

# Tankguard

Marine Tank Coatings



# More than **50 years** in the tank coating business

# Bringing simplicity and flexibility to a complex business

Tank coatings must serve a dual purpose – to protect the carried cargo against contamination and to protect the substrate of the tank against corrosion. The tank coating must provide resistance to the diverse and constantly changing nature of the cargoes being transported.

With our more than 50 years of experience in the tank coating business, Jotun provides efficient solutions in this varied and complex field.

# Selecting the right coating

There are several things to consider when selecting the best coating to ones individual cargo transportation needs.

The main selection will be between a novolac tank coating resistant to the broadest range of chemicals, a phenolic tank coating for all-round use or a standard epoxy tank coating resistant to a set list of chemicals or cargo groups.

Choosing a novolac tank coating will also allow for frequent cargo changes and more flexibility in cargoes that can be transported.

The trading pattern of the vessel should be the basis for choosing the correct coating.

# Products that cover the spectrum

Utilising four different coating chemistries Jotun covers the spectrum of transported oils and chemicals, as shown in the table below.

The Jotun range of tank coatings represents innovative products each developed to meet the challenges of protection against corrosion and contamination. Low temperature product application, worldwide product availability and a team of dedicated coating inspectors for tank coatings jobs allows Jotun to offer unrivalled service, support and advice.

Generic type	Jotun tank coating	Optimised for
Epoxy novolac	Tankguard Special Ultra	The shortest turn-around time in the market. Highest temperatures, speciality chemicals including FFA, EDC and methanol.
Epoxy phenolic	Tankguard Special	All-round use and spot market trading of commodity chemicals.
Ероху	Tankguard HB Classic	Crude oil, petroleum products and simple commodity chemicals.
	Tankguard CPC	Crude oil, petroleum products and simple commodity chemicals.
Zinc silicate*	Tankguard Zinc	Selected, niche chemicals including methanol.

# Future proofing tanks by choosing the correct coating

# Value of the cargo

Rejected cargoes and the need for recoating tanks are time consuming and costly. It is therefore critical that the tank coating used is easy to clean and does not retain cargo leading to contamination of subsequent cargoes. Restrictions on cargo sequences or stowage times can slow down the trading speed of the vessel. Fast turnaround of cargoes without compromising coating or cargo quality is therefore of paramount importance. Jotun can offer the shortest recovery time on the market, increasing transportation efficiency.

# Fixed trade pattern or spot market

Depending on the trading pattern of a tanker different properties are required from the tank coating.

When operating with fixed trade patterns one could select a tank coating that has a chemical resistance more tailored towards the currently transported cargoes. Should one wish to future proof against cargo compositions changing, for instance varying levels of free fatty acids in palm oils or additives in biofuels, upgrading to a heavy duty epoxy novolac coating increases the cargo flexibility of the tank.

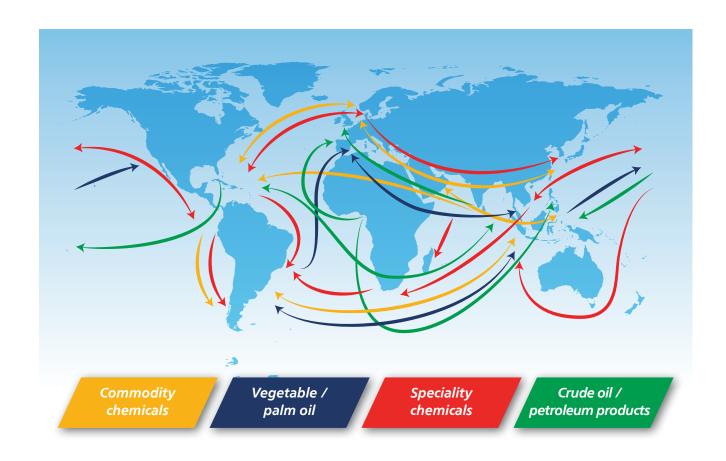
If trading on the spot market then attention to current trends is

crucial. Even having different coatings in different tanks on the same vessel could prove to be advantageous to maximise cargo capabilities.

Jotun can offer you advice on selecting the tank coating systems tailored to suit your transportation requirements.

