Protective Coating Solutions for the Global Mining Industry
A global provider of coatings

Jotun is one of the world’s leading manufacturers of paints, coatings and powder coatings.

We have 68 companies in 43 countries and 33 production facilities in 20 countries on all continents, and are represented in more than 90 countries with our network of agents, branch offices, distributors and sales offices around the world.

Our operations cover development, production, marketing, R&D and sales of paints and coatings to protect and decorate surfaces in residential, shipping and industrial markets.
Jotun is organised in four segments and seven geographical regions with its head office located in Sandefjord, Norway.

**PROTECTIVE COATINGS**
Our protective coatings are protecting assets in industries such as offshore, energy, infrastructure and hydrocarbon processing.

**MARINE COATINGS**
As the world’s leading provider of marine coatings we supply to ship owners, management companies and others for both newbuilding and dry-dock.

**POWDER COATINGS**
Our powder coatings are supplied to manufacturers of appliances, furniture, building components, pipelines and general industries.

**DECORATIVE PAINTS**
Our interior and exterior paints are being used by consumers and professionals worldwide, for protection and decoration.

**UNIFORM STANDARD ACROSS THE GLOBE**
- Easy to exchange trained technical personnel across national borders and multi-national projects.
- Compulsory training for all technical and sales personnel in marine and protective segments. Most of our coating advisors and technical personnel have FROSIO and/or NACE certification.
- Same competence in maintaining company standard procedures globally.

**FOR A MORE COLOURFUL WORLD, WE ALL NEED TO BE A LITTLE GREENER**
Jotun recognises the responsibility it has to the environment and has established its own GreenSteps programme.

Through the GreenSteps programme we address market demand for more sustainable coatings solutions.
Dedicated to protection of the global mining industry

Jotun is a leading global supplier to the whole value chain in the mining industry, from the mine itself to materials handling, processing & beneficiation to transportation and export. Jotun provides high quality corrosion protection systems meeting the specific needs of the mining industry.
Selecting the right solution for your assets

Jotun has product solutions fitting all types of mines – regardless of what metal or minerals are being extracted. Our coatings systems can be tailored to suit your specific need for either new construction or maintenance ensuring long term sustainable protection of your high valued assets.

Choosing the correct system is finding the optimal balance between product technology, expected lifetime of the paint system, application, time, financial aspects as well as attention to Health Safety & Environment. Specifying the right coating systems early in the design phase can optimise the design life as well as considerably increase the time to first maintenance.

Value of Time
Jotun continuously works to develop quicker and better coating processes, and to find solutions that are optimal for any given mining project, aiming to speed up production rates at fabrication stage or reduce downtime in maintenance situations.

Life Cycle & Life Cycle Cost
A correct choice of coating systems can ensure time savings as well as ensure a correct lifetime of the system. The longer the lifetime of a coating system, the greater the potential for savings for the asset owner. Reducing maintenance and shut down time is vital over the life cycle of a coating system, and choosing the correct and ideal coating systems initially means less chance of system failure and that you will get more out of your investment in the long run.

HSE – Health, Safety & Environment
HSE are increasingly important aspects of our business; even more so as environmental awareness and legislation are increasing. Jotun’s products more than meet both current and proposed VOC regulation, and we continue to work on both waterborne and high volume solids solutions at the same time as making our manufacturing greener by implementing the Jotun GreenSteps.

The goal for Jotun is not only to pass on coating selections that contribute to improving safety and working conditions as well as following legislation, but also to pass on our green initiatives to our customers.
Advanced high quality solutions with global availability

Through our global network, Jotun delivers proven product technology solutions that all hold the same high standard of quality. Our range of proven performance coatings is designed to meet all the specific needs of structures, machinery and equipment involved in all phases of mining operations – combining/ensuring increased productivity with cost effective life cycle performance.

**Penguard**
THE PENGUARD RANGE
These products comprise different epoxy technologies for tailored or universal use, applied alone or as a part of a coating system. They offer new construction coatings for installations exposed to various environments – ranging from medium to harsh corrosion conditions.

