

Modular plant solutions

# Metso Nordplant™



The fast way  
to full  
production

# The fast and easy way to build a complete plant

Metso Nordplant™ solutions for aggregates crushing and screening are built using pre-designed modules, which allow quick delivery and easy assembly to get your plant up and running in the time you want. Whether you are building a complete, totally new plant or upgrading your existing plant, Nordplant solutions provide high efficiency and industrial performance for quick return on investment. Performance and production are guaranteed by Metso.

30-40%  
faster delivery and  
commissioning

## Quality

Each solution is carefully selected to meet your needs for production, reliability, and aggregates quality.

## Safety

Metso ensures that safety and maintenance follow best practices and that the plant complies with local regulations and standards.

## Reliability

Every Nordplant solution is based on proven, world-class Metso equipment and technology.

### Everything you need

With Metso, you get everything you need from one supplier. The standard, pre-engineered components make installation simple, fast and easy. We offer 13 standard plant variations and layouts to select from to meet your needs. Each Nordplant delivery includes equipment, machines and conveyors; all steel works, electrical cabinets and accessories; and services including planning, shipping, installation and commissioning supervision. The delivery may include optional spares and service availability.

Example of a **No. 4 Nordplant** complete plant for soft rock applications.





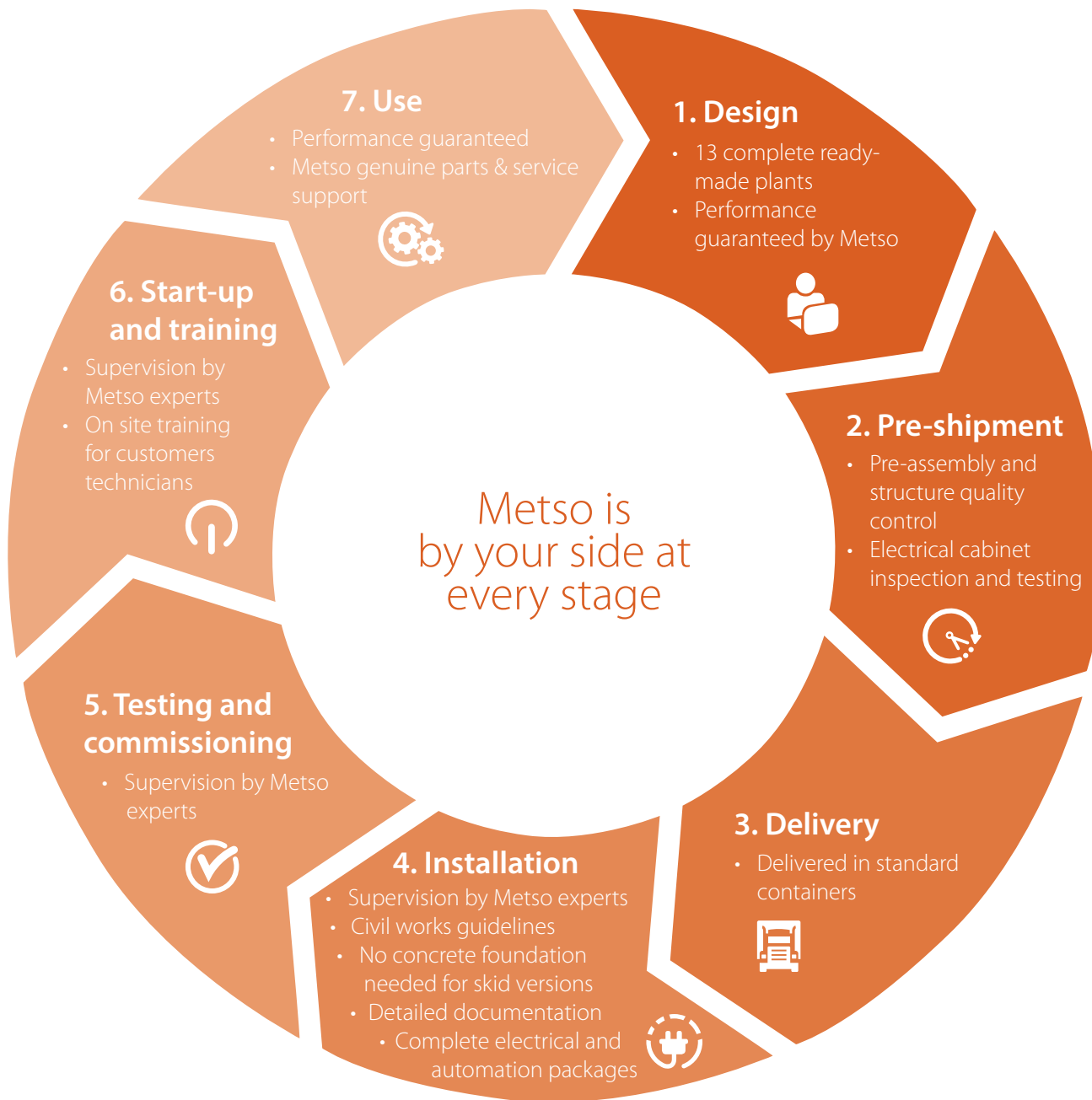


## Nordplant is the perfect solution when you need fast delivery and guaranteed performance

### **The right configuration for your project**

Nordplant solutions are always specified together with the customer to ensure they meet their needs. A selection of modules and layouts is available for primary, secondary, tertiary and quaternary crushing and screening. The skid-mounted equipment does not require concrete foundations, allowing quick installation and easy plant integration. Designed for versatility, the Nordplant modular range is scalable to fit your present and future production needs.