Information on specific cargoes that can be carried with Jotun's tank coatings can be found on www.jotunprl.com





# Recommended tank coatings

# coating solutions for e

# Tankguard HB CLASSIC

Quality epoxy tank coating for use with well known cargoes.

Easy cleaning between cargoes.

# Tankguard CPC

Epoxy tank coating tailored for transportation of clean petroleum products.

Optimised for usage where extensive chemical resistance is not needed.

# Tankguard SPECIAL

Epoxy phenolic tank coating for an extended range of cargoes on the spot market.

All-round use and spot market trading.



# r every cargo

# Tankguard | SPECIAL ULTRA

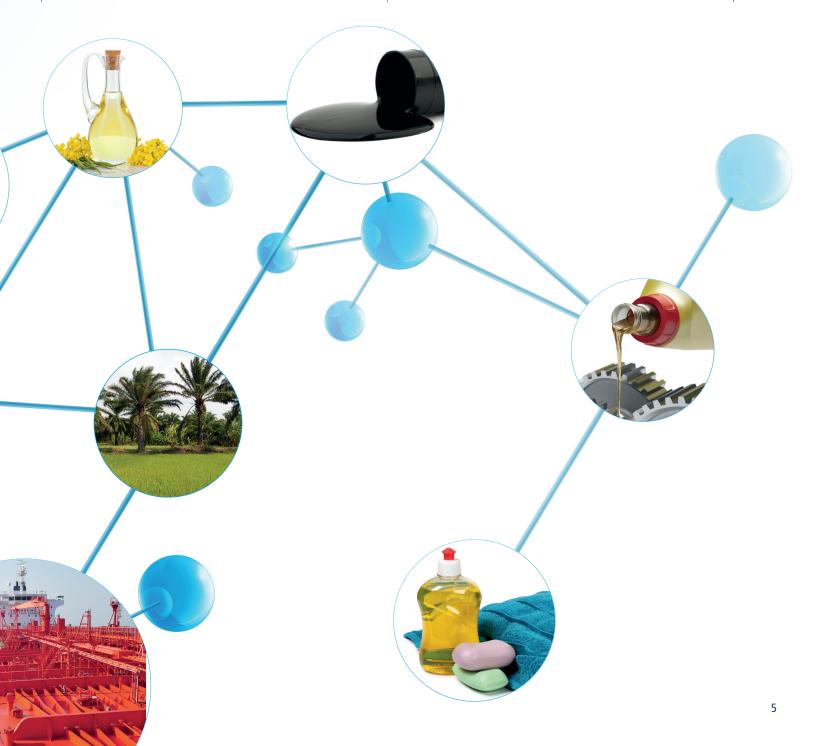
Epoxy novolac tank coating to withstand the most challenging cargoes and cargo sequences.

The shortest recovery time between cargoes on the market.

# Tankguard ZINC

Zinc silicate tank coating giving the best resistance to alcohols and solvents.

Excellent mud cracking resistance.





# A global supplier of 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 newbuilding, seastock 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.

# 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.











# Jotun Marine Coatings and Jotun Protective Coatings offices worldwide

Legal Jotun entities worldwide are listed. For details of Branch offices and Jotun representation in countries not listed, please visit **jotun.com** 

#### **AUSTRALIA**

Jotun Australia Pty. Ltd., P.O. Box 105, Altona North, 9 Cawley Road, BROOKLYN, VIC 3025 Tel: +61 3 9314 0722 Fax: +61 3 9314 0423

#### BRA7II

Jotun Brasil Ltda. Av Santa Luzia, 2084 - Santa Luzia 24.722-315 São Gonçalo RIO DE JANEIRO Tel: +55 21 3147 3850 Fax: +55 21 3147 3861

### **CYPRUS**

Jotun Cyprus Ltd. 56 Theodorou Potamianou Aphrodite Court, 1st Floor 4155, Kato Polemidia LIMASSOL

Tel: +357 25 374455 / 374440 / 374477 Fax: +357 25 374400

#### P.R. of CHINA

Jotun Coatings (Zhangjiagang) Co. Ltd. Jotun COSCO Marine Coatings (Qingdao) Co. Ltd. Floor 20, Jiu Shi Mansions, No. 28 Zhong Shan Road (South) SHANGHAI 200010 Tel: +86 21 6333 080 0 Fax:+86 21 6326 968 6

