



GreyHawk Metso HP450eRFSD Portable Cone Plant

#PO#2051432

EQUIPMENT ON ORDER

Equipment As Follows:

Metso Nordberg HP450e Cone Crusher

We are pleased to introduce the Nordberg HP450e, the newest and highest performance cone crusher in the new Nordberg HPe Series cone crusher offering. Through enhanced kinematics, crushing force, clamping force and 450 horsepower, the new 52" head HP450e provides significant gains in production capacity and improved particle shape over traditional cone crushers.

New features include an anti- spin brake mechanism, cavity sensor feed level monitoring, and no epoxy backing material required for the bowl liner and mantle.

The Nordberg HP450e is suitable for both secondary and tertiary crushing for portable and stationary installations. 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.

Scope00

Industry - Construction

Lubrication Unit - Standard

Sub frame and guard - Not included

Crusher drive motor - Not included



Automation - Not included

Main Unit

Crusher kinematics - Enhanced kinematics

Main frame liner - Standard

Hydraulic motor location - Right to countershaft

Cavity – Pricing includes a liner assembly kit consisting
of a bowl liner, mantle, & retaining hardware.

Countershaft speed - 850 RPM

Anti-spin device – Included

Site Specifications

Accumulator certification - Standard

Minimum ambient temperature - Normal cond. down to -15°C/5°F

Maximum ambient temperature - Normal cond. up to 40°C/103°F

Frequency - 60 Hz

Lubrication unit voltage - 265/460V

Norm - UL

Power Transmission

Drive - Single drive

Motor position - Standard btw 8 and 4 o'clock

Grooves type - 8V

Crusher pulley - Included

Motor pulley - Not included

V-Belt - Not included



Rubber pads - Not included

Crusher installation kit - Not Included

Motor speed/ Pole number - 4 (1500rpm 50Hz/1800rpm 60Hz)

Crusher pulley size - 762 mm

Lub Unit

Control type - Digital

Connection hoses - Not included

Cooler location - On frame

Quantity of Cooler Motors - 1 EA

Cooling medium - Air

Catch tray - Not included

Offline filter - Not included

Tools and Options

Feed extension type - Not Included

Accumulator charging kit - Included

Feed cone lifter - Not Included

Head screw hydr wrench - Not included

Serial number plate material - Aluminium

Color - Metso beige

Certified drawings - Not Included

Quantity of printed manuals - 1

Quantity of spare part books - 1

GREYHAWK PORTABLE HP450eRFSD PLANT

1. MAIN CHASSIS

- 24" Mainbeam
- Quad-axle Hutch Spring Suspension with 49-1/2" axle spacing
- Qty 16 11R22.5 tires on hub piloted wheels
- Air controlled brakes on all axles
- Steel "tee pee" cover over the axles
- LED side marker and tail lights
- Large machinery platform with handrails and toe kicks
- Observation platform with handrails and toe kicks
- 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 fold up for transport.
- Crusher feed basket (may need to be removed for travel)
- Overflow chute to direct excess material from the feed basket to the discharge conveyor
- Crusher motor base with hydraulic assist
- Grease lines

1. 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
- Receiving hopper lined with 1" Trellex rubber panels
- Head Pulley
 - Superior 12" drum pulley
 - XT30 hubs
 - 2-15/16" SCM bearings
 - Master PT shaft mount reducer- size 5
 - WEG 20HP motor
- Tail Pulley
 - Superior 12" wing pulley
 - XT30 hubs
 - 2-15/16" SCM bearings
 - Wide slot takeups

1. 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
- Receiving hopper lined with 1" Trellex rubber panels
- Head Pulley
 - Superior 12" drum pulley
 - XT30 hubs
 - 2-15/16" pillow block bearings
 - Master PT shaft mount reducer- size 5
 - WEG 20HP motor
- Tail Pulley
 - Superior 12" wing pulley
 - XT30 hubs
 - 2-7/16" pillow block bearings

4. ELECTRICAL

- NEMA4 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
- Feed Conveyor – 20HP
- Discharge Conveyor – 20HP
- Crusher lube pump – 10HP
- Crusher lube oil cooler – 7.5HP
- Crusher hydraulic pump – 10HP
- Crusher motor – 450HP/1800RPM
- Crusher is controlled by a WEG soft start
- Door mounted amp meter for crusher amperage
- Hour meter
- Pushbutton start/stop control

5. HYDRAULICS

- 13HP Honda gasoline engine with electric start and backup recoil start

- (6) Hydraulic jacklegs with pin holes
- The hydraulic jack assemblies are designed for service as a “Run-on” jack, however, we highly recommend the use of cribbing to properly support the portable chassis
- 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

6. SAFETY/GUARDING

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

7. GENERAL:

- Paint
 - Sandblasted
 - Two-part epoxy primer
 - Two-part urethane topcoat
 - Chassis Color-GH Beige
 - Handrail/Guarding Color-GH Orange
 - Decals-Orange & grey striping
- (1) sets of owners/parts manuals



