screening machines for crushers (i.e. Hammer Mill, Roll Crusher etc)

McNally Sayaji Engineering Company Limited

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**Crusher | Screens | Mills | Feeders | Conveyors | Port Cranes | Stacker Reclaimer | Wagon Tippler | Slurry Pump | Thickener
Pressure Vessels | Equipments for Steel, Cement, Power & Non Ferrous Metals**