



GreyHawk Metso HP350e Closed Circuit Plant

#PO#2051425

EQUIPMENT ON ORDER:

Equipment As Follows:

METSO HP350e CONE CRUSHER

We are pleased to introduce the Nordberg HP350e, the latest generation of the highly successful HP300. Through enhanced kinematics, crushing force, clamping force and 350 horsepower, the new HP350e provides significant gains in production capacity and improved particle shape over traditional cone crushers.

New features include an anti-spin brake mechanism and no epoxy backing material required for the bowl liner and mantle.

The HP350e 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.

Main Information

Industrial- Construction

Lubrication Unit- Standard

Crusher kinematics-Enhanced kinematics

Anti-spin device- Included

Hydraulic motor location- Right to countershaft



Cavity type-TBD

Countershaft Speed-TBD

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

Crusher pulley size-630 MM

Lub Unit

Control type-Digital

Cooler location-On frame

Quantity of cooler motors-1 EA

Cooling medium-Air

Tools and options

Accumulator charging kit-Included

- Tool to check the pressure inside the accumulator and to connect the inflator head to the reducing valve

METSO 6x20 TWO DECK HORIZONTAL SCREEN

- The new triple shaft Metso horizontal screen is designed for maximum efficiency and performance
- Coil Springs and dampers
- 5/16" Thick Side Plates with Huck Bolt Construction
- Side Tension decks with seal strips for 4' screen panels
- Heavy Duty Tube Steel Decks with Herringbone Cross Bracing
- Vibrating Mechanism (160mm bearings) with Oil lubrication
- Carriage Bolts used to retain clamp bars – Standard is 4' long bars / 5 ft available upon request
- AR lined Feedbox
- AR lined Discharge Lips
- Right hand drive standard with motor mount and belt guard and tensioning device
- Hand access on triple deck screens. Spray Bar knockouts, bottom deck Feed end curtain
 - Medium Scalper Deck – includes heavy duty side tension top deck, heavier feedbox liner and heavier top discharge lip. Also includes side extension wear liners along the screens sides and feedbox perimeter.
 - Side tension single crown
 - End tension
- Installation Angle 0°
- Elliptical stroke 5/8" -3/4"
- RPM 675-875
- Separating G Force: 4.8-6.5
- Top deck options
- Middle deck options
- Bottom deck options

GREYHAWK PORTABLE HP350e CC CHASSIS

1. MAIN CHASSIS

- Heavy duty main beam
- Quad-axle Hutch spring ride suspension with three axles spaced at 49.5" and one axle spaced at 96"
- Qty (16) 11R22.5 tires
- Air controlled brakes on all four axles
- LED side marker and tail lights
- Horizontal screen support frame with diamond plate catwalks and handrails
- Crusher motor support with hydraulic adjust for belt tensioning
- 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
- Grease lines

1. FEED CONVEYOR-42"

- Channel frame
- Superior 5" CEMA C channel mount idlers
- Superior 5" CEMA C channel mount impact idlers in high impact areas
- Superior 5" CEMA C rubber cushion return idlers
- Four-foot impact bed with Argonics impact bars
- 12" wide slot take-ups
- 3 ply, 3/16" top cover conveyor belting
- Superior Powerfold allows easy access for crusher maintenance
- Head Pulley
 - VanDer Graf motorized drum pulley
 - 16" diameter
 - 20HP
- Tail Pulley
 - Superior 12"x44" wing pulley
 - XT40 hubs
 - Dodge SCM bearings
- 60" wide receiving hopper lined with bolted in 1" Trellex rubber
- 1/2" skirtboard rubber where required
- Lift points for removal of conveyor

1. OVER SCREEN CONVEYOR-48"

- Channel frame
- Superior 5" CEMA C channel mount idlers
- Superior 5" CEMA C channel mount impact idlers in high impact areas
- Superior 5" CEMA C rubber cushion return idlers
- 12" tube in tube take-ups
- 3 ply, 3/16" top cover conveyor belting
- Head Pulley
 - VanDer Graf motorized pulley
 - 12" diameter
 - 10HP
- Tail Pulley
 - Superior 12"x51" wing pulley
 - XT40 hubs
 - Dodge SCM bearings
- Supported by four telescoping tubes with hydraulic cylinders to adjust between travel, operation and maintenance positions
- 1/2" skirtboard rubber where required

