Metso NW Rapid[™] Crushing & screening plant



Making the big difference to our customers

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At Metso, we are constantly thinking of how to make a big difference in your daily operations – and how we can make even the most challenging crushing sites more profitable and move to the next site more easily than ever. The revolutionary Metso NW Rapid[™] crushing and screening plant is designed to answer these needs.

Easy setup

It takes less than one working day to set up or dismantle the Metso NW Rapid[™] crushing and screening plant. Hydraulically fine-adjustable support legs, hopper walls and screen lifting facilitate fast installation and dismantling. No heavy cranes or concrete foundations are needed.

Metso's completely new plant conveyor design with fewer support legs makes setup quick and simple. Optional service platforms on the conveyors make your daily operations much easier and safer.

When needed, the entire plant can fit compactly into standard 40 ft (12 m) containers so that it can be shipped cost efficiently overseas or by railway transportation.

Increased performance

The new dual-slope screen in the Metso NW Rapid cone and VSI crushing plants enables more efficient separation and higher screening performance. Typical capacity of the whole crushing and screening plant with very hard feed material and four calibrated end products is 30% higher compared with any conventional solution now available in the same size class.

A perfectly balanced synchronization of the NW Rapid primary and secondary crushing plant is controlled by the new Metso IC[™] process control system. The complete crushing and screening process, including plant conveyors, can be started by the push of a single button.

Metso NW Rapid crushing and screening plants always come with industry-leading safety features, such as service platforms, stairs and emergency stop functions, as standard.

Benefits of Metso NW Rapid[™] plant

- 30% higher production
- Less than 12-hour setup time
 and easy maintenance
- Higher uptime, safety and easier use with Metso IC[™] process control
- Versatile solution for various kinds of crushing sites



Metso NW106[™] Jaw crushing plant

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Metso NW106[™] primary crushing plant is built with the Nordberg[®] C106[™] jaw crusher as the core, thanks to its proven track record in the toughest applications. The plant can be fed by wheel loader, excavator or dump truck. Smooth operation is ensured by innovations such as hydraulically fine-adjustable support legs, hopper walls and Metso's optimized rock breaker solution. You can equip NW106 with on-board conveyors for quick setup and full flexibility or connect the crusher directly to the plant conveyor system without on-board conveyors installed on the NW106 plant.



Metso NW116[™] Jaw crushing plant

Metso NW116[™] primary crushing plant is built with the Nordberg[®] C116[™] jaw crusher as the core, thanks to its proven track record in the toughest applications. The plant can be fed by wheel loader, excavator or dump truck. Smooth operation is ensured by innovations such as hydraulically fine-adjustable support legs, hopper walls and Metso's optimized rock breaker solution. You can equip NW116 with on-board conveyors for quick setup and full flexibility or connect the crusher directly to the plant conveyor system without on-board conveyors installed on the NW116 plant.





Metso NW1213[™] Impact crushing plant

Metso NW1213[™] primary crushing plant is built with the Nordberg[®] NP1213[™] impact crusher as the core, being the primary option in all limestone or recycling crushing applications. The plant can be fed by wheel loader, excavator or dump truck. Smooth operation is ensured by innovations such as hydraulically fine-adjustable support legs and hopper walls. You can equip NW1213 with an on-board vibrating grizzly feeder or belt feeder. Conveyors for quick setup and full flexibility are also available. Optionally, the crusher can be directly connected to the plant conveyor system without on-board conveyors installed on the NW1213 plant.

Metso NW1213

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Metso NW220GPD[™] Cone crushing & screening plant

Combining the Nordberg[®] GP220[™] cone crusher with a big 10 m² (12 yd²) four-deck dual-slope screen into the same advanced chassis brings 30% more crushing and screening performance compared with conventional solutions in the same size class. Innovations such as hydraulically fine-adjustable support legs and screen lifting make installation quick and easy, while the Metso IC™ process control system optimizes the plant operation.



Metso NW200HPD™ Cone crushing & screening plant

Combining the Nordberg® HP200[™] cone crusher with a big 10 m² (12 yd²) four-deck dual-slope screen into the same advanced chassis brings 30% more crushing and screening performance compared with conventional solutions in the same size class. Innovations such as hydraulically fine-adjustable support legs and screen lifting make installation quick and easy, while the Metso IC[™] process control system optimizes the plant operation.

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Metso NW7150D[™] VSI crushing & screening plant

High-quality manufactured sand requires in-depth process knowledge and an advanced plant design. Metso NW7150D[™] VSI crushing plant optimizes everything to ensure that your process runs smoothly with perfectly shaped end products for concrete production. Combining the Barmac[®] B7150SE[™] VSI crusher with a big 10 m² (12 yd²) four-deck dualslope screen into the same advanced chassis makes it possible to design a perfectly balanced solution that is easy to move. The revolutionary Barmac Orange rotor comes standard with the plant to keep your production consistent and lengthen the lifetime of the wear parts.



