

Metso:Outotec

Metso Outotec NW Rapid™

Portable  
crushing and  
screening  
solutions







## 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.

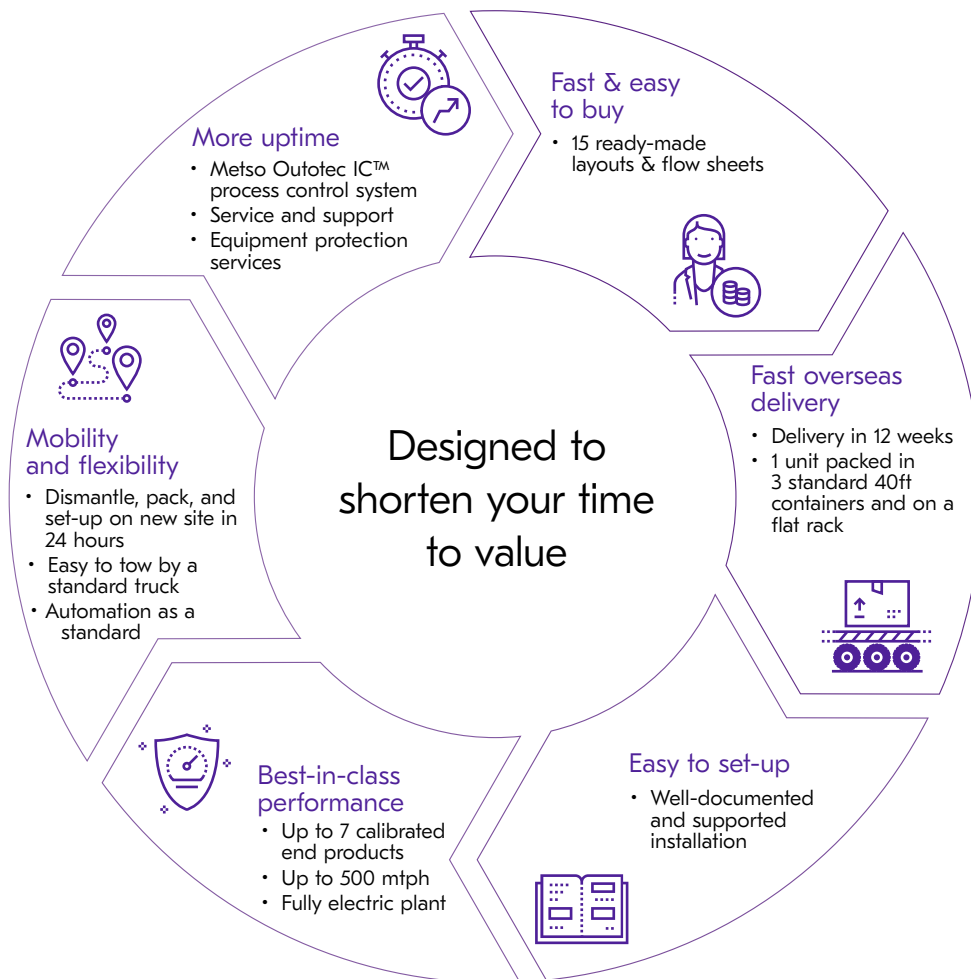
Civil engineering works, such as road, bridge, airport, and dam construction projects, usually last anything from a couple of months to a couple of years. Projects like these require high volumes of different types of high-precision aggregates. If the material can be sourced on-site or in the surrounding 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 fully electric Metso Outotec 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 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

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 NW Rapid portable solutions allows you to choose the optimal equipment combination for your needs. Fifteen ready-made layouts with related flowsheets ensure that you can specify your optimal solution easily.

Modularity and automation also make 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.

## 1. step

How many different end products do you need to produce?	Number of end products	4	5	4	4	4	7
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## 2. step

What is the planned production capacity (mtph)?	Plant capacity tph/stph	250 / 275	250 / 275	250 / 275	350 / 375	350 / 375	350 / 375
How consistent is your end product quality?	Product cubicity	...	...	...	..	..	...

