# Kongsberg Echo Sounder transducers

# Painting instructions



# Approved anti-fouling paints

This is our list of approved antifouling paints for all transducer types. Always refer to the manufacturer's documentation and data sheets for a complete procedure and for relevant safety information.

Important \_

**Do not** paint the transducer with traditional hull plating paint. Use only the correct type of approved paint specified.

**Do not** use high-pressure water, sandblasting, metal tools or strong solvents to clean the transducer face.

#### Jotun

• Manufacturer: Jotun

• Address: P.O.Box 2021, N-3248 Sandefjord, Norway

Manufacturer's website: http://www.jotun.com

#### **Products:**

SeaMate M

- Primer: Safeguard Universal ES

Apply 80 µm wet film thickness (50 µm dry film thickness).

Paint: SeaMate M

Apply 250 μm wet film thickness (125 μm dry film thickness).

- SeaQuantum Ultra S
  - Primer: Safeguard Universal ES

Apply 80 µm wet film thickness (50 µm dry film thickness).

Paint: SeaQuantum Ultra S

Apply 250 μm wet film thickness (125 μm dry film thickness).

- SeaQuantum Ultra III
  - Primer: Safeguard Universal ES / Safeguard Plus

Apply 80 µm wet film thickness (50 µm dry film thickness).

Paint: SeaQuantum Ultra III

Apply 250 μm wet film thickness (125 μm dry film thickness).

SeaForce 200 AV

- Primer: Safeguard Universal ES AV

Apply 70 μm wet film thickness (50 μm dry film thickness).

Paint: SeaForce 200 AV

Apply 140 µm wet film thickness (90 µm dry film thickness).

Data sheets and application guides can be downloaded from:

http://www.jotun.com/ww/en/b2b/technical-info/tds/index.aspx

## **International Marine Coatings**

- Manufacturer: International Marine Coatings
- Address: Stoneygate Lane, Felling, Gateshead, Tyne & Wear, NE10 0JY United Kingdom
- Manufacturer's website: www.international-marine.com

#### **Products:**

- Intersleek 1100SR
  - Primer: Intersleek 737

Apply 50 µm dry film thickness.

Paint: Intersleek 1100SR

Apply 150 µm dry film thickness.

- Intersmooth 7465Si SPC
  - **Primer**: Intergard 269

Apply 40 µm dry film thickness.

Paint: Intersmooth 7465Si SPC

Apply 100 µm dry film thickness.

- Intersmooth 7670 SPC
  - Primer: Intersleek 731

Apply 120 µm wet film thickness (75 µm dry film thickness).

- Paint: Intersmooth 7670 SPC

Apply 130 to 260 µm wet film thickness (75 to 150 µm dry film thickness).

#### **Online information**

The list of approved anti-fouling paints can also be found on our website.

https://www.kongsberg.com/anti-fouling-paints

# Painting the transducer face

Marine growth (biological fouling) on the transducer face reduces the performance. We recommend that you paint the transducer face immediately after installation, and then again as often as required to maintain the protection.

### **Prerequisites**

The following tools and consumables are required:

- Personal protection
- Fresh water
- Plastic brush
- Mild synthetic detergent
- Piece of wood or plastic without sharp corners
- Primer
- Anti-fouling paint

Approved anti-fouling paints for transducers are found on our web-site.

https://kongsberg.com/anti-fouling-paints

- Wet film gauge
- Airless spray

Because some paint types may be aggressive to the polyurethane in the transducer, consult our list of approved paints.

#### **Context**

The transducer has not been designed with any protection against biological fouling. Anti-fouling paint may therefore be applied to the transducer face. To minimize the negative acoustical effects the layer of anti-fouling paint must be as thin as possible.

Note		

The anti-fouling paint will reduce the acoustical performance of the transducer. The surface roughness of the transducer substrate and the thickness of the paint may also influence the performance. Kongsberg Maritime cannot be held responsible for any negative consequences of the anti-fouling paint.

Observe the relevant instructions and safety information provided by the paint manufacturer.

#### **Procedure**

- 1 Clean the transducer thoroughly.
  - Make sure that you remove all oil grease residues, as well as salt and other contamination.
- 2 Allow the transducer surface to dry.
- 3 Abrade the transducer surface using a sanding paper with 240 inch grit size.
  - Do not exceed a surface roughness  $(R_{max})$  of 35 microns as this can influence the transducer performance.
- 4 Remove all dust.
- 5 Apply the primer, and let it dry.

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Observe the instructions provided by the paint manufacturer. Use airless spray. Apply the minimum specified film thickness per coat and for the complete layer. It is not possible to measure dry film thickness on transducer surface. You must therefore use a wet film gauge to frequently measure the paint thickness.

Note
We strongly recommend that you <u>do not</u> use a paintbrush and/or a roller.

7 Allow the paint to dry.

# **Further requirements**

The contractor or shipyard must keep a daily paint log recording all relevant information from the surface treatment.