Transportation on road

Transportation in containers



	NW106™	NW116™	NW1213™	NW220GPD™	NW200HPD™	NW7150D™
Transport dimensions						
Length	13,500 mm	14,000 mm	15,600 mm	13,500 mm	13,500 mm	13,500 mm
Width	3,000 mm	3,000 mm	3,000 mm	3,000 mm	3,000 mm	3,000 mm
Height	4,200 mm	4,500 mm	4,350 mm	4,400 mm	4,400 mm	4,400 mm
Weight	28,000 kg	41,300 kg	40,000 kg	33,500 kg	33,500 kg	32,500 kg
Axle weight	21,000 kg	23,300 kg	23,000 kg	19,600 kg	19,000 kg	18,500 kg
King pin weight	14,000 kg	18,000 kg	17,000 kg	13,900 kg	14,500 kg	14,000 kg
Hydraulic legs	o / •	o / •	o / •	∘/•	∘ / ●	∘/●
Crusher						
Model	Nordberg® C106™	Nordberg® C116™	Nordberg® NP1213M™	Nordberg® GP220™	Nordberg® HP200™	Barmac® 7150SE™
Feed opening	1,060 x 700 mm	1,150 x 760 mm	Max feed size: 250 mm (Belt feeder) 600 mm (Grizzly feeder)	Max feed size: 58 – 123 mm	Max feed size: 10 – 38 mm	Max feed size: 45 mm
Motor power	110 kW	132 kW	250 kW	200 kW	132 kW	220 kW / 2 x 150 kW
Hydraulic setting adjustment	o / •	o / •	o / •	•	•	0
Active Setting Control™	o / •	o / •	0	0	0	0
Metso rock breaker	o / •	o / •	0	0	0	0
Feeder						
Vibrating grizzly feeder / Belt feeder	•/ 0	•/ 0	• / •	o / o	o / o	o / o
Hydraulic hopper sidewalls	∘ / •	∘/•	∘/•	0	0	0
Hopper volume	6 m ³ / 10 m ³	7 m ³ / 10 m ³	5 m³ (Belt feeder) 6 m³ (Grizzly feeder)	0	0	0
Loading height	3,500 mm	3,900 mm	3,200 mm (Belt feeder) 4,750 mm (Grizzly feeder)	0	O	o
Loading width	2,693 / 3,500 mm	2,630 / 3,600 mm	2,400 mm (Belt feeder) 3,000 mm (Grizzly feeder)	O	0	0
Screen						
Туре	0	0	0	Dual-Slope	Dual-Slope	Dual-Slope
Number of decks	0	0	0	4	4	4
Size	0	0	0	5,500 x 1,835 mm	5,500 x 1,835 mm	5,500 x 1,835 mm
Hydraulic screen lifting	0	0	0	∘/•	∘/•	∘/●
Process control						
Metso IC™	∘/•	∘/•	∘/•	•	•	•
Options						

Hydraulic legs with fine adjustment, dust encapsulation, water spraying system, conversion kit for 60 Hz voltage, overpressure sealing on electric cabinet, cold climate kit, light mast, ABS brakes

Optional delivery without bogie (axles & wheels) Additional options for Metso NW106, NW116 & NW1213

Hydraulically foldable feed hopper sidewalls, additional sidewalls for feed hopper, rubber bottom for feeder, side conveyor, magnetic separator

Optional delivery without on-board main conveyor



Metso IC[™] process control

Process control

The versatile Metso IC[™] process control system is available for the Metso NW Rapid plant. IC process control ensures full performance and is specifically designed to meet your expectations and crushing plant requirements for consistent performance, safety and easy control of plant parameters.

Metso IC brings precision and consistency to your operations. This leads to predictable and stable production and end-product quality, and thus ensures profitable operation of the crusher and the whole crushing plant. With optimized start-up and shut-down procedures and sequences integrated into the IC process control, you can be sure that the crusher is working correctly in all circumstances and that the downtime of the plant is minimal.

Metso IC process control allows you to maximize the performance of your highquality Metso crushers. This is done with carefully defined safety parameters for oil temperature, power draw and oil pressure, which are indicators of the actual crusher load. Metso IC monitors the crusher condition and gives an early indication if there's a problem in the crusher. This can help solve a problem before it becomes serious and costly.

Metso IC process control can be easily connected to any plant automation system used in the crushing and screening industry. This enables centralized control of the crusher and the whole plant, allowing the operator to safely control and alter crusher operating parameters according to production needs from a single location.





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Metso IC process control adjusts the crushing process automatically. You can also benefit from the special fine-adjustment features that enable easy crushing process optimization.

IC process control is easy and safe to use. The process can ted and stopped by pressing one single button.

The Metso Way – Making the big difference to our customers

Everything we do is based on deep industry knowledge and expertise that makes the big difference to our customers. Decades of close customer collaboration and adapting to our customers' ever changing needs have transformed us into a knowledge company.





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