## 3. step

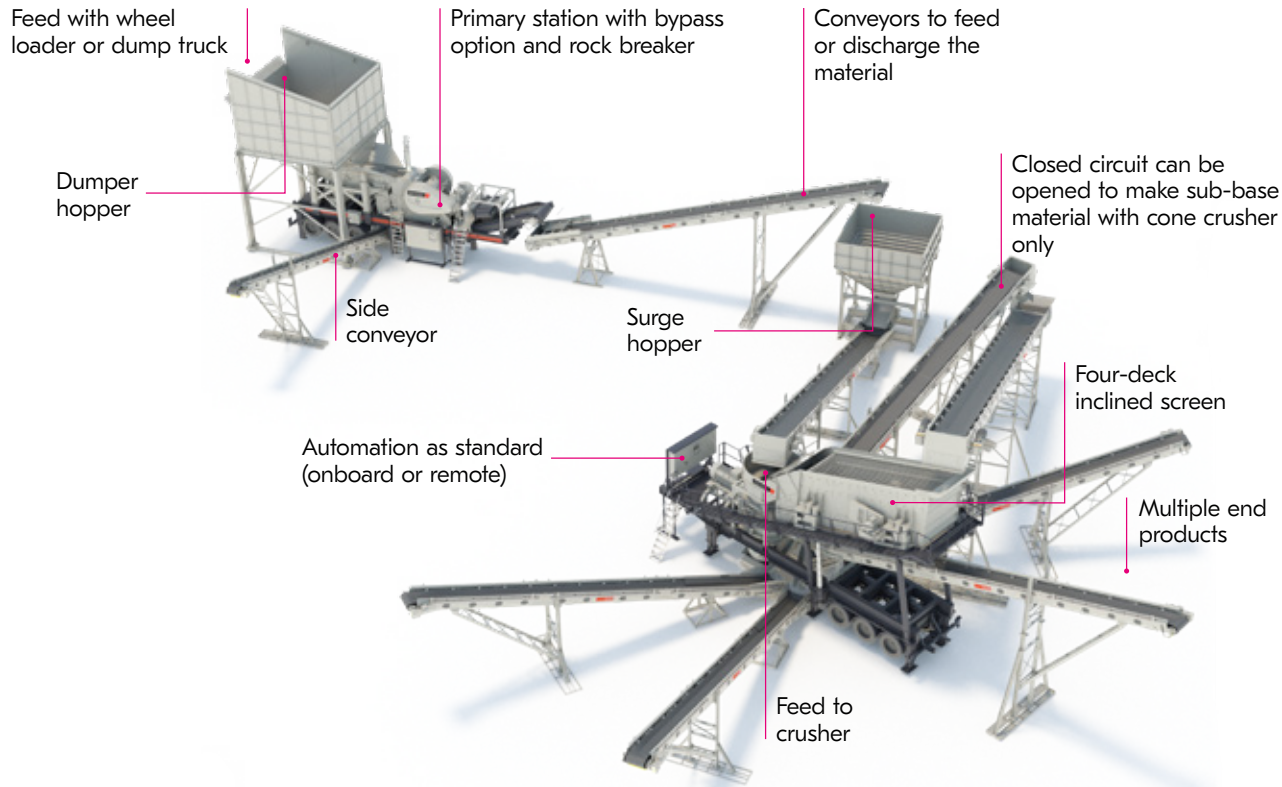
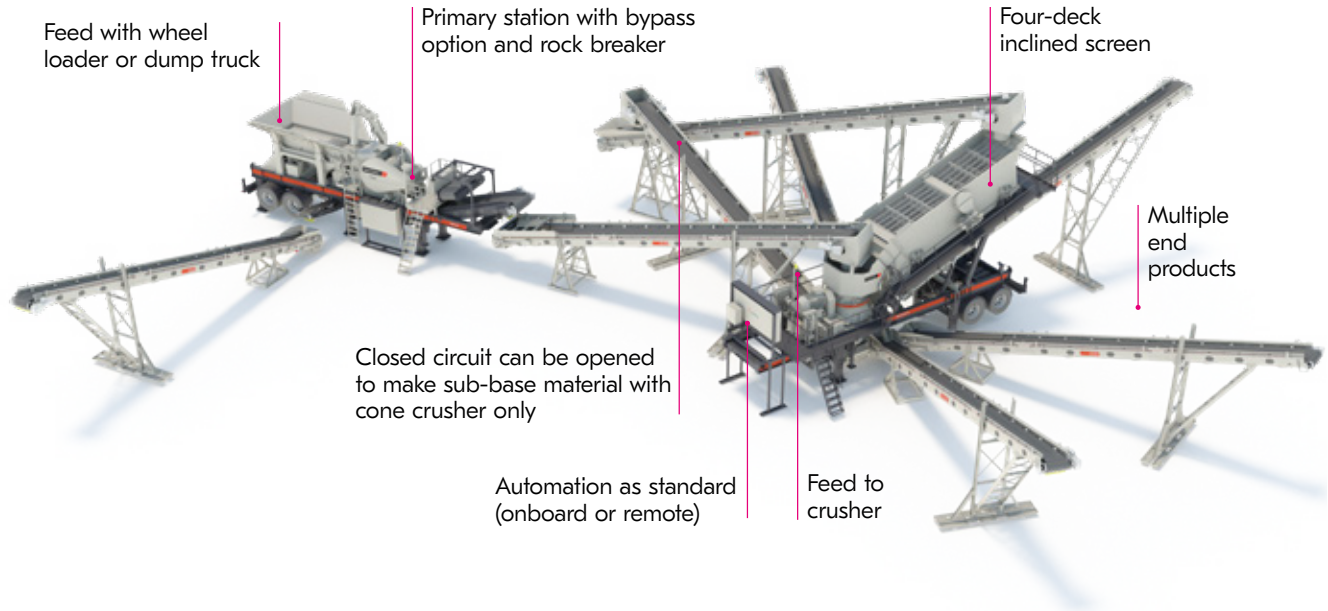
How often do you need to move the plant?	Mobility	..	.	...	..	..	.
How important is production efficiency compared to site mobility?	Efficiency	...	...	..	...	...	...
What is the desired automation level (onboard or remote control)?	Automation	Onboard/ Remote	Onboard/ Remote	Onboard/ Remote	Onboard/ Remote	Onboard/ Remote	Onboard/ Remote

