

Nordberg® NW Series™

Portable crushing & screening plants



Your success
is the secret
of our success



Right where you need us

We supply competitiveness

At Metso, we know that the only real measure of our worth is in the results we deliver to our customers. Our expertise is rooted in more than a century of experience that today provides our customers with an unparalleled knowledge base, rock-solid financial resources – plus the engineering know-how, innovative technologies and worldwide locations to ensure that your crushing and screening operations will profit.

Nordberg® NW Series™ portable plants are fully adaptable to all portable crushing and screening needs, opening up a whole new range of business opportunities for contractors, quarry operators, recycling and mining applications. NW Series plants can be operated as independent units or as a two- or three-stage crushing application: from primary to secondary, tertiary and fine crushing.

NW Series portable plants are built around the proven Nordberg® and Barmac® crushers, which are respected world-wide for their engineering quality, crushing efficiency, versatility and cost-effectiveness.

Nordberg® NW Series™

Why choose Nordberg NW?

Reliability

- High level of engineering
- Persistent quality testing
- Metso's premium-quality components
- More than a century of experience

High capacity

- The best crushers on the market
- Good reliability, good availability
- Nordberg NW for every application
- Metso's wear parts and cavity design

Energy and environment

- Electric drive
- Advanced dust and noise reduction
- Easy to transport

Safety

- Proper stairs and platforms
- Finger protection and safety wires
- One button process start & stop

Easy to use & maintain

- One button process start & stop
- Real-time diagnostics & easy process optimization
- All main languages available
- Interlocking for multistage process
- Industry-leading service network

Nordberg NW Series



Jaw plants

Nordberg NW Series portable plants are built around Nordberg C Series jaw crushers. The crushers are engineered for the toughest feed materials. The reliability of C Series jaw crushers is based on a revolutionary pinned and bolted, non-welded frame construction. This design provides excellent fatigue strength even in the toughest quarrying and mining applications.

A complete solution

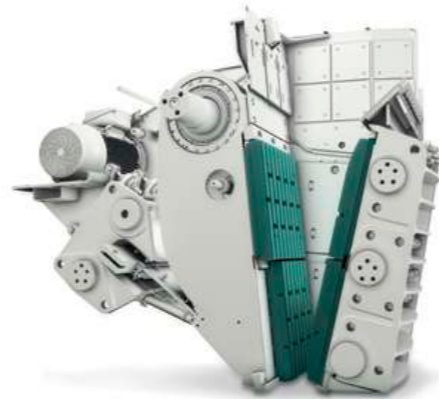
In all there are seven jaw crusher models for portable applications. The Nordberg NW80, NW96, NW106, NW116, NW120, NW130 and NW150 are recommended for operations that require efficient primary crushing for aggregate production, recycling or mining.

Besides reliable crushers, NW Series jaw plants feature strong, specially designed chassis reducing unit length and weight. Feeders, conveyors and electric parts are all manufactured from first-class Metso components.

By choosing the options available, you can modify your NW to accurately suit your crushing application.

