



JOTUN

Maintenance for Oil, Gas and Chemical Operators



A global provider of coatings



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

We have 71 companies and 36 production facilities 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.

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.

PROTECTIVE COATINGS

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

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.



Jotun GreenSteps

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



Maintenance – the challenge for operations



Rarely is 'maintenance' for coatings and paints alone. However it is an opportunity to tackle corrosion issues and then paint afterwards

Maintenance will be carried out during a complete shutdown, partial shutdown, equipment shutdown or live online. The reasons for shutdown will be many and varied, from filter blockage, valve renewal to equipment modification.

Rarely is 'maintenance' for coatings and paints alone. However it is an opportunity to tackle corrosion issues and then paint afterwards. Sometimes corrosion can be the result of failing coatings, incorrect specifications or simply aged coatings. They can be the root cause of maintenance needs but may be perceived as routine rather than preventative.

Coatings will often be the last process prior to going back into service and thus be blamed for delaying start up. Painting may then be reduced in order to speed up the process. This will most likely result in a shorter life of the paint system and lead to the necessity to repeat the job later in the plant's life.

At Jotun we work alongside our clients to help achieve better preparation and prevent corrosion issues from causing health, safety or financial consequences.

Corrosion

Corrosion is a constant enemy – where we can see it we can deal with it. Where it is hidden nasty surprises can await!

In the industrial atmosphere of an operating plant we can expect to have extreme conditions when it comes to corrosion. There will be localised pollution – when it rains the pollution is dissolved into products that often accelerate the corrosion effect.

We all know that water will manage to penetrate where it is designed not to, and thus corrosion will start. The speed at which corrosion occurs depends upon many factors but the truth is once started then the process has a domino effect and accelerates.



The cost of corrosion



Painting is the time limiting factor before going back into service – the faster this can be completed, the quicker the site can be operational again

It is easy to assume that the cost of corrosion is the cost of preparing and painting steel or, in the worst case, replacing it.

However that is only the tip of the iceberg. In operations the challenge is to achieve maximum efficiency – keeping production at its highest level without losing time through unnecessary shutdowns or stoppages.

Paint and coatings can be both a benefit and, when incorrectly managed, a major hassle. Incorrect or poorly used coatings can lead to filter blockages or allow corrosion to occur. This may add to time out of service that could have been avoided.

The painting process itself will often be the last part of a programmed shutdown as there can be a risk of contamination. Thus painting is the time limiting factor before going back into service. The faster this can be completed the quicker the site can be operational again.

The purpose of coating maintenance



The cheapest and most effective method for the prevention of corrosion on plant

Coating maintenance is the cheapest and most effective method for the prevention of corrosion on plant. Because corrosion is often the cause of system failures, it is essential to halt its progress. If coating is undertaken in the form of programmed maintenance then the time expended and the consequences to the plant are reduced.

Some operators are so aware of the huge penalty of production stoppage that they do not limit the budget for this maintenance work – after all the whole painting process costs less than a single day of lost earnings.

Areas of concern



General steelwork

General steelwork such as pipe racks, tanks external and supports etc., may not be exposed to the most aggressive environments. However they are often complicated designs, trapping moisture, difficult to inspect and even harder to paint.



Corrosion under insulation

Corrosion under insulation together with corrosion under fire protection are the most serious areas of concern for a plant operator. Because they cannot be seen, the risk of incident grows but not necessarily awareness. Regular inspection and attention is vital.