# Cost-effective performance



Nordplant solutions are competitively priced and have lower project costs because less engineering and planning is required. You also save over the lifecycle of the plant thanks to the reliability of Metso's crushers and screens, and the durable and well-designed steel structures.



# Complete plants – The options you need

**Complete Nordplant solutions are a good option when you need a plant for aggregates production on greenfield or brownfield sites.**

With a capacity of up to 400 tph, they can meet your needs when aggregates demand is high and when you need multiple fractions. And their small footprint allows them to be installed closer to the pit, reducing transport needs and environmental impact.

Up to  
**400 tph**  
capacity

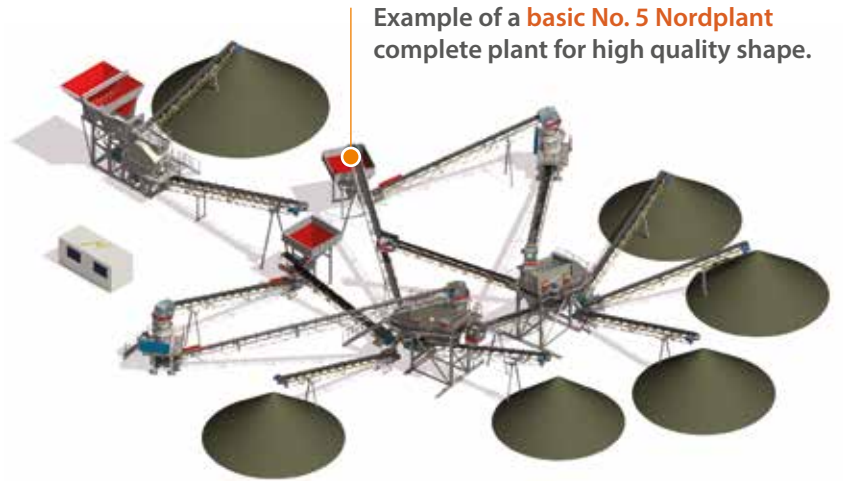
**Metso offers thirteen pre-designed and ready-to-run Nordplant complete solutions with capacities up to 400 tph for quick production start-up.**

Whether you are looking for an easy or complex plant, one crushing stage or three crushing stages, there's a Nordplant configuration for your needs. These complete solutions give you optimized process performance and controlled budget and delivery time for the best return on your investment. Every Nordplant solution has a full Metso warranty.

- Available space between the machines for easier maintenance and high efficiency
- On-site setup for immediate production and adaptation to your quickly evolving market
- High quality aggregates shape possible through selective circuits
- Bigger stock compared to mobile solutions
- Intermediate surge bins for proper and regular crushers feeding for high efficiency

# Metso quality

By choosing Metso you get reliable, field-proven technology. Our equipment is famous for its long lifecycle so you can be sure that your investment will retain its value. We have more than 150 years of expertise and leadership in crushing and screening, and with a service network that reaches around the world, you can rely on us for expert services, dedicated support and high-quality wears and spares.



Example of a **basic No. 5 Nordplant** complete plant for high quality shape.

## Select your complete Nordplant solution

To get started with your Nordplant solution, answer the questions on the left and choose your solution.