Jotun Coatings (Zhangjiagang) Co. Ltd. Jotun COSCO Marine Coatings (Qingdao) Co. Ltd. Room 709-12, Goldlion Digital Network Centre, 138 Tiyu Road East, GUANGZHOU, 510620 Tel: +86 20 38 78 07 49 Fax:+86 20 38 78 19 66

HONG KONG
Jotun COSCO Marine Coatings (H.K.) Ltd
Room 902, 9/F,
101 King's Road, North Point
HONG KONG
Tel: +852 2527 6466
Fax:+852 2861 1307

## DENMARK

Jotun Danmark A/S Jotun Coatings Columbusvej 5, 2860 Søborg, COPENHAGEN Tel: +45 4492 9400 Fax:-45 4492 9401

## EGYPT

El Mohandes Jotun S.A.E. Plot 193, Second District, City Center, Fifth Settlement, NEW CAIRO Tel: +202 2614 9999 Fax: +202 2614 9998

## **FINLAND**

Nor-Maali OY Vanhatie 20, 15240 LAHT Tel: +358 3 874 650 Fax:+358 3 874 6550

## FRANCE

Jotun France S.A. 22/24 Rue du President Wilson, Bat.A 92300 LEVALLOIS PERRET Tel: +33 1 4519 3882 Fax:+33 1 4519 3894

#### GERMANY

Jotun (Deutschland) GmbH Haferweg 38 22769 HAMBURG Tel: +49 40 851 960 Fax:+49 40 856 234

#### GREAT BRITAIN

Jotun Paints (Europe) Ltd. Stather Road, Flixborough, SCUNTHORPE DN15 8RR Tel: +44 1724 400 000 Fax:+44 1724 400 100

#### GREECE

Jotun Hellas Ltd.
33, Zeppou Street,
Glyfada
ATHENS 16675
Tel: +30 210 42 85 980-82
+30 210 42 86 035-37
Fax:+30 210 42 87 237

#### ΙΝΝΙΔ

Jotun India Pvt Ltd.
502, 5th Floor,
Boston House,
Suren Road,
Behind Cinemax Theatre,
Andheri East,
Mumbai – 400 093
Tel: +91 22 2822 4600
+91 22 2820 5900 (+fax)
Fax:+91 22 2820 5900

### INDONESIA

P.T. Jotun Indonesia Kawasan Industri MM2100 Blok KK-1, Cikarang Barat Bekasi 17520 Tel: +62 21 8998 2657 Fax:+62 21 8998 2658

### IRELAND

Jotun (Ireland) Ltd., Unit K7, Marina Commercial Park, Centre Park Road, CORK Tel: +353 214 965955 Fax:+353 214 965992

## ITALY

Jotun Italia S.P.A. Via Petronio, 8, Zona Ind. Noghere 34147 - MUGGIA (TRIESTE) Tel: +39 040 23 98204 Fax:+39 040 23 98222

## JAPAN

NKM Coatings Co., Ltd. 12–1, Minamirokugo 3-chome, Ota-ku, TOKYO 144-0045 Tel: +81 3 6758 2212 Fax:+81 3 6758 2213

# **KOREA (SOUTH)**

Chokwang-Jotun Ltd. 30th Block Jisa Science Park, 1205 Jisa-dong, Gangseo-gu, BUSAN 618-230 Tel: +82 517 976 000 Fax:+82 517 117 735

## LIBYA

Jotun Libya J.S.Co Almumtaz Co. S.A. (Jotun). Alseka Street P.O. Box 6850 TRIPOLI Tel:+218 214777811 Fax:+218 214780718

### MALAYSIA

Jotun (Malaysia) Sdn. Bhd. Lot 7 Persiaran Perusahaan, Section 23, P.O. Box 7050 40700 SHAH ALAM Tel: +60 351 235 500 Fax:+60 351 235 632

#### THE NETHERLANDS

Jotun B.V.
Postbus 208
3200 AE SPIJKENISSE
Visiting address:
Curieweg 11b, 3208 KJ Spijkenisse
ROTTERDAM
Tel: +31 181 678 300
Fax:+31 181 617 899