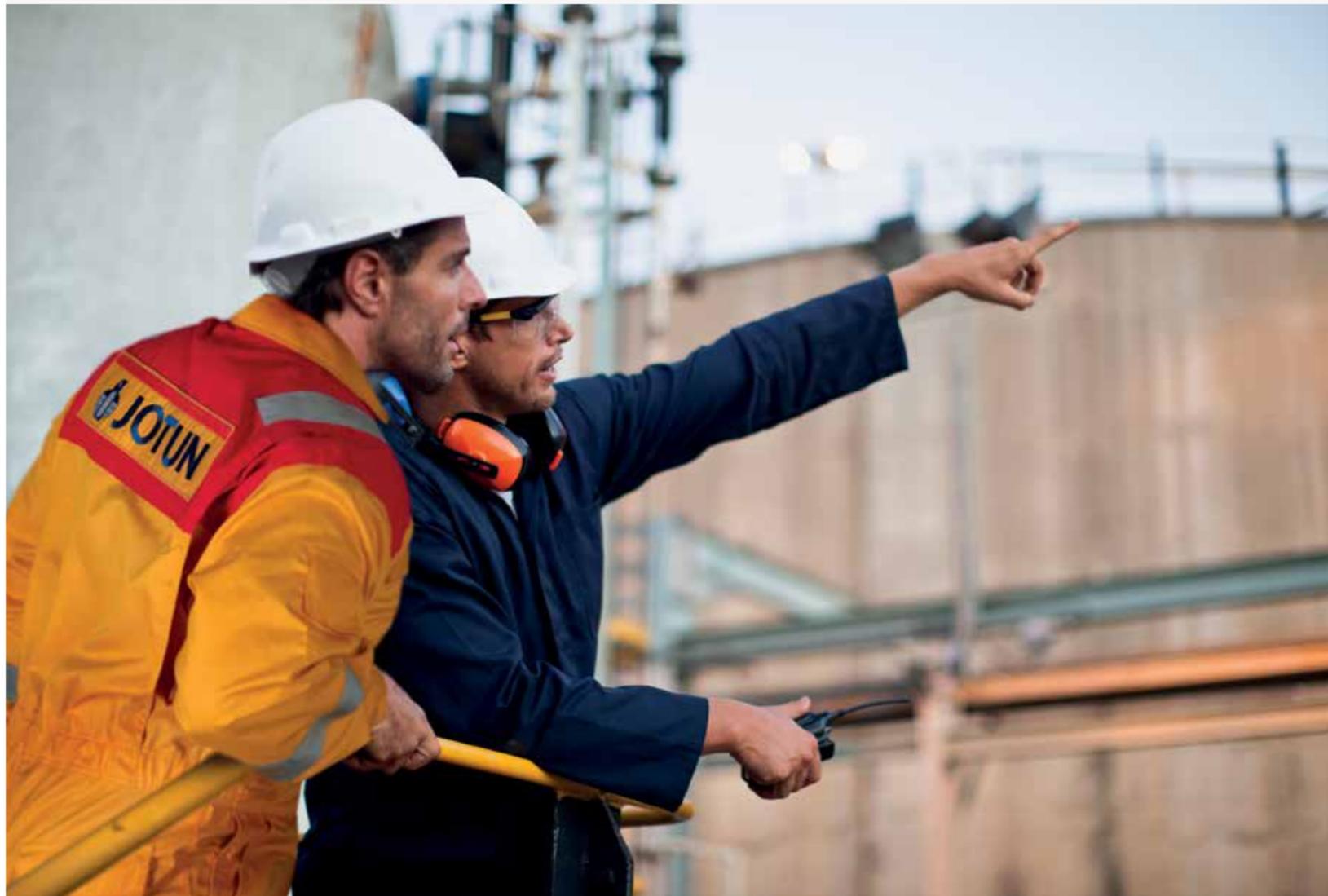


Tank coatings

Tank coatings are the life blood of a chemical operation and quality coatings and good maintenance are essential in order to maintain operational efficiency. It is also a good idea to utilise coatings that provide the most options to meet changing needs for storage – future proofing.

Here's how Jotun can help

JAMP (Jotun Asset Management Programme) strengthens Jotun's ability to provide economical, lasting solutions to plant protection



JAMP:

- Establishes the condition of the site
- Allows client and Jotun to function as a team
- 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 specialised for your asset only 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 etc.

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

In the end you will have 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.

Our key maintenance brands

Baltoflake

Baltoflake is Jotun's range of glassflake reinforced polyester coatings – outperforming traditional protection. The Baltoflake brand represents extremely abrasion resistant and fast curing anticorrosive coatings, ideal for splash zones and immersed areas. More than 30 years proven track record on offshore installations in the North Sea.

Marathon

The Marathon range offers high build solutions with excellent abrasion resistance, making them well suited for high wear and tear areas. Included in the range is Marathon 500 which is ideally suited to tidal zones on jetties as it cures underwater allowing practical maintenance.

Hardtop

Hardtop is a range of two component topcoats to be used as the final coat in an anticorrosive system – delivering properties like gloss retention, colour flexibility and chemical resistance. Whatever demand you have for a topcoat you will find it in the Hardtop range.

Solvalitt

Solvalitt is a range of heat resistant coatings for use in a variety of atmospheric conditions. Covering a wide range of temperature areas, the choice of Solvalitt product is dependent on the level of heat resistance required.

Chemflake

Chemflake is Jotun's range of easy to apply, fast curing and long lasting barrier coatings for storage tank internals. These products are designed to deliver major reductions in application time with faster curing, as well as being long lasting and versatile.

Jotatemp

Jotatemp 650 is a surface tolerant heat resistant coating providing a corrosion barrier when used to protect steelwork beneath thermal insulation (CUI) in areas with wet and dry cyclic conditions, including thermal shock. Especially suitable for maintenance of insulated and un-insulated steel in highly corrosive environments.

Jotamastic

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 in the harshest environments.

