

Portable crushing and screening solutions

Metso NW Rapid™



Crush
& Go

When time, mobility, and capacity are of the essence

Today, work assignments in new locations can come at short notice, making it difficult for quarries to respond. The faster you can move from idea to action, the better your chances of success.

Civil engineering works, such as road, bridge, airport, and dam construction projects, usually last anything from a couple of months to a couple of years. Projects like these require high volumes of different types of high-precision aggregates. If the material can be sourced on-site or in the surrounding area, the construction company can realize significant economic and environmental benefits, meaning aggregate producers who can deliver on this demand gain a notable competitive edge.

We have designed our Metso NW Rapid™ Portable Crushing and Screening Solutions especially for the needs of multisite quarries that have to move their equipment between sites periodically. They are easy to tow by a standard truck. With Metso NW Rapid Portable Solutions, you can stop compromising between time, mobility and production capacity, and tap into new business opportunities.

NW Rapid™ Portable Solutions Crush and Go



Metso NW Rapid Portable Solutions are designed to deliver a faster return on investment. We have optimized all the critical milestones in the solution's lifetime – starting from purchase and continuing all the way to after-sales support.

Choose your winning combination

The modular design of Metso NW Rapid Portable Solutions allows you to choose the optimal equipment combination for your needs. Eleven ready-made layouts - and more to come - with related flowsheets ensure that you can specify your optimal solution in weeks instead of months.

Modularity and automation also make Metso NW Rapid extremely adaptive; you can add modules to existing worksites whenever your requirements change, or modify your equipment to serve different needs and sites.

Getting started

Step 1

1. How many different end products do you need to produce?

Step 2

2. What is the planned production capacity (tph)?
3. How consistent is your end product quality?

Step 3

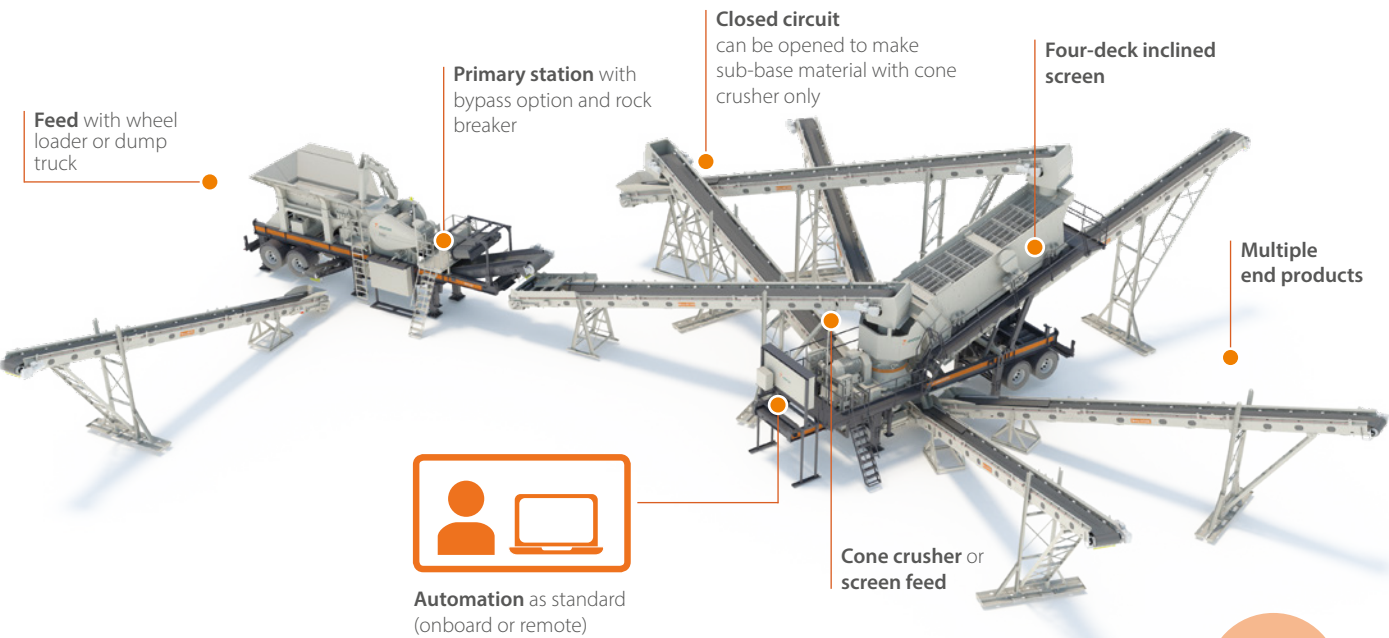
4. How often do you need to move the plant?
5. How important is production efficiency compared to site mobility?
6. What is the desired automation level (onboard or remote control)?

