

## GreyHawk Metso HP400RFSD Portable Plant

### ORDER TO BUILD

#### GH-HP400RFSD Portable Plant

**Nordberg HP400 Cone Crusher**, The heart of the plant is the high performance HP Series cone crusher. Designed for portable installations, this cone crusher is the most compact, economical to operate and productive machine in its class. The HP Series offers substantially higher production capacity over traditional cone crushers. It also provides excellent product shape, making it suitable for both secondary and tertiary crushing.

Equipped with manganese steel crushing members, bronze bearings and replaceable main frame seat liners. Features include hydraulic bowl clamping and adjustment, automatic tramp iron release and hydraulic clearing of the crusher chamber. Remote control station mounted to side of plant allows convenient operation for adjusting the closed side setting, or for clearing the crusher.

Additional HP cone features include a package lubrication system consisting of an internal independent pump, oil pressure switch, temperature switch, oil tank with strainer, oil level gauge, thermometers at three locations, (2) oil heater with control panel, oil filter and oil cooler (air-radiator type), and crusher tools.

#### **Motor:**

400 HP Crusher Drive Motor, 1800 RPM, 460 Volt, 3 Phase, 60 Hz, TEFC Crusher Duty, **including motor platform with hydraulic slide motor base** Motor guard with removable panel for easy sheave changes.

**The Crusher Feed Basket** is a weldment which sits over the feed opening, it directs material into the crusher feed opening and reduces spillage. The feed basket is made of 1/4" mild steel with a 3/8" base plate. Windows allow the operator to view the material level in the feed basket. The feed basket may need to be removed for highway towing.

**The Overflow Chute** is a steel trough that bolts to the side of the crusher feed basket. When an overflow condition occurs, the excess is directed to a discharge conveyor, bypassing the crusher. The chute is 17" wide and constructed from 1/4" mild steel. Because overflows should be rare occurrences, AR liners are not required or provided.

**The Feed Basket Overflow** confines the material to the crusher feed opening. Overflow material is directed to the discharge conveyor.

#### GreyHawk Heavy Duty Chassis

- **Main Chassis**
  - 24" Mainbeam
  - Quad-axle Hutch Spring Suspension with 49-1/2" axle spacing
  - Qty 16 11R22.5 tires on Budd type wheels

- Air controlled brakes on all four axles
- LED side marker and tail lights
- Large machinery platform with handrails and toe kicks
- Observation platform with handrails and toe kicks
  
- **Rear Feed Conveyor (42")**
  - Channel frame design
  - Superior 5" CEMA C channel mount idlers
  - Superior 5" CEMA C channel mount impact idlers in high impact areas
  - Superior 5" CEMA C return idlers
  - 3 ply, 3/16" top cover conveyor belting
  - Hydraulic folding link arm for raising into operation and lower for transport or maintenance
  - Hydraulic raise and lower for the tail section to adjust the feed point height
  - Full length skirt rubber
  - AR lined receiving hopper
  - Head Pulley
    - Superior 12"x44" drum pulley
    - XT30 hubs
    - 2-15/16" pillow block bearings
    - Hub City 415 shaft mount reducer
    - WEG 20HP motor
  - Tail Pulley
    - Superior 12"x44" chevron wing pulley
    - XT30 hubs
    - 2-15/16" bearings
    - Wide slot takeups
  
- **Side Discharge Conveyor (48")**
  - Channel frame design
  - Superior 5" CEMA C channel mount idlers
  - Superior 5" CEMA C return idlers
  - Superior Exterra belt scraper
  - 3 ply, 3/16" top cover conveyor belting
  - Hydraulic folding for lowering into operation and raising for transport
  - Skirt rubber in drop zone
  - Hinged door to provide easy access to the crusher rock box
  - AR lined receiving hopper
  - Head Pulley
    - VanDer Graff motorized pulley, 12"x51"
    - 15HP
  - Tail Pulley
    - Superior 12"x51" chevron wing pulley
    - XT30 hubs
    - 2-7/16" pillow block bearings

**Electrical:**

- 5'x 5'x12" deep electrical enclosure
- Enclosure is bolted to a steel support frame for setting on grade during operation
- Lifting eyes
- Connected to plant with 15' of cable to allow the customer to position the enclosure
- Door interlocked disconnect linkage
- Warning horn
- Square D circuit breakers
- Square D NEMA rated starters
- Crusher is controlled by a Allen Bradley soft start
- Door mounted amp meter for crusher amperage
- Hour meter located inside the enclosure

### Hydraulics:

- 13HP Honda gasoline engine with electric start and backup recoil start
- (6) run-on jacklegs with 6" diameter 18" stroke cylinders
- Six bank valve body for independent control of each jackleg
- Single bank valve for independent control feed conveyor positioning
- Single bank valve for raising and lowering the feed conveyor tail section
- Single bank valve for side discharge conveyor positioning
- Single bank valve for crusher motor adjustment

**Adjustable king pin support** - Adjustable tubular supports reduce the amount of blocking required in the kingpin area during plant operation, which simplifies set up and tear down. The kingpin supports have Acme threaded rod adjustment and swing up for transport.

### Safety Guards:

We install all standard guarding, customer will be responsible for compliance with local codes.

### General:

- Chassis to be sandblasted, one coat two part epoxy primer and two part urethane finish painted one coat GreyHawk beige with orange and grey highlight stripe on the trailer frame beams.
- (2) sets of owners/parts manuals.