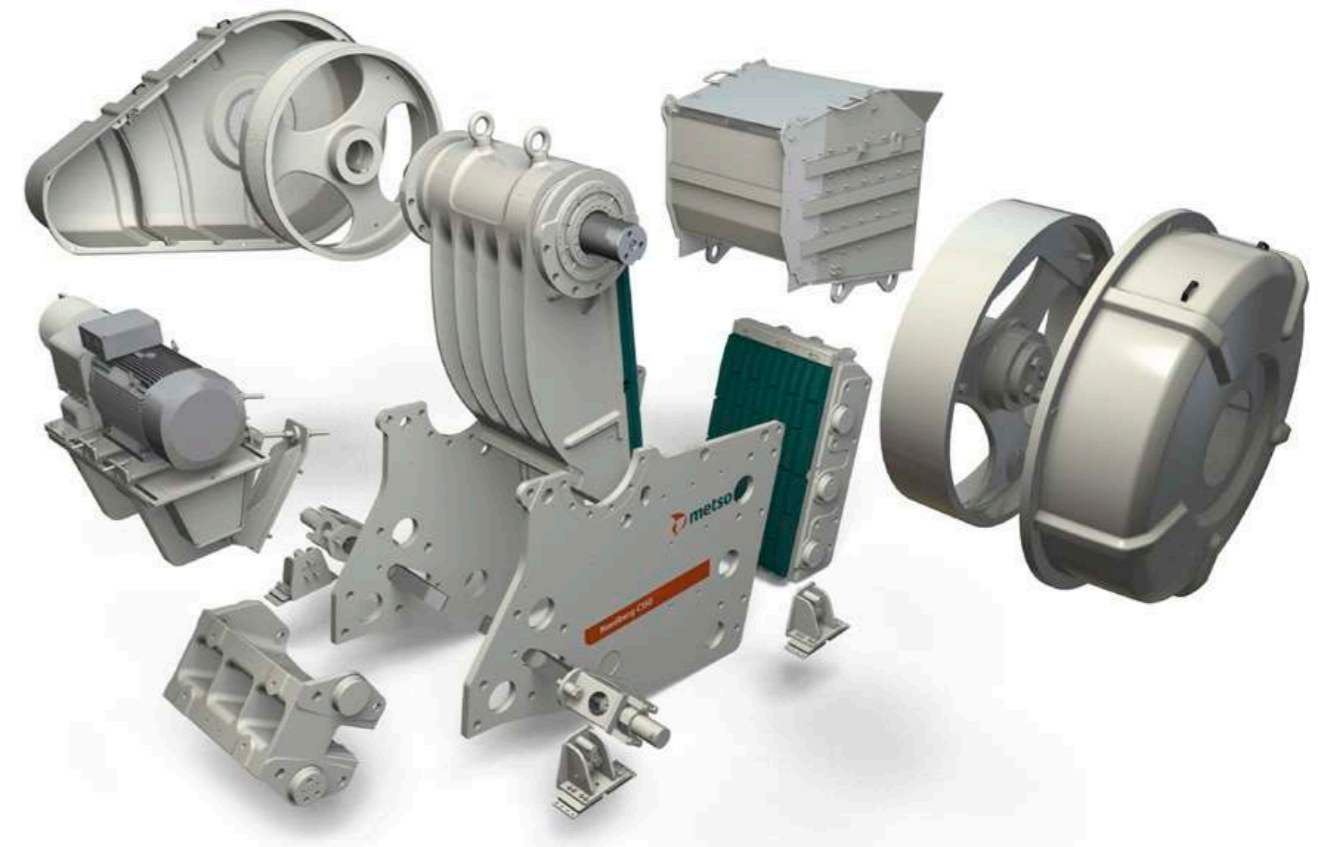
Benefits

- Efficient and reliable C Series jaw crushers
- Reduced length and weight
- Excellent process flexibility
- Guaranteed customer service world-wide



Nordberg® C120™ jaw crusher

	NW80™	NW96™	NW106™	NW116™	NW120™	NW130™	NW150™
Transport dimensions							
Length	9 400 mm	12 000 mm	13 500 mm	15 300 mm	17 300 mm	16 500 mm	17 600 mm
Width	2 500 mm	2 500 mm	3 000 mm	3 500 mm	3 500 mm	3 500 mm	3 500 mm
Height	4 050 mm	3 300 mm	3 700 mm	4 100 mm	4 400 mm	4 500 mm	4 900 mm
Weight	19 600 kg	26 000 kg	35 500 kg	47 000 kg	68 000 kg	65 000 kg (20 000 kg)	82 000 kg (39 000 kg)
Axle weight	9 100 kg	16 000 kg	20 000 kg	30 800 kg	41 000 kg	37 000 kg	50 000 kg
King pin weight	10 400 kg	10 000 kg	15 500 kg	16 200 kg	27 000 kg	28 000 kg	31 500 kg
Crusher							
Model	Nordberg® C80™	Nordberg® C96™	Nordberg® C106™	Nordberg® C116™	Nordberg® C120™	Nordberg® C130™	Nordberg® C150™
Feed opening							
- intake width	800 mm	930 mm	1 060 mm	1 150 mm	1 200 mm	1 300 mm	1 400 mm
- intake depth	510 mm	580 mm	700 mm	800 mm	870 mm	1 000 mm	1 200 mm
Setting range	40-175 mm	60-175 mm	70-200 mm	70-200 mm	70-200 mm	100-250 mm	125-250 mm
Motor power	75 kW	90 kW	110 kW	132 kW	160 kW	160 kW	200 kW
Feeder							
Model	TK8-27-2V	TK8-32-2V	TK11-42-2V	TK11-48-2V	VF561-2V	VF561-2V	VF661-2V
- length	2 700 mm	3 200 mm	4 200 mm	4 800 mm	6 100 mm	6 100 mm	6 100 mm
- width	800 mm	800 mm	1 100 mm	1 100 mm	1 300 mm	1 300 mm	1 600 mm



Nordberg NW Series



Cone plants

In portable applications with requirements for efficient secondary, tertiary and fine crushing with high productivity, good reduction ratio and excellent cubicity requirements, the ultimate choice is the Nordberg NW Series portable plant equipped with the proven GP and HP Series cone crushers. Nordberg GP and HP Series cone crushers feature a unique combination of crusher speed, throw and cavity design.

