



McNALLY SAYAJI ENGINEERING LIMITED

(A Member of the Williamson Magor Group)



ROLLER SCREEN

At MSEL 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 mineral processing and other heavy equipment, serving the core sectors of the economy. These sectors include Coal, Mining, Power, Steel, Ports, Cement, Aluminium and Non-Ferrous Metals.

All manufacturing units of MSEL are ISO 9001-2008 certified with well established quality assurance department supported by modern testing facilities and

managed by a team of highly experienced professionals.

MSEL has branch offices at Kolkata, Bangalore, Chennai, Delhi, Mumbai, Hyderabad, Nagpur, Vishakhapatnam, Kochi, Vijaywada, Coimbatore. This makes MSEL capable to render comprehensive customer support.

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/scalping to reduce crusher load or classifying after the crushing process or sorting of metallurgical coke.

Feed materials can be medium size Coal, Lignite, Limestone, Gypsum, Coke etc.

OPERATING PRINCIPLE

Roller Screens are screening machines that have several screening rolls rotating in the same direction. Each roll consists of a square shaft fitted with triangular, hexagonal or octagonal shaped roll discs as per requirement. Because of the rotation and special shape of the roll discs, material while passing over the discs are lifted up and pushed forward towards the discharge end. The material is subjected to a gentle and harmonic rolling motion. As the material travels, the smaller particle comes to the bottom layer and passes through the openings between two consecutive rolls. The oversized materials are discharged at the other end.

For a moist and sticky material, Scrappers are provided below the rolls for cleaning the roll discs.

CONSTRUCTIONAL FEATURES

Depending on the type of feed material and the separation size, Roll Discs are available with various shapes and sizes. These discs are either cast or fabricated from a wear resistant plate. All roll assemblies are mounted on a common frame parallel to each other and separated by a predetermined distance to suit the application.

Roll shafts are driven by two Longitudinal Shafts through case-hardened Bevel gears. Each Longitudinal Shaft supplies power to the alternate Roll shafts and is driven by individual Motor through Fluid Coupling and Gearbox. Alternative drive arrangement viz. Individual Drive with Geared Motor and Single Motor with Gear train may be supplied on request.

The entire screening area is covered by a fabricated housing with inspection doors at convenient locations. Provision can be kept in housing for connection to Dust Control System. For ease of handling, transportation and erection at site, specially designed Lifting Arrangement is supplied along with the Screen.

SALIENT FEATURES

- Suitable for screening sticky and clayey material.
- Adequately sized double row spherical roller bearings for shafts
- Duty specific Disc profile
- High specific capacity with low power consumption.
- Screens can be horizontal or inclined.
- Screens can be mounted on Trolley.
- Scrappers can be provided with steam heating arrangement.

AVAILABLE SIZES

WIDTH (m)	LENGTH (m)	FEED MATERIAL	SEPARATION (mm)	MAX. CAP. (TPH)	INCLINATION (deg.)	MOUNTING	MOTOR (No. X kW)	APPROX. WEIGHT (t)
1.5	3	COAL	37	300	0	FLOOR	12x2.2	11
1.7	2.2	COKE	25	220	15	TROLLEY	1x15	14
1.7	2.4	COKE	80	220	15	TROLLEY	1x15	15
1.8	3.6	COKE	30/60/80	360	15	TROLLEY	2x11	19
2	6	LIGNITE	80	2000	0	FLOOR	2x30	30
2.4	6	COAL	20/25/50	2500	0	FLOOR	2x37	36

NOTE: As improvements are made from time to time, specifications and other details are subject to change without notice.

McNally Sayaji Engineering Limited

Corporate Office: Ecospace Business Park, Campus-2B, 11F/12, New Town, Rajarhat, Kolkata 700 156, India. P +91-33-3014 2345/6628 2345; F +91-33-3014 2393.

Factories: Kumardhubi P +91-6540-273010/11, +91-6540-272 235/197; F +91-6540-273024 | **Baroda** P +91-2667-263000/2661-2793650; F +91-2667-263051 | **Bangalore** P: +91-08151399964/67/58 | **Asansol** M +91-8016090116, +91-8016090128.

Sales Office: **Kolkata** P +91-33-40111300; F +91-33-40111317 | **Bangalore** P +91-80 41153781-83; F +91-80 41153784 | **Chennai** M +91-9500011660; F +91-044-22431309 | **Delhi** M 9910661861 | **Mumbai** P +91 022-26397641 | **Hyderabad** P +91-040-27204395; F +91-040-27205361 | **Nagpur** M +91-9422114059; F +91-712-2535089/2560097 | **Vishakhapatnam** P +91-891-2551534 | **Kochi** P +91-9846034939; F +91-484-2405914 | **Vijaywada** M +91-9440320529 | **Coimbatore** M +91-978 978 0318.

Crusher | Screen | Grinding Mill | Feeder | Conveyor | Wagon Tippler | Pulley & Idler | Port Crane | Stacker Reclaimer | Mobile/Skid Mounted Crushing & Screening Plant | Slurry Pump | Thickener | Floatation Cell | Pressure Vessel | Equipment for Iron Ore, Steel, Cement, Power, Coal & Other Non-Ferrous Metal Processing Plants