Tankguard

Jotun's 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 and cargoes.



Marine and protective coatings offices worldwide

Legal notice: Offices and trade are listed for details of branch offices and legal representation in countries not listed, please visit jotun.com

AUSTRALIA

Jotun Australia Pty. Ltd.
PO Box 125, Allans North,
Woolsey Street,
BROCKTON, VIC 3008
Tel: +61 3 9394 0700
Fax: +61 3 9394 9029

BRAZIL

Jotun Brazil Ltda.
Av. Santa Lucia, 2060 - Santa Lucia
24.722-789-020, Curitiba
81220-000
Tel: +55 31 3147 9990
Fax: +55 31 3147 9990

FRANCE

Jotun Coatings (Shanghai) Co. Ltd.
Jotun (China) Marine Coatings
(Shanghai) Co. Ltd.
Room 20, No. 2111 Wansheng
No. 24 Zhongyuan Road (South)
200002 200010
Tel: +86 21 6000 8800
Fax: +86 21 6000 8800

Jotun Coatings (Shanghai) Co. Ltd.
Jotun (China) Marine Coatings
(Shanghai) Co. Ltd.
Room 20112, Guilin Digital Network
Centre, 118 Tianyuan Road,
GUANGZHOU 510020
Tel: +86 20 86 76 57 49
Fax: +86 20 86 76 19 88

HONGKONG

Jotun (China) Marine Coatings (H.K.) Ltd.
Room 1108, 12/F, Garden House
77 Hing Yee Street, Queen Mary

HONGKONG

Tel: +852 2621 6666
Fax: +852 2621 1367

INDONESIA

Jotun Coatings (K) Jotun Coatings
Colombong, 2000, Palembang
CORPORATION
Tel: +62 4482 5000
Fax: +62 4482 5001

ISRAEL

8 Mibnashim Jotun, K.A.F.
8 Mibnashim, Cal. El Hay Street,
Rosh HaNai,
Mizrahi Sheraton - 4th Floor
CAIRO
Tel: +972 3366 1800
Fax: +972 3366 1801

ITALY

Maritalia Oy
Via Fieschi 26, 14020 LARZI
Tel: +39 0174 874 000
Fax: +39 0174 874 000

JAPAN

Jotun Kasei Co., Ltd.
2208 Sun-ku, President Mitsui, Bldg.
670-001, 1-14-100, Nishi-ku
Tel: +81 3 4516 1000
Fax: +81 3 4516 1000

KOREA

Jotun (South Korea) Co. Ltd.
Hullweg 10
22750 Munsan-ri
Tel: +82 42 851 9000
Fax: +82 42 851 3744

NEW ZEALAND

Jotun Paints (New Zealand) Ltd.
Teafield Road, Teakomahua,
1004-0010 Christchurch
Tel: +64 3 726 400 000
Fax: +64 3 726 400 000

NETHERLANDS

Jotun Holland
181 Westageweg, Arnhem,
3504AA
Tel: +31 26 482 88 000/01
+31 26 482 88 000/02
Fax: +31 26 482 88 000/01
+31 26 482 88 000/02

INDIA

Jotun India Pvt. Ltd.
100, Park Road,
Bandra/Neova,
Mumbai
Tel: +91 22 2622 4000
+91 22 2622 0000 (Fax)
Fax: +91 22 2622 0000

INDONESIA

Jotun Indonesia Private and Chemicals
Kawasan Industri (KAWI) 60
(Makassar), Olongg Road
Bekasi 17120
Tel: +62 21 8844 3007
Fax: +62 21 8844 3008

IRELAND

Jotun (Ireland) Ltd.,
100017 Marine Commercial Park,
Carrig Park Road, CO. Wick
Tel: +353 20 928 8888
Fax: +353 20 928 8882

ITALY

Jotun Italia S.p.A.
Via Marconi 8, Zona Ind. Pignone
Tel: +39 0474 360071
Tel: +39 0474 360064
Fax: +39 0474 360011

JAPAN

Jotun Coatings Co., Ltd.
1-1-1, Minamishinjo 3-chome,
Chiyoda
Tokyo 100-0001
Tel: +81 3 3283 22 01
Fax: +81 3 3283 22 01

KOREA (SOUTH)

Chobang Jotun Ltd.
10th Blvd. Seongbuk-gu Park,
1000, Seoul, Gangnam-gu,
10000 000-000
Tel: +82 2 789 0000
Fax: +82 2 789 11739

LIBYA

Jotun Libya S.R.L.
Almusharafa, CA (Tobruk)
Alsharafa Street
PO Box 1000
TRIPOLI
Tel: +218 21600000
Fax: +218 21600018