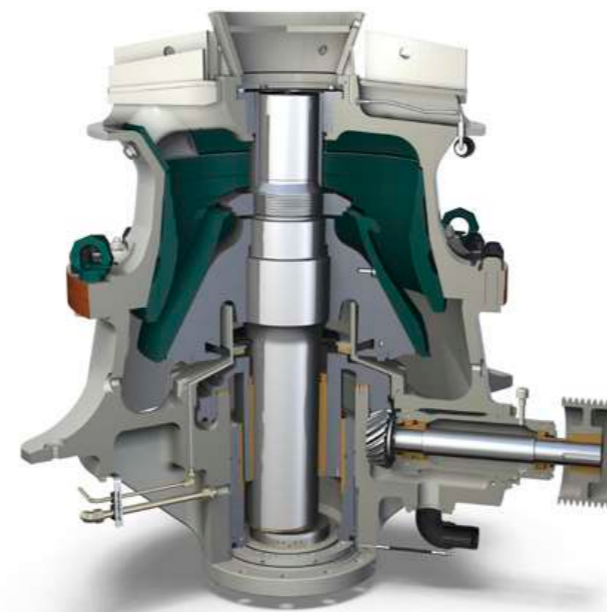
A versatile solution

According to your crushing application, you can choose from seven different portable plants with GP cones and eight with HPs. If your crushing project requires a portable plant with screen, NW100GPC, NW100HPC-CC, NW1100C, NW220GPC and NW200HPC are equipped with an on-board screen.

When needing secondary and tertiary cones for two- or three-stage portable processes, you can find the right cone crushers from the GP and HP series, ensuring accurate adaptability to your crushing process.

Benefits

- Built around Nordberg GP and HP cone crushers
- High capacity and excellent end-product cubicity
- Excellent process flexibility
- Wide range available, also with on-board screens



Nordberg® GP330™ cone crusher is the latest member of Nordberg GP range.

	NW100GPC(S)™	NW100HPC-CC™	NW220GPC™	NW200HPC™
Transport dimensions				
Length	12 600 mm	16 800 mm	13 300 mm	13 500 mm
Width	2 500 mm	3 000 mm	2 900 mm	2 980 mm
Height	4 060 mm	4 200 mm	4 315 mm	4 370 mm
Weight	25 400 kg	30 000 kg	34 400 kg	35 000 kg
Axle weight	12 000 kg	20 000 kg	19 000 kg	19 500 kg
King pin weight	13 400 kg	10 000 kg	15 400 kg	15 000 kg

Crusher				
Model	Nordberg® GP100™ / GP100S™	Nordberg® HP100™	Nordberg® GP220 / GP200S™	Nordberg® HP200™
Feed opening	46-142 mm (GP100) 206-239 mm (GP100S)	20-150 mm	58-213 mm (GP220) 222-295 mm (GP200S)	25-185 mm
Setting range	6-20 mm (GP100) 20-45 mm (GP100S)	6-32 mm	8-35 mm (GP220) 25-50 mm (GP200S)	10-38 mm
Motor Power	90 kW	90 kW	160 kW	132 kW

Screen				
Model	CVB1540-4	CVB1540-4	CVB 1845-4	CVB 1845-4
- length	4 000 mm	4 000 mm	4 500 mm	4 500 mm
- width	1 500 mm	1 500 mm	1 800 mm	1 800 mm

	NW100GP(S)™	NW220GP™	NW330GP™	NW550GP™	NW500GP™
Transport dimensions					
Length	10 000 mm	10 600 mm	10 700 mm	13 000 mm	15 000 mm
Width	2 500 mm	3 000 mm	3 500 mm	3 500 mm	3 500 mm
Height	4 150 mm	4 000 mm	4 300 mm	4 300 mm	4 500 mm
Weight	14 000 kg	20 200 kg	30 000 kg	43 800 kg	54 500 kg
Axle weight	8 700 kg	14 100 kg	20 000 kg	28 000 kg	35 800 kg
King pin weight	5 300 kg	6 100 kg	10 000 kg	15 800 kg	18 700 kg

