



JOTUN

SeaForce

Efficient fouling protection

SeaForce

Efficient fouling protection

The SeaForce range is an established and world proven assortment of quality antifoulings. The range is designed to provide efficient fouling protection. Developed in Jotun's world leading R&D facility, the SeaForce range is under constant development to meet our customers' needs. Now the introduction of new, improved SeaForce 60 and SeaForce 90 provides even more efficient fouling protection!

Significantly less leached layer in SeaForce 60 and SeaForce 90



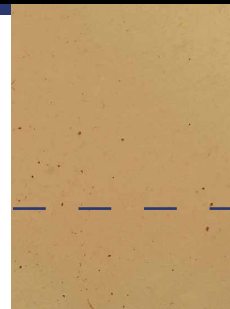
- With new Seaforce 60/SeaForce 90 the leached layer is reduced by up to 50%
- Significantly less leached layer → Better effect of the biocide used → Improved fouling protection
- In the two photos (*right*) the leached layer of the new SeaForce coating is visibly thinner than the previous SeaForce – the red colour is seen through the low leached layer in the new paint.



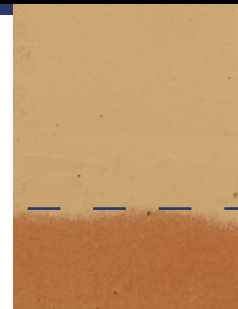
Easier to remove leached layer

- These two photos show high pressure washing of an area of leached layers of previous SeaForce 60/SeaForce 90 (*left*) and new SeaForce 60/Seaforce 90 (*right*).
- The leached layer of new SeaForce 60/SeaForce 90 is easier to remove.
- This feature gives a shorter time for cleaning and improved adhesion when overcoating.

Previous SeaForce 60/SeaForce 90



NEW SeaForce 60/SeaForce 90

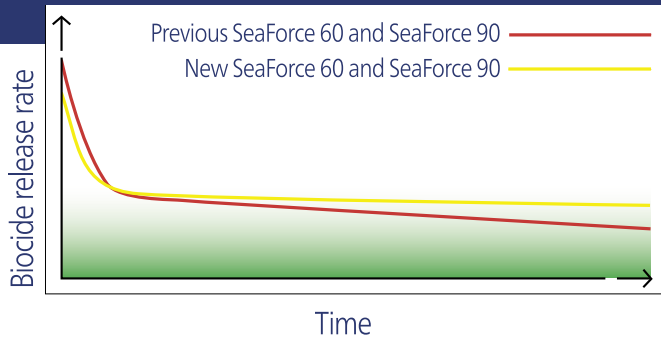


AREA
HIGH PRESSURE
WASHED

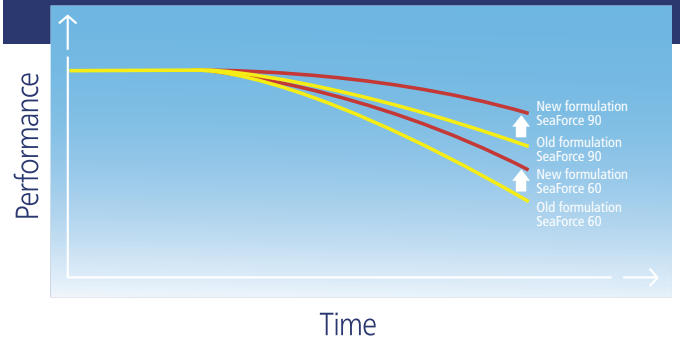
In the photos above, lower pressure than recommended was used in order to illustrate the difference between leached layers of previous SeaForce 60/SeaForce 90 and new SeaForce 60/SeaForce 90.



Improved control of biocide release rate



In total, improved efficient fouling protection



Biocide release and onset of fouling

- As the biocide release rate falls into the green shaded area, fouling by slime and algae may start.
- The lower the rate falls, the greater the chance of fouling.
- SeaForce 90 now incorporates a new and more effective combination of biocides which results in increased efficiency of the fouling protection.

- Reducing the leached layer thickness/better effect of biocides gives an improved performance in both SeaForce 60 and SeaForce 90.

