McNALLY SAYAJI ENGINEERING LIMITED
(A Member of the Williamson Magor Group)

DUAL CHAIN MILL

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

A range of machines specially designed for size reduction of materials used in the manufacture of fertilizers and feed stuffs. No internal screens are fitted, as these materials are liable to become more sticky. The chain mill are designed for the rapid, uniform and economic reduction, in open or closed circuit of loosely bound agglomerates and other sticky materials with a minimum chance of clogging. They are used for super phosphate, triple super phosphate and di-ammonium phosphate and conventional granular tailings.

OPERATING PRINCIPLE

Chain mill is a size reduction crusher with simple design having two counter rotating rotors attached with replaceable flail chains, housed in a Single rugged/Sturdy Steel Housings. These rotors are powered by two motors with the help of sheaves and V-belt combinations, mounted on the top of the housing itself. Fertilizer lumps gets broken in to small pieces by the impact of rotating chain.

The chain mill can handle a large volume of fertilizer tailings/feed lumps per hour with reduced plugging or clogging. The rotor speed can be varied depending on the product fineness.

CONSTRUCTIONAL FEATURES

The machine comprises of two moving elements: two high-speed rotors carrying chains with hammer and without hammers arranged alternatively against which the reduction is achieved. The rotors are enclosed in a dust tight steel casing fitted with doors, providing ample access for cleaning and maintenance.

Maximum efficiency is achieved by spreading the feed across the full width of the machine.

The equipment Housing is made from rolled steel sections and plate of welded and bolted construction. Internal surfaces are protected by abrasion “Resistant” polyurethane or rubber liners.

Rotor Assembly is built up from a number of steel discs keyed and locked together on a fully machined shaft, which in turn is carried by a set of spherical roller bearings and Plummer blocks. Eight rows of suspension bar are mounted within the steel discs. Steel chains of adequate breaking strengths are fastened to the suspension bars. Hammers are tied at the free end of the chains as required.

MSEL chain Mills are sometimes supplied with anti vibration pads to minimize transmission of dynamic load to the supporting structure. Motor Bases have provision for belt tensioning arrangement. V-belts are covered by safety guards.

SALIENT FEATURES

- High reduction ratio
- Moderate power requirements
- Low maintenance cost
- Dependable operation
- High capacity
- Long service life

AVAILABLE SIZES

<table>
<thead>
<tr>
<th>Available Size (cm)</th>
<th>Input (W) (HP)</th>
<th>Body Length (m)</th>
<th>Crushing Material</th>
<th>Feed Size (mm)</th>
<th>Product Size (mm)</th>
<th>Capacity (T/hr)</th>
<th>Motor Power (Kw X KVA)</th>
<th>Available (Wt. (Tns))</th>
</tr>
</thead>
<tbody>
<tr>
<td>890</td>
<td>865</td>
<td>AMMONIUM PHOSPHATE BASED FERTILIZER</td>
<td>( ) 50</td>
<td>1.4</td>
<td>45</td>
<td>2 x 45</td>
<td>6.50</td>
<td></td>
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<tr>
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<td>1060</td>
<td>AMMONIUM PHOSPHATE BASED FERTILIZER</td>
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<td>( ) 6</td>
<td>75</td>
<td>2 x 75</td>
<td>7.50</td>
<td></td>
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</table>

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

McNally Sayaji Engineering Limited


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