Your NW Rapid Solution

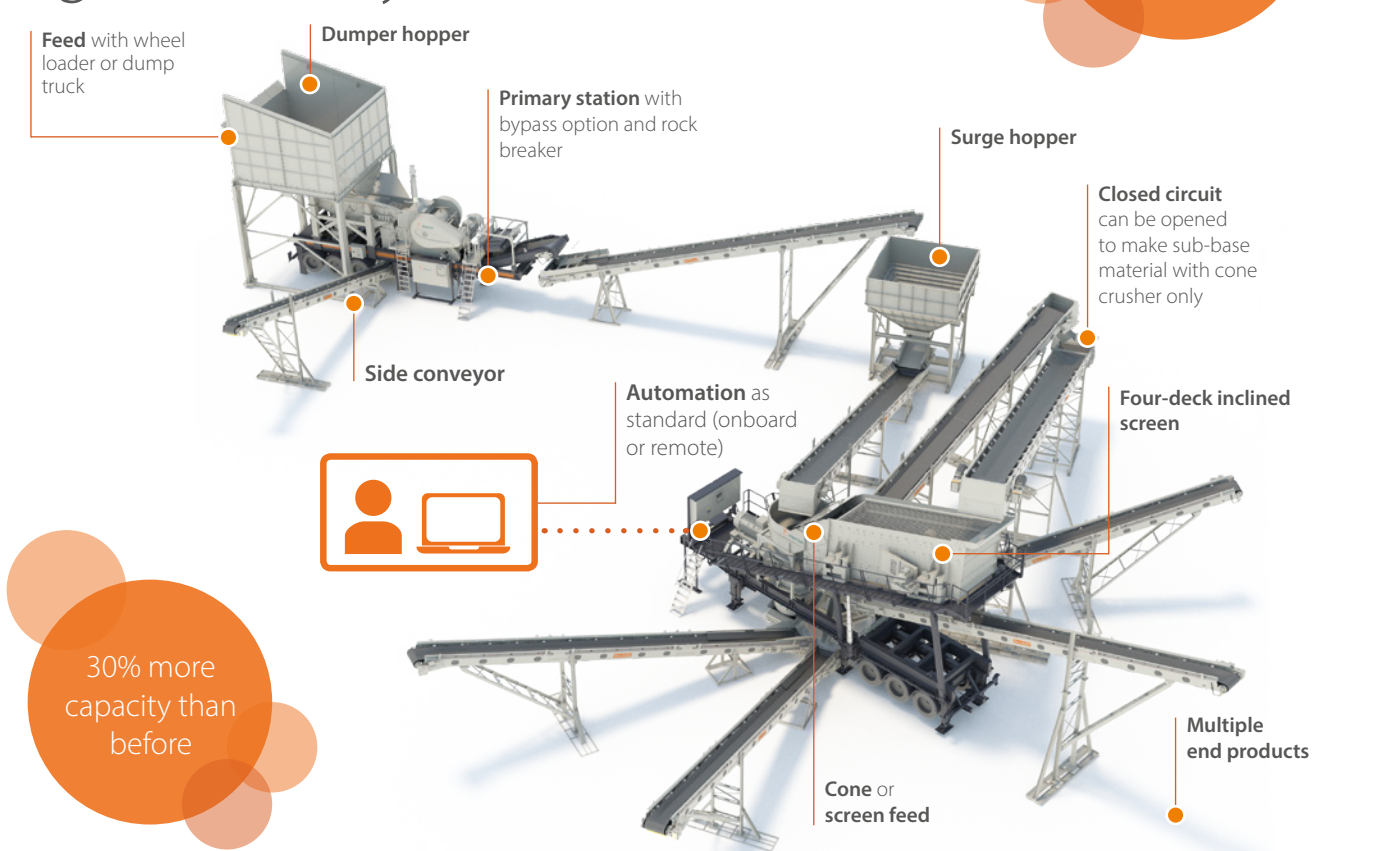
Feed material	Low to very abrasive rock					
Number of end products	4	5	4	4	4	7
Plant capacity tph/stph	250 / 275	250 / 275	250 / 275	350 / 375	350 / 375	350 / 375
Product cubicity	...	...	...	..	..	...
Mobility	..	.	...	..	..	.
Efficiency	...	...	..	...	...	...
Automation	Onboard/Remote	Onboard/Remote	Onboard/Remote	Onboard/Remote	Onboard/Remote	Onboard/Remote