**Hardtop**
THE HARDTOP RANGE
A range of two component topcoats, whilst protecting the anti corrosive primer, give properties like gloss retention, flexibility and chemical resistance. Whatever demand you have for a topcoat you will find it in the Hardtop range of products.

**Marathon**
THE MARATHON RANGE
The Marathon range offers high build solutions with excellent abrasion resistance, making them well suited for high wear and tear areas – examples being jetties, machinery, thickener tanks, walkways etc. Marathon has a 30 year proven track record.

**Chemflake**
THE CHEMFLAKE RANGE
Chemflake is Jotun’s range of glassflake reinforced vinylesters. These are versatile, easy to apply, fast curing and long lasting barrier coatings for tank internals and are designed to deliver major reductions in application time.

**Jotamastic**
THE JOTAMASTIC RANGE
Jotamastic is the market’s first choice for long lasting protection on aged steel and surfaces without optimal preparation, thus saving time and money during the maintenance process. The Jotamastic brand has more than 25 years proven track record and over 300 million litres have been supplied worldwide.

**Resist**
THE RESIST RANGE
The Resist range of products comprises silicate binders and high quality zinc dust in various combinations, giving a solid foundation for long lasting coatings systems.

**Tankguard**
THE TANKGUARD RANGE
Tankguard products have been specifically developed to protect chemicals inside tanks from contamination in addition to preventing corrosion of the tank itself. The range covers products that are resistant to a wide range of chemicals.

**Barrier**
THE BARRIER RANGE
The Barrier range of products comprises epoxy technologies and high quality zinc dust in various combinations giving a solid foundation for long lasting coating systems.
Global experience – local presence

To you as a customer, quality and consistency in products, service and technical support are of key importance – especially when a project is being fabricated in multiple locations around the world at the same time. Jotun’s global network and experience ensures that we are there to follow up the project from start to finish, whether it is through our presence and advice at the engineering stage, with technical support in the local fabrication yards or at the final construction site for touch up, repair and future maintenance advice.

NCIG Terminal Project, Newcastle, Australia

Jotun was a supplier to both stage 2 and 3 of the large NCIG project of Newcastle’s coal export terminal located at Kooragang Island. The two stages included a number of material handling machines, a new wharf facility and thousands of tonnes of structural steel that was fabricated and painted in a number of countries.

“We for a project like this it is important to be supported by a global supplier that can follow up on a project at all fabrication sites and deliver the same products, of the same high quality, together with technical support in all countries.”

Bruce Anderson
Project Manager – NCIG CET Project
Aurecon Hatch
South Korea:
In Busan, a total of 2 stacker-reclaimers and one ship loader were fabricated and coated.

Turkey:
Bogies for the machinery were painted with Barrier, Jotamastic 87 and Hardtop Optima.

Thailand:
Structural steel including hopper bins, dump stations, galleries, platforms and general structural steel were manufactured and painted by a series of protective coating systems fit for purpose.

Indonesia:
Wharf structure fabricated and painted in Indonesia using 66,000 litres of Jotacote UHB.

China:
Thousands of conveyor idler frames manufactured in Dalian, China were painted using Penguarc Special and Jotamastic 87.

Australia:
In Australia, Jotun’s local team worked closely together with key stakeholders in the project to ensure a well-executed result, in addition to supplying paint on site for touch up and repair and to more than 30 fabricators and applicators across the country.
Corrosion protection in a maintenance situation is significantly different compared to the challenges met in new construction. Lesser prepared surfaces, different application techniques and limited accessibility, simply mean that the optimal coating system will vary greatly from that recommended at fabrication stage.

For all assets in operation a main concern is to avoid, where possible, unscheduled and costly shut downs due to corrosion challenges or coatings application. Choosing the right coating system at new construction is important, but wear and tear and exposure to the elements will in the end make maintenance inevitable. Several factors are important to consider when selecting a maintenance coating solution, such as degree of surface preparation, size of the area, lifetime expectancy, among others. In Jotun we understand these challenges and can offer a number of tailor-made maintenance solutions that have been specifically engineered for these situations.