## 4. Your NW Rapid solution

NW Rapid layout number	PT1	PT2	PT5-B	PT9-A	PT9-B	PT10
Configuration	NW106/ NW116 + NW200HPS/ NW220GPS	NW106/ NW116 + NW200HPS + NW7150S	NW106 + NW220GPS	NW120 + NW300HPS	NW120 + NW300HPS/ NW330GPS	NW120 + NW330GPS/ NW300HPS + NW330GPS/ NW300HPS/ NW7150S
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 PT5-B

## Simple layout with high mobility



# NW Rapid Layout PT9-A

## Close to stationary plant with high efficiency





## Metso Outotec IC™ series process control for NW Rapid

Process control is a standard feature in Metso Outotec NW Rapid portable solutions. When process control system and equipment are provided by the same partner, you can be confident that you're getting the most out of your crushing process.

Metso Outotec IC series process control automates, monitors, and controls the crushing process, as well as optimizes it.

Unlike other process control systems, Metso Outotec IC offers a Remote User Interface (RUI) which is included with NW Rapid plants with no extra license costs. Instead of controlling the process from machines at the field, you can control the entire process with a PC from the control room. No additional programming or software is needed as the RUI is displayed on a browser.

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.

Process control 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 Outotec IC series process control

## A field-proven platform

### Easy configuration to meet alternative worksite layouts

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

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

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

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

## Metso Outotec LCS and Metso Outotec Metrics

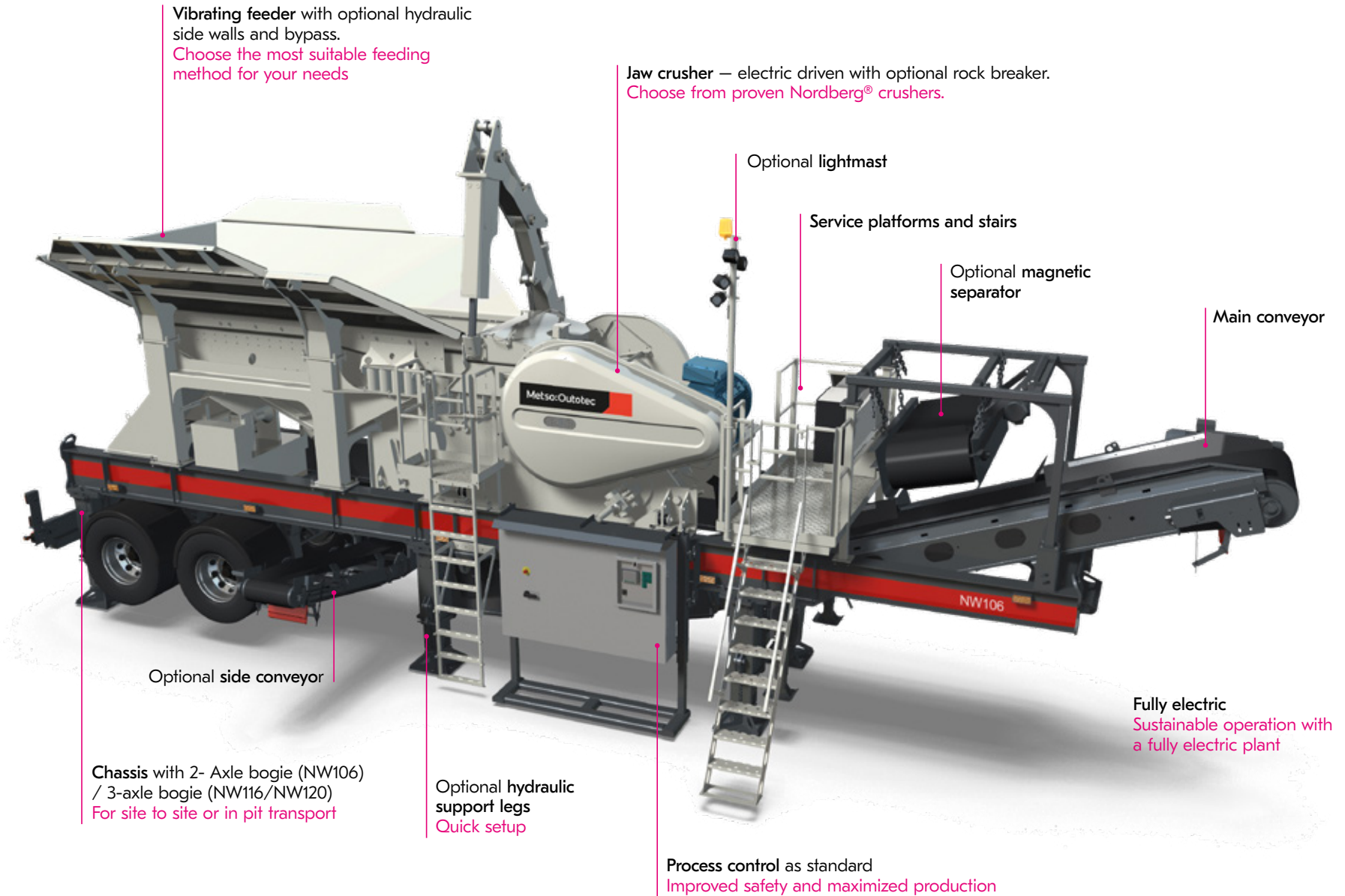
Together with Metso Outotec Life Cycle Services (LCS) we offer a digital solution to help further optimize your NW Rapid portable solutions. Through remote data monitoring, Metso Outotec Metrics Services gives you access to critical insights on your fleet's performance and maintenance needs, with optional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



With Metso Outotec Metrics integration you get:

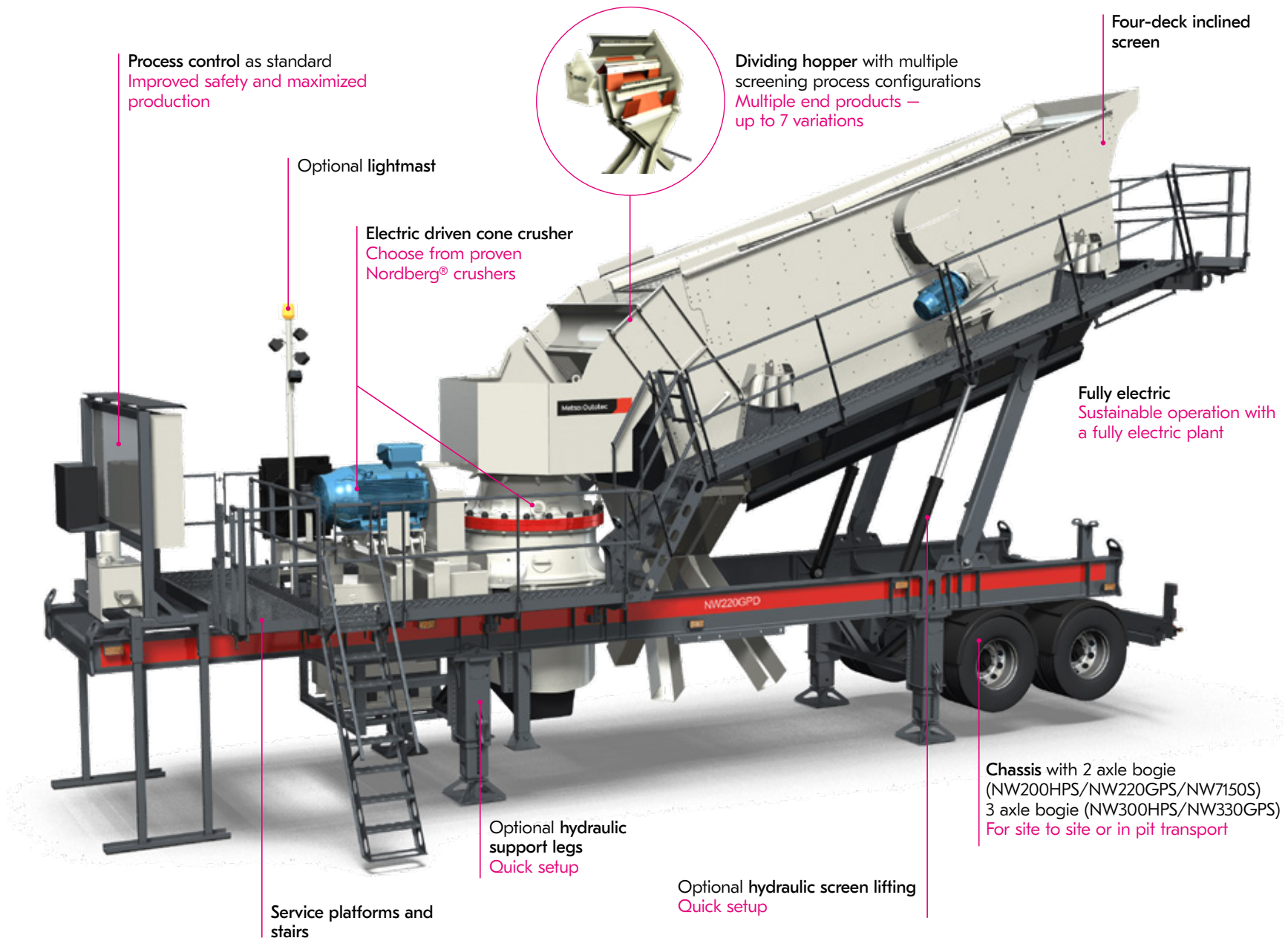
- 24/7 access to your data via computer or tablet, using a secured cloud-based platform
- visibility on your equipment's key operating data, including utilization rates, energy consumption, alarms, and parameter changes
- location data for your entire fleet in map format
- access to equipment specific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

# NW Rapid Primary crushing units





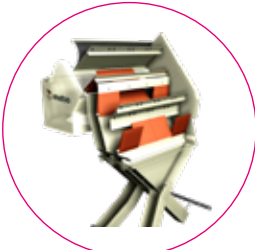
# NW Rapid Secondary and tertiary units



Process control as standard  
Improved safety and maximized production

Optional lightmast

Electric driven cone crusher  
Choose from proven Nordberg® crushers



Dividing hopper with multiple screening process configurations  
Multiple end products – up to 7 variations

Four-deck inclined screen

Fully electric  
Sustainable operation with a fully electric plant

Optional hydraulic support legs  
Quick setup

Service platforms and stairs

Optional hydraulic screen lifting  
Quick setup

Chassis with 2 axle bogie (NW200HPS/NW220GPS/NW7150S)  
3 axle bogie (NW300HPS/NW330GPS)  
For site to site or in pit transport

# Equipment Protection Services for NW Rapid

## It's all about protecting your assets

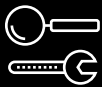
As part of Metso Outotec's Life Cycle Services for aggregates, Equipment Protection Services (EPS) brings you added protection for your most valuable assets. The comprehensive EPS service package includes extended warranties, scheduled inspections with Metso Outotec certified technicians, and Metso Outotec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

EPS gives you peace of mind through improved cost predictability by anticipating and minimizing unexpected equipment failures. Along with extended warranties that cover repairs or replacements on designated key components, the package includes scheduled inspections and other services to keep your equipment running smoothly throughout its operational lifespan.