**Step 1**  
What type of rock are you processing?

**Step 2**  
How many different end products do you need to produce?

**Step 3**  
What is your planned production capacity (tph)?

**Step 4**  
How consistent does your end product need to be?

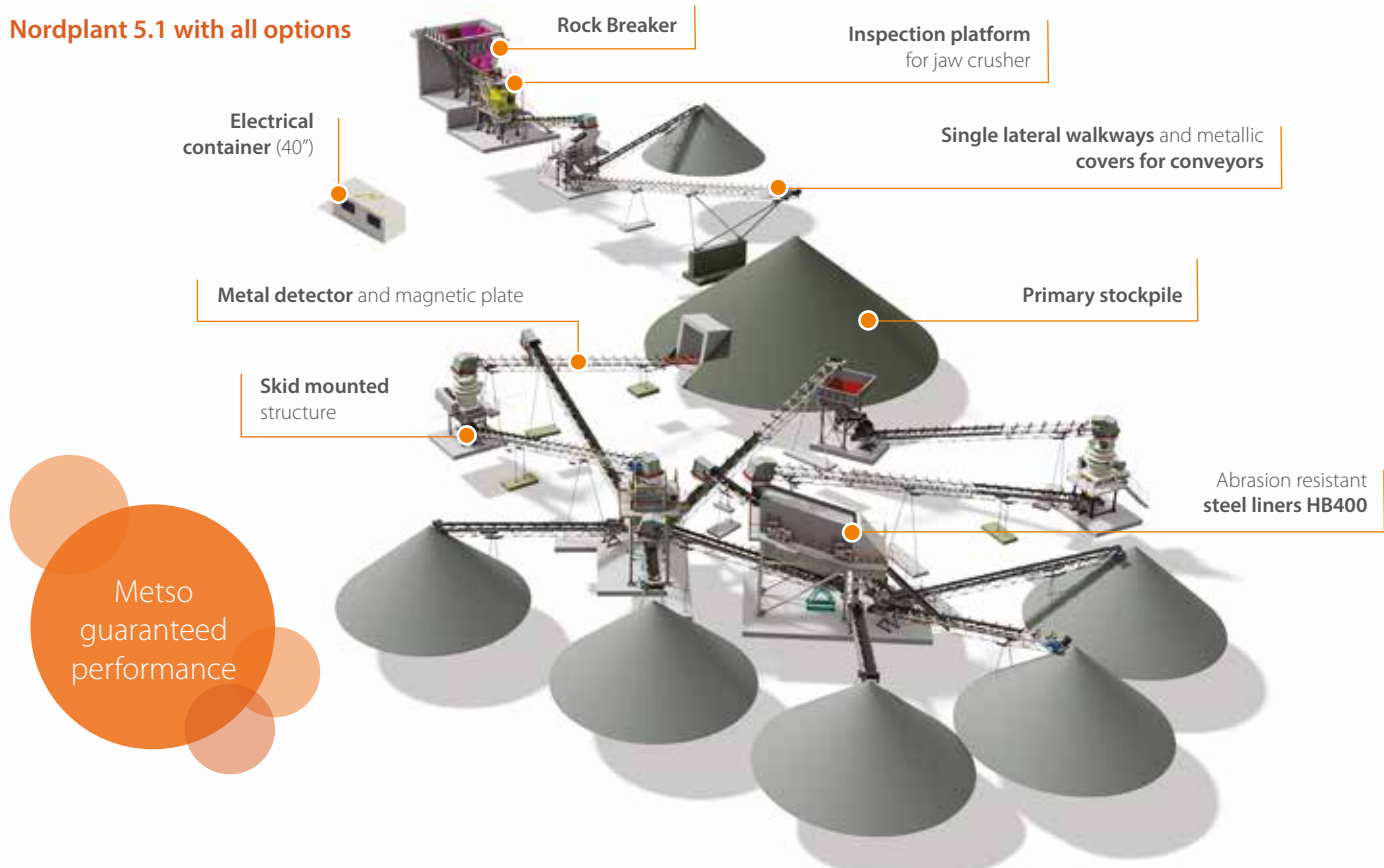
Your Nordplant solution

		Low to abrasive rock				
<b>No. end products size fractions</b>		4	4	4	4	4
<b>Max feed size</b>		400	560	560	700 610 (*)	700 610 (*)
<b>Production data - From hard to soft rock</b>	<b>Feed products t/h</b>	80 / 100	150 / 170	220 / 240	220 / 240	280 / 320
	<b>End products 0-25 mm t/h</b>	65 / 70	130 / 140	190 / 200	190 / 200	240 / 260
<b>Product quality (shape)</b>		•	•	•	•	••