Crusher					
Model	Nordberg® GP100™ / GP100S™	Nordberg® GP220™ / GP200S	Nordberg® GP330™ / GP300S™	Nordberg® GP550™	Nordberg® GP500S™
Feed opening	46-142 mm (GP100) 206-239 mm (GP100S)	58-213 mm (GP220) 222-295 mm (GP200S)	**85-225 mm (GP330) 247-332 mm (GP300S)	68-265 mm	321-442 mm
Setting range	6-20 mm (GP100) 20-45 mm (GP100S)	8-35 mm (GP220) 25-50 mm (GP200S)	8-35 mm (GP330) 25-50 mm (GP300S)	10-45 mm	45-70 mm
Motor Power	90 kW	200 kW / 160 kW	315 kW / 250 kW	315 kW	315 kW

	NW100HP™	NW200HP™	NW300HP™	NW400HP™	NW4HP™	NW6HP™
Transport dimensions						
Length	10 000 mm	10 600 mm	13 700 mm	13 500 mm	13 500 mm	15 000 mm
Width	2 500 mm	3 000 mm	3 500 mm	3 500 mm	3 500 mm	3 500 mm
Height	4 150 mm	3 600 mm	4 300 mm	4 400 mm	4 400 mm	4 500 mm
Weight	14 000 kg	23 000 kg	35 000 kg	39 500 kg	39 500 kg	52 500 kg
Axle weight	8 700 kg	15 000 kg	22 000 kg	24 500 kg	24 500 kg	35 000 kg
King pin weight	5 300 kg	8 000 kg	13 000 kg	15 000 kg	15 000 kg	17 500 kg

Crusher						
Model	Nordberg® HP100™	Nordberg® HP200™	Nordberg® HP300™	Nordberg® HP400™	Nordberg® HP4™	Nordberg® HP6™
Feed opening	20-150 mm	25-185 mm	25-230 mm	30-300 mm	74-250 mm	35-330 mm
Setting range	6-32 mm	10-38 mm	10-45 mm	10-51 mm	8-45 mm	10-45 mm
Motor Power	90 kW	132 kW	200 kW	315 kW	315 kW	450 kW

Nordberg NW Series



VSI plants

Nordberg NW Series portable VSI plants are built around Barmac B Series Vertical Shaft Impactor (VSI). Barmac is the original rock-on-rock impactor. It has become synonymous with high-quality products in quarrying and minerals processing industries.

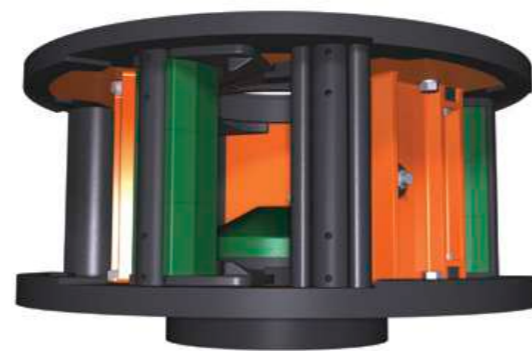
Proven producer of premium quality

The crushing process makes Barmac VSI unique. Whereas most other types of crushers use metallic parts to crush rock, Barmac VSI uses the rock fed into the machine to crush itself. This autogenous crushing action offers the lowest possible cost per ton of any impact crushing method. The high velocity impact crushing achieved in a Barmac VSI improves the soundness and shape of the material and produces the highest quality end products on the market today. It is widely known that the more cubical your product, the better its performance in concrete, asphalt and base mixtures.

Barmac VSI is usually applied in the last phase of the crushing circuit. The quarrying and construction industry has always been Barmac VSI's main application area with thousands of units operating around the world, followed by many demanding manufactured sand, heap leaching, pre-grinding, industrial minerals and recycling applications. This is possible because of the unique free-impact crushing and grinding action combined with the ability to accept fines in the feed and to fine-tune the crusher's performance by simply changing the rotor speed or cascade ratio.

