



# McNALLY SAYAJI ENGINEERING LIMITED

(A Member of the Williamson Magor Group)



## **ROTARY SCRUBBER**

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.

#### **A**PPLICATION

It is used as a cost effective washing unit to upgrade the quality of crushed ore and rock by removing clays, coatings and fine particles through water. For efficient washing, feed size should be 2" minimum. For smaller feed size and softer material scrubbing becomes difficult. Scrubbers are used to remove clay from coarse minerals and rock, sand from aggregate, fines sand from coarse sand, silica sand from lump hematite, phosphate or barite.

#### **O**PERATING PRINCIPLE

The drum shell is made to rotate at a low speed, generally at 10-20 rpm., by means of a chain or gear drive. Material with required amount of water is fed through one end which is lifted up to some height by the lifters inside the shell. Angle lifters are also used for pushing the material forward.

Clays and finer materials are disintegrated from the hard rock or ore due to the scrubbing action within the lumpy material. Higher percentage of clay requires the material to be scrubbed for a longer time. Scrubbing is to be followed by washing and screening.

## **C**ONSTRUCTIONAL FEATURES

It is a cylindrical drum supported on 4 carrying rollers or two trunnion bearings. Thrust rollers are provided to restrict axial movement of rotating shell. Liners and lifters are fitted inside the shell (durm). Liners may be of rubber or steel. Drive consists of motor, coupling, gear box, chain and sprocket or gear and pinion. Trommel Screen may be provided at the discharge end to remove rough product, unwanted material form the washed product.

## SALIENT FEATURES

- Shell liners can be of Mn steel or rubber and discharge trommel can be supplied with wire mesh or PU panel.
- Bigger size scrubbers can be provided with babitted trunion bearing and Hi-lift arrangement.

- Low susceptibility to breakdown due to high workmanship and quality materials.
- Easy replacement of wear and spare parts.
- Low Power consumption.

#### **A**VAILABLE SIZES

| SHELL<br>DIAMETER | SHELL<br>LENGTH | MAX.<br>CAPACITY TPH | NOMINAL<br>Motor<br>Power (kW) | APPROX<br>WT. (TON)<br>W/o DRIVE |
|-------------------|-----------------|----------------------|--------------------------------|----------------------------------|
| 6'                | 12'             | 100                  | 75                             | 27                               |
| 2.15m             | 4.5m            | 250                  | 110                            | 39                               |
| 8'                | 20'             | 450                  | 180                            | 54                               |
| 2.4m              | 7.5m            | 500                  | 200                            | 55                               |
| 3m                | 9m              | 600                  | 250                            | 100                              |

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.

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