NW Rapid layout number	1	2	5B	9A	9B	10
Configuration	NW106/NW116 + NW200HPD/ NW220GPD	NW106/NW116+ NW200HPD + NW7150D	NW106 + NW220GPD	NW120 + NW300HPS	NW120 + NW300HPS/ NW330GPS	NW120 + NW330GPS/ NW300HPS + NW330GPS/ NW300HPS/ NW7150D
Process type	Feed to crusher	Feed to crusher	Feed to crusher	Feed to crusher	Feed to screen	Feed to crusher
Stages	2	3	2	2	2	3

NW Rapid Layout 5B Simple layout with high mobility



NW Rapid Layout 9A Close to stationary plant with high efficiency



Hundreds of machines delivered since 2015

30% more capacity than before



Metso IC™ Series Automation Solutions for NW Rapid

Crusher automation is a standard feature in Metso NW Rapid Portable Solutions. When automation and equipment are provided by the same partner, you can be confident that you're getting the most out of your crushing process.

Metso IC Series Automation Solutions automate, monitor, and control the crushing process, as well as optimizes it.

Unlike other crushing automation solutions, Metso IC Series Automation Solution offers a Remote User Interface (RUI). This means that instead of controlling the automation from an individual piece of equipment, you can do it centrally from a remote control-room using a PC without additional programming. This has a direct impact on the level of safety at your site and the well-being of your employees, as they don't have to go to the crushing station to start and stop it, or to change settings.

Automation allows you to adjust process without stopping it, leading to improved productivity and a reduction in unplanned downtime through preventive maintenance. Furthermore, the end product quality will be more consistent as the process is automatically controlled.



Metso IC Series Automation Solutions

A field-proven platform

Automatic **start and stop sequence** with single button

Choice of **automatic control options** (e.g. metal detector, magnetic separator, water sprays, etc.)

Touch display with **data logs** and option to export data to USB



Crusher condition monitoring and early warning of any problems

Automatic **crushing optimization** by feed-rate control, based on material level and crusher's load conditions

Automatic **CSS** (closed side setting) calibration and control

Automatic **lubrication** and **hydraulics** control for cooling, heating, and circulation

Easy configuration to meet alternative worksite layouts

- Devices can be enabled or disabled from the automatic sequence
- Switch between closed circuit and open circuit

Metso LCS & Metso Metrics

Together with Metso Life Cycle Services (LCS) Metso offers a digital solution to help further optimize your NW Rapid Portable Solutions. Through remote data monitoring, Metso Metrics Services gives you access to critical insights on your fleet's performance and maintenance needs, with optional access to expertise that will help you to analyze the data.



With Metso Metrics integration you get:

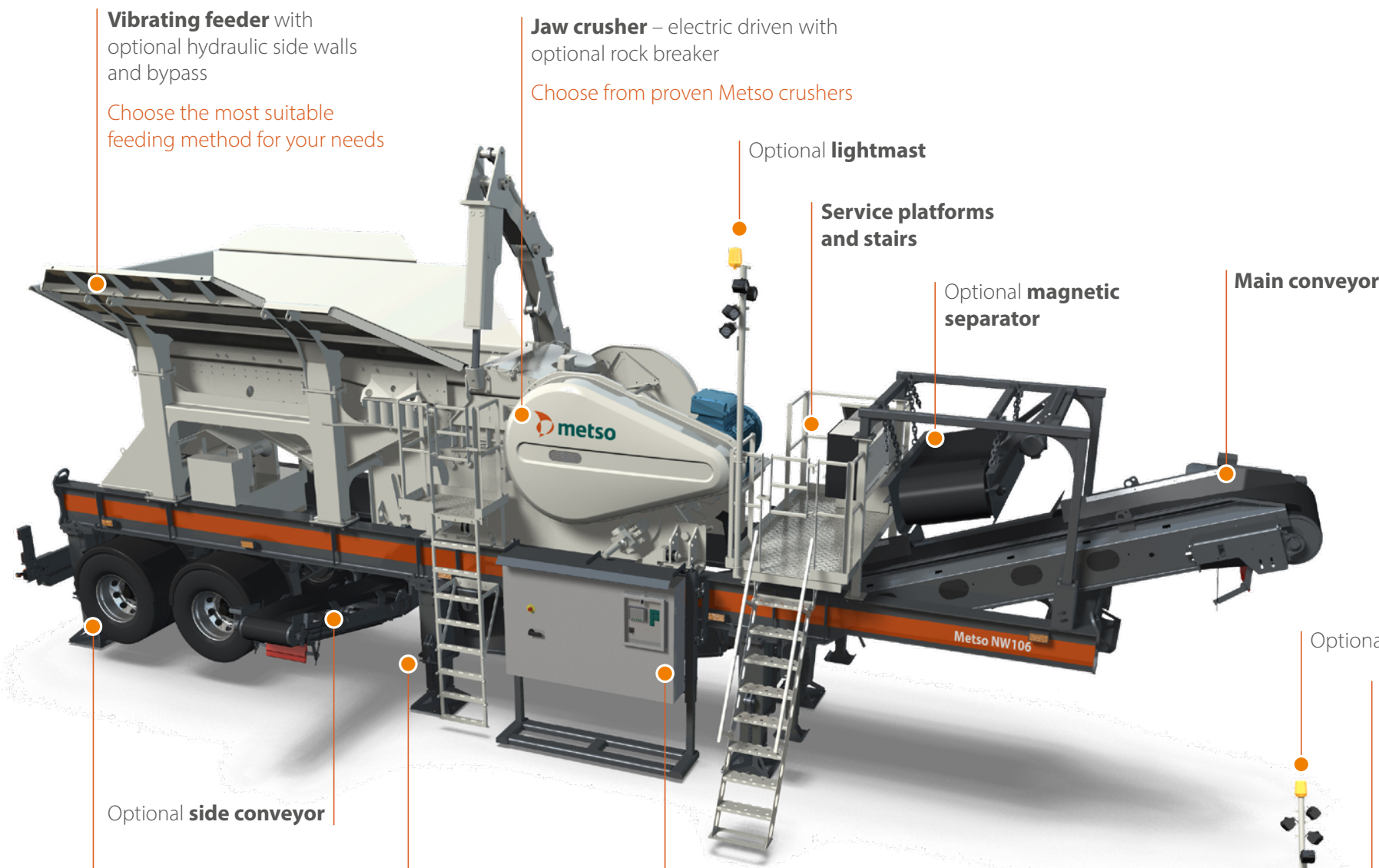
- **24/7 access to your data** via computer or tablet, using a secured cloud-based platform
- visibility on your equipment's **key operating data**, including utilization rates, energy consumption, alarms, and parameter changes
- **location data** for your entire fleet in map format