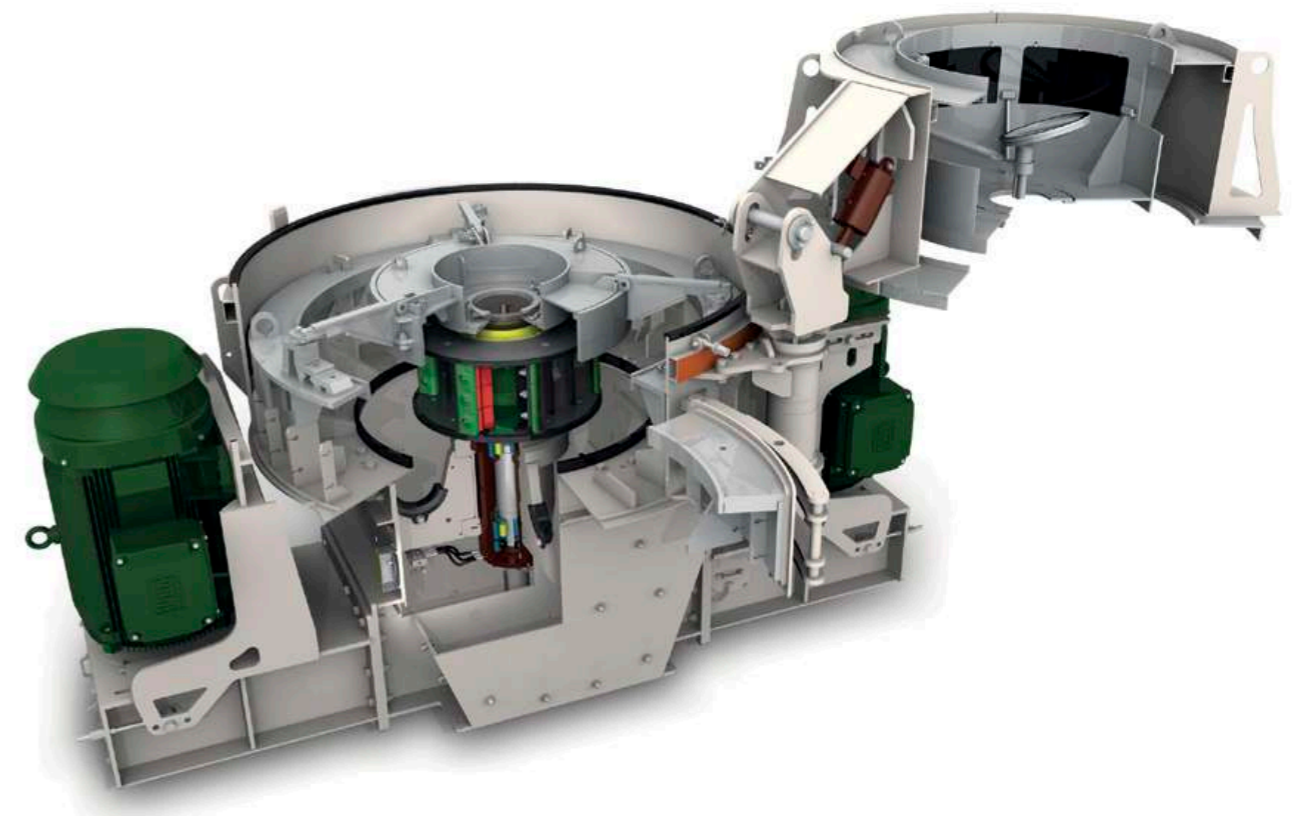
Benefits

- Based on the original Barmac vertical shaft impactor
- Minimized wear part costs
- Easy to add as the third/fourth crushing stage
- High end-product cubicity guaranteed



Metso's new Orange Series Rotor is a user-friendly and cost-effective solution for your VSI application. Uptime can be significantly increased through shorter maintenance intervals and longer life time of wear parts.

	NW7150™	NW9100™	NW6150C™	NW7150C™
Transport dimensions				
Length	15 000 mm	14 865 mm	11 720 mm	14 000 mm
Width	3 130 mm	3 130 mm	2 500 mm	3 000 mm
Height	4 080 mm	4 300 mm	4 060 mm	4 440 mm
Weight	26 000 kg	30 000 kg	24 900 kg	35 000 kg
Axle weight	16 050 kg	18 775 kg	11 600 kg	21 500 kg
King pin weight	9 950 kg	11 225 kg	13 300 kg	13 500 kg
Crusher				
Model	Barmac® 7150SE™	Barmac® 9100SE™	Barmac® 6150SE™	Barmac® 7150SE™
Max feed size	66 mm	66 mm	43 mm	66 mm
Feed hopper volume	9 m³	9 m³	-	-
Motor power	2 x 160 kW	2 x 350 kW	132 kW	220 kW
Screen				
Model	-	-	Nordberg® CVB1540-4™	Nordberg® CVB1845-4™
- length	-	-	4 000 mm	4 500 mm
- width	-	-	1 500 mm	1 800 mm
- number of decks	-	-	4	4



Nordberg NW Series

Screening plants

When requiring accurate classification of different end products after crushing, Metso offers portable screen plants to precisely match your application needs. Likewise with the portable crushing plants, the wheeled screens are based on our long experience and know-how in crushing and screening.

