JAW CRUSHER:

National Jaw Crushers are heavy duty Single/Double toggle design having Grease lubrication system. These crushers are designed for long life service with minimum maintenance for hard, tough and principal of crushers is on the basis of compression on rock against metal.

STEEL BODY

The Body of Jaw Crusher is fabricated from mild steel plates of adequate thickness, with reinforcing members welded in place. The complete frame is steers relieved for trouble free performance.

JAWPLATES

The Jaw Plates, reversible type are casted out of best quality 12-14% Manganese steel of one piece construction conforming to IS-276 specifications. The setting of Jaw Plate is carried out by simple adjustment with tie rod at the bottom of the sawing Jaw stock, the setting is altered and adjustment can be made without stopping the machine.

PITMAN

The pitman is fabricated from MS plates alternatively casted in single piece duly machined. It is designed to receive large size anti friction bearings and provision is made for regular Grease lubrication.

TOGGLE SYSTEM

The toggle system is of four bearing type. Front and Rear toggle plates are of steel and ride

in machined M.S. Bearings seated in the Swing jaw, Pitman and toggle block.

ECCENTRIC SHAFT AND BEARING

The eccentric shaft is of special steel and carried in self-aligned double row spherical bearings, which ensures smooth running. The bearings are fitted, one in each side of body and two in swing jaw stock, well-sealed against possible entry of dust and moisture by a system of labyrinth seats.

FLYWHEEL

The flywheel are made of solid grey cast iron and grooved for V-Belt drive. National gives the best quality of flywheel for jaw crusher.

ROLLER CRUSHER

National Roll Crushers are designed for heavy duty, long life service and minimum of maintenance. These crushers are mainly used as secondary/tertiary crushers for smaller fraction. The two parallel roller shells are rotated in opposite directions and material is crushed in between on pressure compression principal.

STANDARD SPECIFICATIONS:

STEEL BODY

Box type frame is made out of M.S. plate reinforced by steel ribs base feet are M.S squares riveted to main frame. The top and side plates are bolted to main frame.

ROLLERS

Out of two rollers, one is stationery and the other is adjustable. The rollers are made of chilled iron/high carbon steel/manganese steel depending upon the requirement.

SUPER GEARS

Super gear is mounted on shaft of each roller. This gear is driven by pinion, pulleys and finally by motor. We also make roll crusher on bearings directly coupled with motors.

ROTOPACTOR

Rotopactor to designed and build to handle large volume material selectively reduce the particles to the desired size quickly and efficiently. The product produce by the Rotopactor is technically and comfortably acceptable to any authority be it NHAl, MOST OR DAM Construction. It is on the principal of impact crushing with stone to metal breaking at high speed.

VIBERATING SCREEN

National manufacture's Vibrating screens in different models having single, double and triple deck, and Rotary Screen depending upon the requirement of customers. These screens are heavy-duty type working on the principle of circular notion and designed for long life maintenance-free service.

STANDARD SPECIFICATIONS:

BODYFRAME

The main frame is fabricated from M.S. Plate, angles and pipe and is welled construction with feed and discharge hoods as integral part. National makes the robust body frames for the vibrating screens.

SCREEN PLATES

The screen plates are drilled/perforated/wire woven panel of appropriate size for proper separation of desired product. The screen plate/woven wire panel is bolted to cross members connecting to side plate with necessary HT bolts. Nyloc nut and washers, U-clamp are generally used for fixing screen performed plate.

VIBRATOR ASSEMBLY

The vibrator assembly comprises of electric shaft, unbalancing weights, driven V-Pulley, bearings, housing and central pipe casing. The shaft is housed in the assembly with covers, the perforated plate is fixed on the frame with U-clamps. The complete screen is rested on set of coil springs and steel frame.

CONVEYORS

We are supplying conveyors in different designs as per the space available at site and to accommodate the requirement of the customer. The head and tail pulleys are wide faced and turned on anti-friction bearings. Conveyor idlers and accessories supplied for easy assembly. Drive to conveyor pulley is by motor and gear box further reduction if required by chain and sprocket.

MOVABLE LOADER

NATIONAL makes loaders in different models used for crushed material into trucks and saving a lot of time and manpower. The loaders are portable and can be driven to a desired place. The unit is mounted on portable trolley and is driven by motor/engine. Height is adjustable to meet the truck height.

**Sand classifier for washing sand**

National Sand Classifier SA separates, dewaters & conveys sand and heavy particles from water. Street sand, filter sand and similar materials can be handled. The sand/water mix is pumped or fed into the separation tank where sand settles. The screw conveyor dewaters & conveys the sand. Excess water during pumping flows out over a weir and is led out.it manufactured with high quality material which makes it robust.

Bucket Elevator

One of the most efficient ways to elevate bulk materials vertically is with a bucket elevator. A Bucket Elevator consists of a series of buckets attached to a belt or chain with pulleys or sprockets located at the top and bottom of the unit. The buckets are located in a casing or housing to contain the material. Bulk materials are loaded into each bucket as the bucket moves past an inlet point. KWS designs and manufactures a wide variety of bucket elevators based on the characteristics of the bulk material and the process requirements.

Screw conveyors

Screw conveyors are used to convey the material continuously with the help of a rotating helical screw blade (known as flights) by shear and tumbling effect inside a U shaped trough or a round tube. They are generally used for handling fines of coal, crushed material, powders, cement, chemicals etc. The periphery of leading side of the helix is provided with hard face welding for handling abrasive material. We offer screw conveyors in standard and customized solution to address varied requirements.

Slat Conveyors

These are extremely robust and reliable systems with capabilities to deliver dependable performance for a long period and are designed to offer minimum down time and cost on maintenance. The conveyors are used for wide industrial applications right from raw material handling to finished goods handling and management. They are extensively used at various stages in the manufacturing and assembly processes in automobile and engineering industries. The conveyors can be made flushed to floor level to facilitate hindrance free man movements. Specially designed slat conveyors are used for unique applications like for hot metal handling, for shower test lines and inspection lines in car manufacturing.

Automatic Deflector

Moveable Belt Trippers conveyor

An enclosed movable tripper belt conveyor includes an elongated trunking having an endless conveyor belt carried by troughing idlers along an upper path leading from a tail pulley to a head pulley. The belt returns from the head pulley to the tail pulley in sliding contact with a floor of the trunking. A movable tripper unit includes a tripper that discharges the material being conveyed to a valve that is configured and arranged to selectively discharge the material to one side or the other of the movable tripper unit. A cover is received over the trunking and the movable tripper unit so as to form with the trunking an enclosure containing the belt, the tail pulley, the head pulley, all of the troughing idlers and the movable tripper unit.

Steel Fabrication

Structural steel has a long list of benefits associated with it as a sustainable and highly reliable material for construction. However, the fabrication and welding processes necessary to transform structural steel into products used for construction and other industrial applications are complex and demanding. If you do not find a company who can pull them off properly the material’s viability may be compromised. The processes used in structural steel welding take a special expertise that only some companies have. Swanton Welding has that expertise.