#### NORWAY

Jotun A/S P.O. Box 2021, 3202 SANDEFJORD Visiting address: Hystadveien 167, 3209 Sandefjord Tel: +47 33 45 70 00 Fax:+47 33 45 79 00

# OMAN

Jotun Paints Co. LLC Rusayl Ind. Estate, Road No. 10 P.O. Box 672 Code 111, MUSCAT Tel: +968 2444 6100 Fax:+968 2444 6105

#### PAKISTA

Jotun Pakistan (Pvt.) Ltd. 2KM Defence Road, Off 9KM Raiwind Road, Adjacent Valencia Homes Gate LAHORE 544770 Tel: +92 423 532 350 0-3 Fax:+92 423 532 1387

#### PHILIPPINES

Jotun (Philippines) Inc. 846 West Service Road, Km.18 South Super Highway Paranaque City, METRO MANILA 1714 Tel: +63 2239 1032-34 Fax:+63 2822 0760

## POLAND

Jotun Polska Sp.zo.o. ul. Magnacka 15, 80-180 GDAŃSK KOWALE Tel: +48 58 555 1515 Fax:+48 58 781 9692

## RUSSIA

Jotun Paints O.O.O. Varshavskaya Str., 23/2, Office 53 196128 ST. PETERSBURG Tel: +7 812 640 00 80 Fax:+7 812 640 00 81

## SAUDI ARABIA

Jotun Saudia Co. Ltd. Jeddah Industrial City, Phase 3, P.O. Box 34698, JEDDAH 21478 Tel: +966 2635 0535 / 2636 1271 Fax:+966 2636 2483

## SINGAPORE

Jotun (Singapore) Pte. Ltd. 37 Tuas View Crescent Singapore 637236 Tel: +65 650 882 88 Fax:+65 6265 7484

## **SOUTH AFRICA**

Jotun Paints South Africa (PTY) Ltd. Wimbledon Road, P.O.Box 187 BLACKHEATH 7581 Tel: +27 21 905 1070 Fax:+27 21 905 1652

#### **SPAIN**

Jotun Iberica S.A. Poligon Santa Rita, Calle Estatica no. 3, 08755 Castellbisbal, BARCELONA. Tel: +34 937 711 800

#### **SWEDEN**

Jotun Sverige AB P.O. Box 151, Klangfärgsgatan 13, 421 22 VÄSTRA FRÖLUNDA Tel: +46 3169 6300 Fax:+46 3169 6397

#### **THAILAND**

Jotun Thailand Ltd Amata Nakom Ind. Estate (BIPII) 700/353 Moo 6 Tumbol Donhualoh, Amphur Muang CHONBURI 2000 Tel: +66 2 022 9888 Fax:+66 38 214 373/375

### TURKEY

Jotun Boya San. ve Ticaret. A.S. Balabandere Caddesi Hilpark Suites Sitesi No.10, Istinye 34460 Sariyer ISTANBUL Tel: +90 21 2279 7878 Fax:+90 21 2279 2549

# U. A. E.

Abu Dhabi Jotun Abu Dhabi (LLC) P.O. Box 3714, Mussafah ABU DHABI Tel: +971 2691 0700 Fax:+971 2551 0232

## Dubai

Jotun U.A.E. Ltd. (LLC) P.O. Box 3671, Al Quoz Industrial Area DUBAI Tel: +971 4339 5000 Fax:+971 4338 0666

## USA

Jotun Paints Inc. 9203 Highway 23, P.O. Box 159, Belle Chasse, LA 70037 Tel: + 1 713 860 8241 Fax: +1 713 860 8242

## **VIETNAM**

Jotun Paints (Vietnam) Co. Ltd. Song Than Industrial. Zone, No.1 Street 10, Di An District, Binh Duong Province Tel: +84 650 3742206 Fax:+84 650 374 2205

# YEMEN

Jotun Yemen Paints Co. Ltc P.O. Box 70183, Al Alam ADEN Tel: +967 2820 546-9 Fax:+967 2249 362 Designed and produced by RMP Design & Marketing Ltd, Hull, England www.rmpdesign.com Part Number: 8MM0537832