The key elements in the portable screens are the Nordberg ES and CVB Series screens, designed to be both modular and robust with exceptional performance in a wide range of applications.

Nordberg NW Series screens are specifically designed for portable applications. Their construction is modular with most components being huck-bolted: the screen media support rails, cross members, feedbox, etc., and can be individually replaced.

Benefits

- Based on Nordberg ES and CVB Series screens
- Modular design for easy service and parts change
- Efficient and easy to service MV modular vibrator
- Two- and three-deck screens available



Nordberg NW Series

Complete plants

The Nordberg NW Series portable plant allows you the use of various crushing and screening operations: from a single, stand-alone unit to two-, three-, even four-stage complete plants providing several end-product fractions.

The NW Series complete plants can be easily adjusted to accurately suit your crushing application. You can choose feeding to crusher or feeding to screen options to meet your end-product requirements.

Likewise, you can operate your NW plant as an open or closed circuit operation just by adding an extra return conveyor. This really enhances the versatile use of your equipment.

When knowing the feed material type and required end-product sizes, the Bruno simulation software developed by Metso helps you to create a reliable process flow and makes choosing the right crushers and screens easy.

Benefits

- Easy to modify into different crushing processes
- Can produce up to four accurate fractions
- Quick move and set-up times
- Process planning and customer service guaranteed

Services

Maximizing your return on investment

Our comprehensive services offering comprises everything from original spare and wear parts to advanced service solutions fine-tuned to your specific needs. You can count on Metso's expertise, available through our worldwide service network of more than 70 service centers, 10 distribution centers and 20 regional warehouses. So if it's wear or spare parts support, performance service solutions or a highly customized Equipment Protection Plan that you are looking for, we'll make sure that your investments get the best expertise they deserve.

Spare and wear part support

Our OEM parts help maintain the performance and availability of your equipment, resulting in a lower production cost per ton. Based on a long-term mutual commitment, you can take advantage of benefits such as preferential access to the most critical spare and wear parts.

Metso parts are manufactured according to specific design parameters using high-quality materials, tools and techniques. The use of OEM parts assures optimal performance and equipment availability, resulting in a lower production cost per ton.

Our crusher chamber/liner optimization solution is tailored to your process. This is a continuous improvement program, since the characteristics of the aggregates or the crushing process may vary. Depending on your needs, we can set goals, such as longer wear life, higher capacity throughput, finer material, or shorter downtime on liner changes.

Expert services

Our experienced field service team provides on-site support for your operation. As a global service provider, we understand how to deliver better process performance, improved productivity, maximum plant availability, reliable equipment performance, effective preventive maintenance and improved safety.

Add to that our extensive repair and rebuilding services as a cost-effective alternative to purchasing new or replacement equipment. These services are available at our manufacturing facilities worldwide through our experienced aftermarket engineering staff and customer service representatives. Backed by years of experience, we can repair broken or damaged equipment to "like-new" condition and restore worn or irreplaceable equipment to perfect operating condition.

Services

Life-cycle solutions

Metso implements industry best practices at each step of your operation to achieve optimum performance and guaranteed results. Our life-cycle service offering includes new installations, maintenance services, process improvements, as well as upgrades and rebuilds.

Metso Performance Solutions are far more than a simple offering of services. They incorporate our global knowledge in products and processes to provide solutions that best fit your needs. In addition to our contract-based service offering, Metso has built different service levels that you can choose from depending on your needs.

Equipment Protection Plan

EPP is a reliability assurance program that covers key components of your Metso equipment, representing up to 75% of the complete crushing equipment value. Standard freight and service supervisory work are included in the program coverage.

Intermittent equipment inspection visits from a Metso-certified inspector are part of the reliability assurance program. Certified inspectors help optimize your equipment's life-cycle productivity to enable the lowest sustainable cost of production.

Please contact your Metso customer service representative for detailed information on the Equipment Protection Plan.





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