Scan the QR code to read more about Metso Metrics



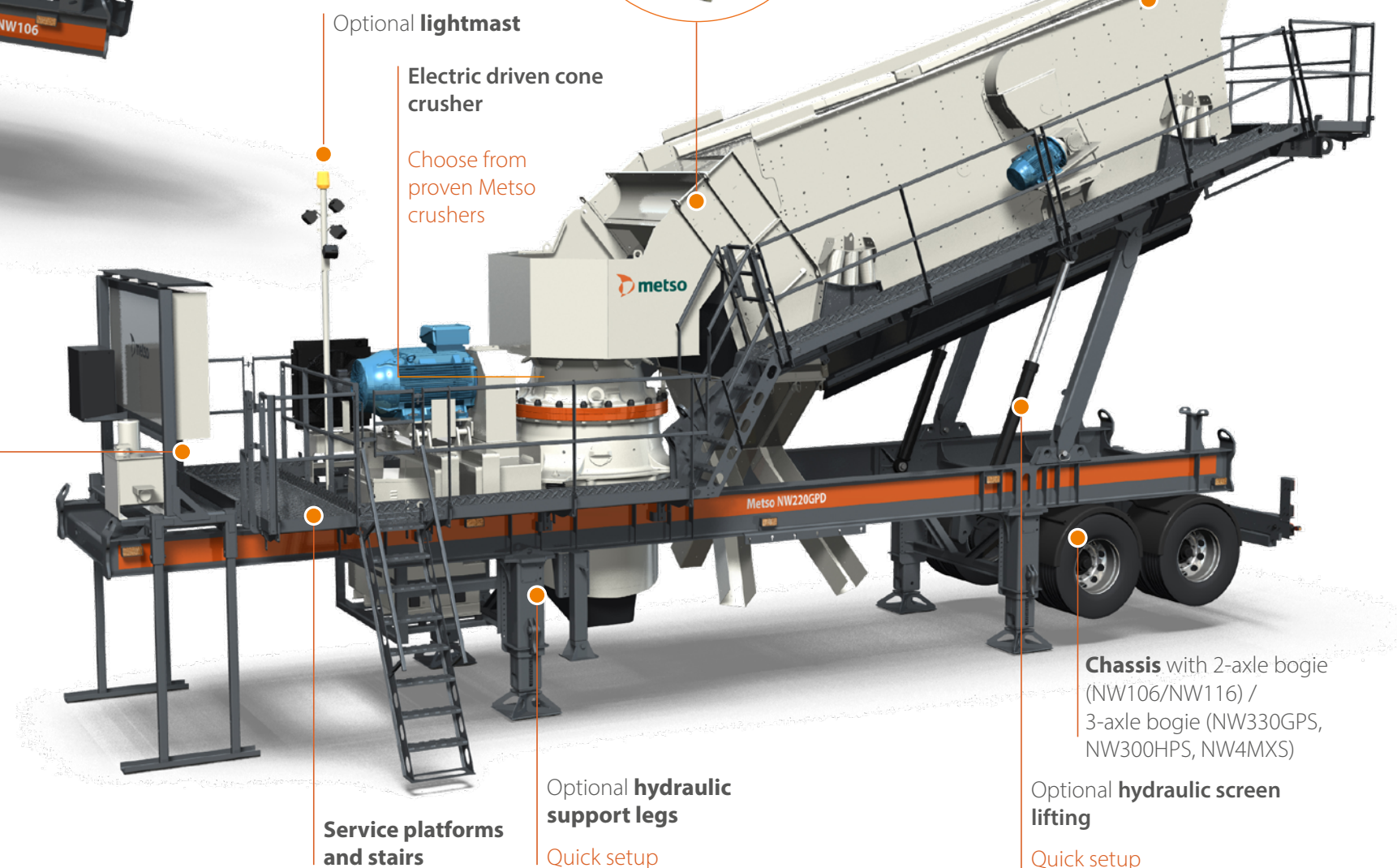
NW Rapid Secondary and tertiary units



Dividing hopper with multiple screening process configurations

Multiple end products – up to 7 variations

Four-deck inclined screen



NW Rapid Primary crushing units

Equipment Protection Services for NW Rapid

It's all about protecting your assets

As part of Metso's Life Cycle Services for aggregates, Equipment Protection Services (EPS) brings you added protection for your most valuable assets. The comprehensive EPS plan includes extended warranties, scheduled inspections with Metso-certified technicians, and Metso Metrics.

EPS gives you improved cost predictability by anticipating and minimizing unexpected equipment failures. Along with extended warranties that cover repairs or replacements on key wear parts, the plan includes comprehensive inspections and other services to keep your equipment running smoothly throughout its operational lifespan.



Extended warranty 10,000 h/5 yrs
for specified major components on designated equipment. Scheduled inspections with Metso-trained and certified technicians, as well as parts recommendations.



Annual maintenance contracts
Maintenance planning and reporting for mobile equipment through Metso Metrics.



Metso Metrics
Complete fleet visibility.



Scan the QR code to read more about EPS



Metso NW Rapid™ user experiences

Delivering timely results

With over 1000 plants delivered to more than 20 countries, Metso NW Rapid Portable Solutions have been helping quarries around the world succeed since 2015.



“With Metso’s expert team by our side, our plants are always up and running, and Metso’s services differentiates it from all the players in the market.”

Chakresh Jain,
Managing Director
PNC Infratech Ltd



➤ Read the whole case



“Completing a project on time is the most crucial aspect for us, and Metso has indeed helped us in doing so by generating more production and saving costs.”

Mr. Sandeep Reddy,
Managing Director, Gayatri Projects Ltd.



➤ Read the whole case



“We define Metso’s NW Rapid plant as easy to fix and easy to move, which supports the biggest issue of mobility in the construction business. It is aptly suited for those who work on a project-to-project basis, since moving from one project to the next is very critical and involves cost, which can be minimized with the NW Rapid.”

Udit Mittal,
Director, M/s M G Contractors Pvt Ltd.