<b>Nordplant model</b>		1	8	9	10	2
<b>Configu-ration</b>	<b>Crushing modules</b>	C80 TKF 8-32-2V HP100	C106 TKF11-42-2V HP200	C106 TKF11-42-2V HP300	C120 VF561-2V TK13-20-3V or C116 VF544-2V (*) HP300	C120 VF561-2V TK13-20-3V or C120 TK11-42-2V or C116 VF544-2V (*) HP300 HP200
	<b>Screening modules</b>	CVB1540-4M	CVB1845-4M	CVB2060-4M	CVB2060-4M	CVB2060-4M

## Nordplant 5.1 with all options



Low to very abrasive rock High quality aggregates shape						Low to slightly abrasive rock	
5	5	5	5	5	5	4	4
560	610	700 610 (*)	700	700 610 (*)	700	600	700 610 (*)
170 / 200	170 / 200	260 / 310	320 / 390	240 / 320	310 / 380	180 / 230	250 / 320
150 / 170	150 / 170	220 / 250	280 / 320	210 / 250	270 / 310	160 / 195	210 / 250
•••	•••	•••	•••	••••	••••	••	••

11	12	5	13	6	7	3	4
C106 TKF11-42-2V HP200 HP200	C116 VF544-2V HP200 HP200	C120 VF561-2V TK13-20-3V or C116 VF544-2V (*) HP300 HP300	C120 VF561-2V TK13-20-3V HP4 HP4	C120 VF561-2V TK13-20-3V or C120 TK11-42-2V or C116 VF544-2V (*) HP300 B7150	C120 VF561-2V TK13-20-3V HP4 B9100	C106 TKF11-42-2V NP13	C120 VF561-2V TK13-20-3V or C120 TK11-42-2V or C116 VF544-2V (*) NP13
CVB1845-4M CVB1845-4M	CVB1845-4M CVB1845-4M	CVB1845-4M CVB2060-4M	CVB2060-4M CVB2060-4M	CVB2060-4M CVB2060-4M	CVB2060-4M CVB2060-4M	CVB2060-4M	CVB2060-4M



# Nordplant crushing and screening modules

## - Expand and upgrade your plant

Upgrade your existing installation using Metso crushing and screening modules. Nordplant modules are standardized, optimized and designed with the machines to deliver long lasting results. Every module is pre-designed, which allows quick delivery and easy assembly to get your plant and your process operational in the minimum time.

Metso designed the Nordplant modular range to provide flexible and ready to run crushing and screening solutions that can be adapted according to your production requirements. Buying a module with the key process machines for your project is the best insurance for reliable and efficient installation. Our range of pre-designed modules includes primary, secondary crushing and vibrating equipment, based on reliable, field-proven technology and decades of market experience and process expertise. Choose from our catalogue of standard configurations to build or upgrade your installation and limit engineering costs.



**Nordplant module**  
**C120 VF561-2V**



**Nordplant module**  
**DF2012P**

### Delivery and steelwork included

Metso will deliver your crushing and screening modules complete with everything required to get your process up and running. This includes delivery, steelwork, assembly, and installation, as well as the associated services to optimize your process application.

Metso can also provide customized structures and full plants for specific applications, while upgrades can improve safety, environmental compliance and productivity. Ask your Metso representative for more details.





Nordplant module		
DESCRIPTION		MACHINES
Primary crushing modules	Jaw	C80 TK 8-32-2V C106 TK11-42-2V C116 VG 544-2V C120 TK11-42-2V C120 VG544.2V C120 VF561-2V TK1320-3V C130 VF561-2V TK1320-3V
Secondary and tertiary crushing modules	Cone	HP 100 HP 200 HP 300 HP 3 HP 4
	Impact	NP 1110 NP 13 NP 15
	Vertical shaft	B 7150 SE B 9100 SE
Primary screening modules	CVB-P and DF screens	CVB1540-2P CVB1540-3P CVB1845-2P CVB1845-3P CVB2060-2P CVB2060-3P DF2012P DF2016P
Secondary and tertiary screening	CVB-M Screens	CVB1540-3M CVB1540-4M CVB1845-3M CVB1845-4M CVB2060-3M CVB2060-4M
Intermediate feeding hopper modules		Hopper 10 m <sup>3</sup> Hopper 20 m <sup>3</sup> Hopper 30 m <sup>3</sup>