**Smart Pack**
*The ultimate solution for brush & roller application*

The purpose behind Smart Pack is to provide a solution specifically developed for optimum corrosion protection when brush and roller are the only possible application methods.

- Best corrosion protection when using brush and roller
- Improved flow properties mean a smoother, better protective film.
- Ideal for smaller repair and touch up jobs.
- Supplied in 5 litre tins with a 1:1 mixing ratio, reducing wastage by over 50% by mixing only what you need.

**Jotamastic Smart Pack**
Surface tolerant primer and midcoat.

**Hardtop Smart Pack**
The Smart Pack solution for topcoats.
Marathon 500
A champion for challenging areas and harsh environments

Marathon 500 combines great strength with versatile maintenance features.

The thick paint film coupled with high abrasion resistance makes a formidable barrier to its environment, preventing damages to the paint film and thereby nipping corrosion in the bud. Tolerance to less than ideal substrates coupled with underwater curing also mean the product is ideally suited to efficient maintenance of a wide range of structures.

Jotamastic range
The ultimate maintenance solution

For a lesser prepared surface the Jotamastic range of surface tolerant epoxy mastics is unrivalled in today’s market.

With more than 25 years of usage and a proven track record based on more than 1.2 billion square meters covered, Jotamastic is the market leading maintenance solution for surfaces prepared down to St 2 (ISO 8501-1-2007).

- Jotamastic 90
- Jotamastic 87
- Jotamastic 80
- Jotamastic SF
- Jotamastic 87 GF
- Jotamastic 90 GF
“The aim of JAMP is to offer an overview of the current condition of the assets with regard to corrosion protection in order to avoid unscheduled and costly shutdowns.”
JAMP:
Jotun’s Asset Management Programme

Unscheduled shutdowns caused by corrosion problems are costly and usually come at the worst time. JAMP is a proactive method of asset management designed by Jotun to help maximise the life cycle of assets that are coated or will be coated, thus enhancing maintenance cycles.

**JAMP:**

- Establishes the corrosion and paint condition of the asset.
- Allows client and Jotun to function as a team finding better end solutions for maintenance.
- Supports preparation of a specialised maintenance programme providing long term cost effective corrosion protection coating systems.
- Considers issues related to planned maintenance of an asset in operation or at shutdown.
- Recommends coating systems with all relevant issues and challenges in mind.

The end result of a JAMP survey is a maintenance programme specifically designed for the asset, that takes into consideration all of the issues related to planned maintenance of a facility in operation or at shutdown i.e. location, local weather conditions, site access, practical preparation problems and so on.

It will tell which areas are crucial and need to be fixed immediately (<4 months), what maintenance needs to be done within 1 year and what can be left in the current condition until next inspection.

In the end the result will be a dedicated maintenance programme that incorporates both standards and coating systems that will work within the constraints of the facility, and a suitable timetable of priority to perform the required maintenance schedule.
Delivering on our promises wherever you are in the world

Jotun’s extensive experience and knowledge equips it with an unrivalled understanding of the particular challenges of the industry. Three key factors strengthen Jotun’s ability to provide economical, lasting solutions to plant protection:

**Team No.1**
- An unrivalled comprehensive technical support function at every Jotun location worldwide.
- A team of highly trained, experienced coatings specialists, certified to FROSIO or NACE certification standards working as a team both together and with their customers. Providing coating design advice, site surveys, written specifications, planning actual coating work, ensuring surface preparation and application are to the standards which secure lasting corrosion protection with minimum maintenance.

**Worldwide R&D**
- A team of scientists at the central laboratory in Norway and at regional laboratories in China, Korea, Malaysia, USA and UAE, work together combining state-of-the-art technology, innovative thinking and practical knowledge and experience to ensure Jotun coating systems work in all climates and locations.

**Education and Training**
- The TSS Academy – available to all employees – is an established system for education and training for management, technical support staff and corrosion engineers for construction facilities, contractors, engineering consultants and industrial companies.
- Proven to be very successful, increasing product knowledge, improving communication and understanding of common problems and their solutions.