➤ Read the whole case

Read more customer cases



“The new Metso NW Rapid™ plant is a perfect fit for our growing need for more eco-friendly, mobile, and economical solutions.”

Udit Mittal, Director, M/s M G Contractors Pvt Ltd.

Key technical specifications

NW RAPID PRIMARY CRUSHING UNITS			
Jaw plants	Rapid NW106™	Rapid NW116™	Rapid NW120™
TRANSPORT DIMENSIONS			
Length	14 250 mm	13 730 mm	14 000 mm
Width	3 000 mm	3 000 mm	3 050 mm
Height	4 170 mm	4 750 mm	4 380 mm
Weight	35 500 kg	41 300 kg	51 000 kg
Bogie weight	18 950 kg	23 300 kg	30 000 kg
King pin weight	16 050 kg	18 000 kg	21 000 kg
CRUSHER			
Model	Nordberg® C106™	Nordberg® C116™	Nordberg® C120™
Feed opening (width x depth) (mm)	1 060 x 700	1 150 x 760	1 200 x 870
Setting range	70 - 200 mm	70 - 200 mm	70 - 200 mm
Motor power	110 kW	132 kW	160 kW
FEEDER			
Model	TKF11-42-2V	TKF11-48-2V	TKF12-48-2V
- length	4 200 mm	4 800 mm	4 800 mm
- width	1 100 mm	1 100 mm	1 200 mm



NW RAPID SECONDARY AND TERTIARY CRUSHING UNITS (CONE PLANTS)					NW RAPID SECONDARY AND TERTIARY CRUSHING UNITS (IMPACTOR PLANTS)			SCREEN ONLY	
Cone plants / Impactor plants	Rapid NW200HPD™	Rapid NW220GPD™	Rapid NW300HPS™	Rapid NW330GPS™	Rapid NW4MXS™	Rapid NW7150D™ Single drive	Rapid NW7150D™ Dual drive	Rapid NW1213™	Rapid NW1855D™
TRANSPORT DIMENSIONS									
Length	13 500 mm	13 500 mm	15 200 mm	15 000 mm	15 000 mm	13 500 mm	13 500 mm	15 600 mm / 14 200 mm	13 700 mm
Width	3 000 mm	3 000 mm	3 200 mm	3 200 mm	3 200 mm	3 000 mm	3 000 mm	2 500 mm	3 000 mm
Height	4 400 mm	4 400 mm	4 200 mm	4 200 mm	4 200 mm	4 400 mm	4 600 mm	4 100 mm	4 500 mm
Weight	33 500 kg	33 500 kg	53 600 kg	53 600 kg	53 600 kg	32 500 kg	33 000 kg	35 000 kg / 39 000 kg	33 500 kg
Bogie weight	19 000 kg	19 600 kg	34 500 kg	34 500 kg	34 500 kg	18 500 kg	18 600 kg	19 000 kg / 22 000 kg	18 200 kg
King pin weight	14 500 kg	13 900 kg	19 100 kg	19 100 kg	19 100 kg	14 000 kg	14 400 kg	16 000 kg / 17 000 kg	7 900 kg
CRUSHER									
Model	Nordberg® HP200™	Nordberg® GP220	Nordberg® HP300™	Nordberg® GP330™	Metso MX4™	Barmac® 7150SE™	Barmac® 7150SE™	Nordberg® NP1213™	-
Feed opening	25 - 185 mm	58 - 213 mm	25 - 230 mm	85 - 225 mm	25 - 257 mm	-	-	-	-
Max feed size	-	-	-	-	-	45 mm	45 mm	250 mm (belt feeder) / 600 mm (grizzly feeder)	-
Setting range	10 - 38 mm	8 - 35 mm	10 - 45 mm	8 - 35 mm	8 - 49 mm	-	-	-	-
Motor power	132 kW	220 kW	220 kW	315 kW	315 kW	220 kW	2x 150 kW	250 kW	-
SCREEN									
Model	DS1855-4	DS1855-4	CVB2060-4M	CVB2060-4M	CVB2060-4M	DS1855-4	DS1855-4	-	DS1855-4
- length	5 500 mm	5 500 mm	6 000 mm	6 000 mm	6 000 mm	5 500 mm	5 500 mm	-	5 500 mm
- width	1 800 mm	1 800 mm	2 000 mm	2 000 mm	2 000 mm	1 800 mm	1 800 mm	-	1 800 mm

See it in action



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