**We select and specify the solution together with you**

- One contact for structure and machine supply
- Planning and design based on experience from installed base
- High quality, proven Metso machines
- Shipping and delivery
- Quick installation – including all steelwork
- Optional spares and services

# Build your Nordplant anywhere

**Nordplant solutions can be shipped anywhere in the world in containers or on metallic skids for quick delivery and easy site placement.**

Nordplant structures and conveyors are optimized, and packed and shipped in standard containers. Some structures are welded as one piece for fast erection and placement on site. All Nordplant structures are simplified kits equipped with detailed assembly manuals. Metso conducts quality control checks on structures before units leave the workshop. Every bolt, nut and detail is reviewed for fast site erection and operation. In addition, Metso provides the expertise, design and equipment to get your operation performing as quickly as possible.

Nordplant structures and conveyors are optimized, packed and shipped in **standard containers**.



## Service & support for your Nordplant

# It's all about protecting your assets



### Life Cycle Services

LCS takes the entire range of services Metso provides to our aggregate customers and conveniently bundles them into customizable, easily manageable packages, ranging from the basics to more comprehensive solutions, depending on the scale of your needs. Metso implements industry best practices at each step of your operation to achieve optimum performance and guaranteed results. Our LCS offering includes

- extended warranty coverage
- equipment support
- maintenance services and
- optimization packages.

### Equipment Protection Services



EPS is an extended warranty program that covers specified major components on designated equipment for up to 5 years or 10,000 operating hours. Scheduled inspections every 1,000 operating hours with Metso-trained and certified technicians, provide valuable recommendations that can prevent unexpected equipment failure.



**CASE LOS TRIGALES, PARAGUAY**

Los Trigales is the first company in South America to implement the Nordplant solution.

The Paraguayan company aimed to increase their production of high-quality aggregates with a solution that guaranteed performance. After discussions with Metso's specialists, they selected a Metso Nordplant solution. This included a Nordberg® C120™ jaw crusher and a Metso VF561-2v™ grizzly feeder in the primary crushing stage, and Nordberg® HP300™ cones for secondary and tertiary crushing.

*"We are very happy. This is a strategic plant for the Group's operations, and Metso was up to the challenge when it assembled the solution in two months, saving us 40% on assembly costs," says **Omar Bustos**, Chairman of Grupo Los Trigales.*

**Challenge:** The goal was to sustainably and solidly increase the production of high-quality aggregates.

**Metso solution:** The Nordplant solution included a Nordberg® C120™ jaw crusher and a Metso VF561-2v™ grizzly feeder in the primary crushing stage, and Nordberg® HP300™ cones for secondary and tertiary crushing.

**Results:** Los Trigales successfully increased production and, because installation only took 2 months, they also saved 40% on assembly costs.

**Read the full story:**



◀ Los Trigales adds 80,000 tons to its monthly aggregate production.

Hummingbird Mining Corporation enters the high quality aggregates business.



**CASE HUMMINGBIRD MINING CORPORATION, GUINEA**

Hummingbird Guinea Mining Corporation opens a quarry with the new Metso Nordplant solution.

Market demand for aggregates in the Guinea region is increasing. Hummingbird Guinea Mining Corporation approached Metso to help them develop a complete new quarry system. Metso helped Hummingbird to establish a fully operational quarry by providing a complete Nordplant™ solution with three crushing stages and a selective crushing circuit for an excellent quality of aggregates in terms of shape. This solution included a Nordberg® C116™ jaw crusher and a Metso VF544-2v™ grizzly feeder in the primary crushing stage, and Nordberg® HP300™ cones for secondary and tertiary crushing.

*"Metso provided us with the best solution and their world-class screening and crushing equipment enabled us to start operating on time and to reach our production targets" says **Mohamed Ndao**, CEO of Hummingbird Guinea Mining Corporation*

**Challenge:** With the customer being new in the quarry business, they wanted to reduce the commercial risk and ensure overall equipment effectiveness by using an experienced service provider.

**Metso solution:** Metso provided a complete Nordplant™ solution with flexible processes to address both concrete applications, as well as asphalt applications, for rock building markets.

**Results:** Hummingbird Guinea Mining Corporation successfully entered the high quality aggregates business and they now produce different types of materials needed for infrastructure development in the region.

▶ More cases in [www.metso.com/showroom](http://www.metso.com/showroom)



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