MALAYSIA

Jotun (Malaysia) Sdn. Bhd.
Lot 2, Persiaran Perumahan,
Seriway 71, P.O. Box 1010
40100 Seremban
Tel: +60 691 208 500
Fax: +60 691 208 500

NETHERLANDS (NEW ZEALAND)

Jotun NZ
Ponsonby Road,
2200 Mt. ROBINSON
Shipping address:
Commerce Park, 1000/101 Lyndon
ROBINSON
Tel: +61 691 678 000
Fax: +61 691 678 889

NETHERLANDS

Jotun NV
P.O. Box 2024,
3201 CA ROTTERDAM
Shipping address:
Hofdijkweg 107, 3000 Leidschendam
Tel: +31 78 45 70 00
Fax: +31 78 45 70 00

OMAN

Jotun Oman Co. LLC
Royal Ind. Estate, Road No. 10
P.O. Box 177, Qala' Fiti, MA'ASAF
Tel: +968 2444 0100
Fax: +968 2444 0100

OSLO

Jotun (Oslo) (Private) Limited
P.O. Box 24, Center 5
Kjeller Industriell Zone, 2004 OHN
Tel: +47 219 5121 000/0
Fax: +47 219 5121 400

PAKISTAN

Jotun (Pakistan) Ltd.
5th Floor (Industrial) Plot No. 10
South Super Highway
Pattokar City,
SITE: CHAKRALA, F-7/8
Tel: +92 300 1 000 00
Fax: +92 3022 0700

POLAND

Jotun Polska Sp. z o.o.
ul. Magnolia 16,
80-180 GOSZCZÓW SZKOLNY
Tel: +48 56 666 1010
Fax: +48 56 791 9000

RUSSIA

Jotun Russia OOO
Narvskaya St., 21-0, Office 10
194 020 ST. PETERSBURG
Tel: +7 812 940 0010
Fax: +7 812 940 0014

SOUTH AFRICA

Jotun Coatings Co. Ltd.
Industrial City, Phase 3,
P.O. Box 24284, JOHANNESBURG
Tel: +27 11 208 8888 / 2488 1000
Fax: +27 11 208 2488

SINGAPORE

Jotun (Singapore) Pte. Ltd.
27 Teck Hong Street #1
Singapore 06027
Tel: +65 633 800 88
Fax: +65 6333 7888

SOUTH AFRICA

Jotun Paints South Africa (Pty) Ltd
Wendellton Road, PO Box 107
BLADENHUIS TOWN
Tel: +27 21 908 1070
Fax: +27 21 908 1000

SPAIN

Jotun Iberica S.A.
Poligon Santa Rosa,
Calle Pineda no. 3,
48700-Camakurralde,
48000-000
Tel: +34 987 711 800
Fax: +34 987 711 800

THAI

Jotun (Thailand) Ltd.
P.O. Box 191, Wang Bang Chan 71,
401 20-4, CHANGWAT, CHAIYACHUM,
Tel: +66 340 0000
Fax: +66 340 0007

TURKEY

Jotun Turkmenistan
Anadoluyakari Ind. Estate (BPP)
100700 Akisli, Istanbul
Cankaya, Jotun Turkiye
06060 00 000
Tel: +90 312 44 00 00 00
Fax: +90 312 44 00 00 00

TURKEY

Jotun Ege San. ve Ticaret A.Ş.
Hizmetler Sanayi Bölgesi 16,
Sakarya
16000 Sakaş (KORUVA)
Tel: +90 21 2270 7070
Fax: +90 21 2270 2000

U.S.A.

John D. E.
John D. E.
Jotun (U.S.) (Pty) Ltd.
P.O. Box 1074, Milwaukee
48100-0000
Tel: +1 414 264 0700
Fax: +1 414 264 0332

UNITED

Jotun S.A.S. (U.K.) (U.K.)
P.O. Box 1074,
All Cava Indonesia Area
00100
Tel: +61 4 833 0000
Fax: +61 4 833 0000

USA

Jotun Paints Inc.
1000 Highway 20, P.O. Box 100,
Bella Channel, LA 70017
Tel: +1 800 230 9000 /
+1 504 954 9000
Fax: +1 504 954 0700

Vietnam

Jotun Paints (Vietnam) Co. Ltd.
Long Thanh Industrial Zone,
No. 1 Street 10,
Di An District, Binh Duong Province
Tel: +84 910 0342300
Fax: +84 910 0342300

YEMEN

Jotun Yemen Private Co. Ltd.
P.O. Box 70180, Aden
ADEN
Tel: +967 2400 040 0
Fax: +967 2400 040

Jotun A/S
P.O. Box 2029,
4000 Sandness, Norway
Tel: +47 2249 70 00
jotun.com