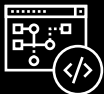
### Extended warranty 10,000 h/5 yrs

Extended factory warranty up to 4,000h/2 yrs and extended coverage for specified major components on designated equipment up to 10,000h/ 5 years



### Scheduled 1,000h inspections

Scheduled 1,000h inspections with recommendations from our certified inspectors/ technicians



### Metrics

24/7 access to how your equipment is operating (production data, alarms, parameters and analytics). Maintenance planning made easy through access to equipment specific maintenance plans and required part lists.









# Metso Outotec NW Rapid™ user experiences

## Delivering timely results

With over 1000 plants delivered to more than 20 countries, 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 Outotec's services differentiates it from all the players in the market."

Chakresh Jain,  
Managing Director, PNC Infratech Ltd



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

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



"We define 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.

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An aerial photograph of a mobile aggregate processing plant. The plant consists of several long, parallel conveyor belts that transport material across a large, flat, sandy or gravelly area. In the upper right, there are several large, rectangular storage bins or silos. A person wearing a yellow safety vest is visible near the bottom right of the plant. The overall scene is industrial and mobile, set in an open, unpaved area.

"The 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				IMPACTOR PLANTS
	Rapid NW106™	Rapid NW116™	Rapid NW120™ Foldable- / fixed hopper	Rapid NW1213™
<b>TRANSPORT DIMENSIONS</b>				
Length (mm)	13,482	13,712	13,983	14,193
Width (mm)	3,130	3,196	3,054 / 3,033	2,990
Height (mm)	4,117	4,459	3,917 / 4,380	4,113 / 4,303
Weight (kg)	34,000	47,800	52,500 / 51,000	39,000 / 40,000
Bogie weight (kg)	19,800	29,500	31,000 / 30,000	22,000 / 23,000
King pin weight (kg)	14,200	18,300	21,500 / 21,000	
<b>CRUSHER</b>				
Model	Nordberg® C106™	Nordberg® C116™	Nordberg® C120™	Nordberg® NP1213M
Feed opening W x D (mm)	1,060 x 700	1,150 x 800	1,200 x 870	1,300 x 900
Setting range (mm)	70 - 200	70 - 200	70 - 200	20 - 80
Motor power (kW)	110	132	160	220
<b>FEEDER</b>				
Model	TK11-42-2V	TK11-48-2V	TKF 12-48-2V	TK11-42-2V
Length (mm)	4,200	4,800	4,800	4,200
Width (mm)	1,100	1,100	1,200	1,100

NW RAPID SECONDARY AND TERTIARY CRUSHING UNITS – CONE PLANTS					IMPACTOR PLANTS			SCREEN ONLY
	Rapid NW200HPS™	Rapid NW220GPS™	Rapid NW300HPS™	Rapid NW330GPS™	Rapid NW7150S™ Single drive	Rapid NW7150S™ Double drive	Rapid NW1213™	Rapid NW1855S™
<b>TRANSPORT DIMENSIONS</b>								
Length (mm)	13,738	13,738	15,307	15,000	13,738	13,738	15,579	13,738
Width (mm)	3,029	3,029	3,190	3,190	3,029	3,008	2,990	3,029
Height (mm)	4,504	4,504	4,357	4,200	4,504	4,504	4,113	4,504
Weight (kg)	36,200	36,200	55,900	55,500	34,100	36,000	39,000	24,800
Bogie weight (kg)	22,300	22,300	36,250	36,000	21,100	21,600	22,000	17,800
King pin weight (kg)	13,900	13,900	19,650	19,500	13,000	14,400	17,000	7,000
<b>CRUSHER</b>								
Model	Nordberg® HP200™	Nordberg® GP220	Nordberg® HP300™	Nordberg® GP330™	Barmac® B7150SE VSI	Barmac® B7150SE VSI	Nordberg® NP1213M	
*Max opening/feed size (mm)	135	213	241	225	45	45	1,300 x 900	
*Closed side setting range (mm)	8-35	8-35	10-45	8-35				
Motor power (kW)	132	200	220	315	220	2 x 150	220	
<b>SCREEN</b>								
Model	DS1855-4	DS1855-5	CVB2060-4M	CVB2060-4M	DS18554	DS18555		DS1855-4
Length (mm)	5,500	5,500	6,000	6,000	5,500	5,500		5,500
Width (mm)	1,800	1,800	2,000	2,000	1,800	1,800		1,800
Power (kW)	15	15	22	22	15	15		

\*cavity configuration dependant

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