1. UNDER CRUSHER CONVEYOR-36"

- Channel frame
- Superior 5" CEMA C channel mount idlers
- Superior 5" CEMA C rubber cushion return idlers
- Superior Exterra belt scraper
- 12" wide slot take-ups
- 3 ply, 3/16" top cover conveyor belting
- Head Pulley
 - Superior 10"x38" vulcanized drum pulley
 - XT30 hubs
 - Dodge SCM pillow block bearings
 - Master PT shaft mount reducer
 - WEG 15HP motor
 - Sheaves & vbelts
- Tail Pulley
 - Superior 10"x38" wing pulley
 - XT30 hubs
 - Dodge SCM bearings
- 1/2" skirtboard rubber where required

1. RE-CIRCULATING CONVEYOR-36"

- Channel frame
- Superior 5" CEMA C channel mount idlers
- Superior 5" CEMA C rubber cushion return idlers

- 12" tube in tube take-ups
- 2 ply, 3/16" top cover conveyor belting
- Head Pulley
 - VanDer Graff motorized drum pulley
 - 5" diameter
 - 5HP
- Tail Pulley
 - Superior 10"x38" wing pulley
 - XT30 hubs
 - Dodge SCM bearings
- 1/2" skirtboard rubber where required

1. UNDER SCREEN CONVEYOR-60"

- Channel frame
- Superior 5" CEMA C channel mount picking idlers
- Superior 5" CEMA C rubber cushion return idlers
- Superior Exterra belt scraper
- 12" wide slot take-ups
- 3 ply, 3/16" top cover conveyor belting
- Head Pulley
 - Superior 12"x63" vulcanized drum pulley
 - XT40 hubs
 - Dodge SCM pillow block bearings
 - Master PT shaft mount reducer
 - WEG 15HP motor
 - Sheaves and vbelts
- Tail Pulley
 - Superior 12"x63" wing pulley
 - XT40 hubs
 - Dodge SCM bearings
- 1/2" skirtboard rubber where required

1. TOP CROSS CONVEYOR-18"

- Channel frame
- Superior 5" CEMA C channel mount idlers
- Superior 5" CEMA C rubber cushion return idlers
- 12" tube in tube take-ups
- 2 ply, 3/16" top cover conveyor belting
- Head Pulley
 - Van Der Graff motorized pulley
 - 5"-5.5HP
- Tail Pulley

- Superior 8"x20" wing pulley
- XT25 hubs
- 1-15/16" dodge SCM bearings
- 1/2" skirtboard rubber where required

1. BOTTOM CROSS CONVEYOR-24"

- Channel frame
- Superior 5" CEMA C channel mount idlers
- Superior 5" CEMA C rubber cushion return idlers
- 12" tube in tube take-ups
- 2 ply, 3/16" top cover conveyor belting
- Head Pulley
 - Van Der Graff motorized pulley
 - 5"-5.5HP
- Tail Pulley
 - Superior 8"x26" wing pulley
 - XT25 hubs
 - 1-15/16" dodge SCM bearings
- 1/2" skirtboard rubber where required

9. 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 (IEC)
- Over Screen Conveyor – 10HP (IEC)
- Under Crusher Conveyor – 15HP (IEC)
- Re-Circulating Conveyor – 5.5HP (IEC)
- Under Screen Conveyor – 15HP (IEC)
- Top Cross Conveyor – 5.5HP (IEC)
- Bottom Cross Conveyor – 5.5HP (IEC)
- Crusher lube pump – 10HP (IEC)
- Crusher lube oil cooler – 7.5HP (IEC)
- Crusher hydraulic pump – 10HP (IEC)
- Screen – 40HP (NEMA)
- Crusher motor – 350HP/1800RPM, WEG SSW900 soft start
- Door mounted amp meter for crusher amperage

- Hour meter
- Pushbutton start/stop control
- Plant fully wired and test run

1. HYDRAULICS

- 13HP Honda gasoline engine with electric start and backup recoil start
- (6) Hydraulic jacklegs with lock-out valves
- 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 body for crusher motor adjustment
- Single bank valve body for folding the feed conveyor head section
- Two bank valve body for adjusting the over screen conveyor front and rear supports

1. SAFETY/GUARDING

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

2. GENERAL:

- Paint
- (2) sets of owners/parts manuals
 - Chassis Color-GH Beige
 - Handrail/Guarding Color-GH Orange
 - Decals-Orange & grey striping