SeaForce 30

- **Up to 60 months efficient fouling protection**
 - Vertical side: 36 months
 - Flat bottom/boot top: 60 months
- **Self-polishing**
- **For vessels operating in global trade**
- **Based on PPT;**
Polymeric Plasticiser Technology (patented)

SeaForce 60

- **Up to 36/60 months efficient fouling protection**
 - Vertical side: 36 months
 - Flat bottom/boot top: 60 months
- **Self-polishing**
- **Low leached layer**
- **For vessels operating in global trade**
- **Based on PPT;**
Polymeric Plasticiser Technology (patented)

SeaForce 90

- **Up to 60 months efficient fouling protection**
 - Vertical side: 60 months
 - Flat bottom/boot top: 60 months
- **Self-polishing with high performance biocides**
- **Low leached layer**
- **For vessels operating in global trade**
- **Based on PPT;**
Polymeric Plasticiser Technology (patented)

SeaForce solutions for Tankers/Bulkers/LNGs/Containers/Barges etc.

PRODUCT	FLAT BOTTOM (months)	SIDE BOTTOM (months)	BOOTTOP (months)
SeaForce 30	60	36	60
SeaForce 60	60	36	60
SeaForce 90	60	60	60

Jotun worldwide

Jotun Coatings and Jotun Paints
Division of Jotun A/S
Legal Jotun entities world wide 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

BRAZIL

Jotun Brasil Ltda.
Av Santa Luzia, 2084 - Santa Luzia
24.722-315 São Gonçalo
RIO DE JANEIRO
Tel: +55 21 2776 1313
Fax: +55 21 2776 2263

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 1208, 12/F, Stanhope House
734 King's Road, Quarry Bay
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.
El Sheikh Aly Gad El Haq Street
Florida Mall,
Masaken Sheraton – 4th Floor
CAIRO
Tel: +20 2265 1800
Fax: +20 2265 1801

FINLAND

Nor-Maali OY
Vanhatie 20, 15240 LAHTI
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.
18, Vouliagmenis Avenue,
Glyfada
ATHENS 16675
Tel: +30 210 42 85 980-82
+30 210 42 86 035-37
Fax: +30 210 42 85 983/
+30 210 42 87 237

INDIA

Jotun India Pvt Ltd.
204 & 205 Ascot Centre,
Sahar Road, Andheri (East)
MUMBAI 400 099
Tel: +91 22 2822 4600
+91 22 2820 5900 (+fax)
Fax: +91 22 2820 5900

INDONESIA

P.T. Jotun Indonesia Paints and Chemicals
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. Noghiera
34147 - MUGGIA (TRIESTE)
Tel: +39 040 23 98204
Fax: +39 040 23 98222

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
Al Mumtaz Imp. of Paints and Equipm. Co.
P.O. Box 6850
Hail Al Andalous district
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

PAKISTAN

Jotun Pakistan (Pvt.) Limited
Plot no. 2-H, Sector 5
Korangi Industrial Area, KARACHI
Tel: +92 213 5121 491-2
Fax: +92 213 5121 493

POLAND

Jotun Polska Sp.zo.o.
Ul. 10 Lutego 16, 81-364 GDYNIA
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 81 2332 0080 / 2785 0034
Fax: +7 81 2783 0525

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
Fax: +34 937 711 801

SWEDEN

Jotun Sverige AB
Amata Nakom Ind. Estate (BIP1)
421 22 VÄSTRA FRÖLUNDA
Tel: +46 3169 6300
Fax: +46 3169 6397

THAILAND

Jotun Thailand Ltd
Amata Nakom Ind. Estate (BIP1)
700/353 Moo 6 Tumbol
Donhualoh, Amphur Muang
CHONBURI 2000
Tel: +66 38 214 824-6/214 347-51
Fax: +66 38 214 373/375

TURKEY

Jotun Boya San. ve Ticaret. A.S.
Yeni Camlik Caddesi, Ayaz Sok. No. 2/4,
4. Levent,
ISTANBUL 34418
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 2551 0300
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: +1 800 229 3538 /
+1 504 394 3538
Fax: +1 504 394 3726

VIETNAM

Jotun Paints (Vietnam) Co. Ltd.
Song Than Industrial. Zone,
No.1 Street 10,
Di An District, Binh Duong Province
Tel: +84 65 074 2206-9
Fax: +84 65 074 2205

YEMEN

Jotun Yemen Paints Co. Ltd
P.O. Box 70183, Al Alam
ADEN
Tel: +967 2820 546-9
Fax: +967 2249 362

Jotun A/S
P.O. Box 2021,
N-3202 Sandefjord, Norway
Tel: +47 33 45 70 00
jotun.com



Jotun Protects Property