

## Network 3500

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### Product description

This is a physically drying, special synthetic resin based on tin free antifouling coating. Specially designed for stationary fishing net with outstanding antifouling properties. It has very good adhesion and flexible film. To be used as single coat system in immersed environments only. Recommended for fishing nets. It can be applied at sub zero surface temperatures.

### Scope

The Application Guide offers product details and recommended practices for the use of the product.

The data and information provided are not definite requirements. They are guidelines to assist with efficient and safe use, and optimum service of the product. Adherence to the guidelines does not relieve the applicator of responsibility for ensuring that the work meets specification requirements. Jotun's liability is in accordance with general product liability rules.

The Application Guide (AG) must be read in conjunction with the relevant specification, Technical Data Sheet (TDS) and Safety Data Sheet (SDS) for all the products used as part of the coating system.

### Referred standards

Reference is generally made to ISO Standards. When using standards from other regions it is recommended to reference only one corresponding standard for the substrate being treated.

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## Surface preparation

The required quality of surface preparation can vary depending on the area of use, expected durability and if applicable, project specification.

### Coated surfaces

#### Verification of existing coatings including primers

The existing hull coating system must be high pressure washed at 350 bar. Evaluate according to ASTM D610 pictorial assessment guide of these defects combined: mechanical damage, rust/bare metal, flaking, cracks, checks, blisters, animal fouling remains/roots.

Jotun's general recommendation for maximum salt contamination for under water areas is 80 mg/m<sup>2</sup> NaCl.

#### New tie coat or new antifouling

This product can be applied upon vinyl epoxy tie coats assuming the maximum over coating interval of the tie coat is adhered to. Should the over coating interval of the tie coat be exceeded, then it is recommended to apply an additional thin coat of the same sealer coat before applying this coating on top.

#### Aged antifouling with leached layer

The spent, skeletal, porous layer at the surface of aged antifouling known as leached layer can cause popping/pinholes/bubbling when over coated. Furthermore the leached layer will be weaker in cohesive strength than a new antifouling system. Therefore, all efforts should be made to properly remove the leached layer. Various factors will determine the leached layer's thickness and its strength and integrity; mainly the antifouling's binder technology, but also the vessel's speed and the water temperature where the ship was trading (slow speeds and cold waters often result in thicker leached layer). Leached layers should be removed by very thorough high pressure freshwater washing.

Note that the use of a tie coat is no substitute for proper washing of aged antifouling. Sealer coatings are not significantly better at sealing porous surfaces than are antifouling. Popping or compromised adhesion may still result. Furthermore, sealing aged antifouling has the disadvantage of blocking off antifouling that might become exposed, and therefore provide fouling protection later in service.

Practically Jotun recommends doing a test spray with thinned antifouling on the washed and dry surface in order to check for potential popping. Please note that the popping itself will have no negative effect on the performance of the antifouling properties, however it will have a negative visual effect.

Use of lower pressures is acceptable, provided enough time is used to ensure complete removal of the leached layer. Pressure below 200 bar is not recommended.

### **Aged antifouling: Cracked, flaked or "sandwiched" coating systems**

In case of through polishing exposing the existing tie coat another new coat of tiecoat is required in order to ensure proper adhesion to the aged sealer/tiecoat. Before any application takes place it should be high pressure fresh water cleaned as per above guidelines. Overlapping with new sealer coat on top of existing, intact antifouling should be limited as much as practically possible.

Alternatively all defective areas are spot grit-blasted to minimum Sa 2 (ISO 8501-1) with roughness Medium G (ISO 8503-2), followed by application of a complete anti corrosive system. To reduce the number of small spot blasted areas, areas with higher spot blasting requirement than 5% shall be blasted in full squares. All edges are to be feathered.

## Application

### **Acceptable environmental conditions - before and during application**

Before application, test the atmospheric conditions in the vicinity of the substrate for the dew formation according to ISO 8502-4.

Air temperature	10 - 50	°C
Substrate temperature	10 - 40	°C
Relative Humidity (RH)	10 - 85	%

The following restrictions must be observed:

- Only apply the coating when the substrate temperature is at least 3 °C (5 °F) above the dew point
- Do not apply the coating if the substrate is wet or likely to become wet
- Do not apply the coating if the weather is clearly deteriorating or unfavourable for application or curing
- Do not apply the coating in high wind conditions

## Product mixing

### Product mixing

Single pack

### Induction time and Pot life

The temperature of base and curing agent is recommended to be 18 °C or higher when the product is mixed.

### Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 2 / Jotun Thinner No. 7 / Jotun Thinner No. 10

### Film thickness measurement

#### Ventilation

Sufficient ventilation is very important to ensure proper drying/curing of the film.

## Drying and Curing time

### Substrate temperature

23 °C

Surface (touch) dry	30 min
Dried to handle	1 h

Drying and curing times are determined under controlled temperatures and relative humidity below 85 %, and at average of the DFT range for the product.

Surface (touch) dry: The state of drying when slight pressure with a finger does not leave an imprint or reveal tackiness.

Dried to handle: Minimum time before the coated objects can be handled without physical damage.

## Maximum over coating intervals

Maximum time before thorough surface preparation is required. The surface must be clean and dry and suitable for over coating. Inspect the surface for chalking and other contamination and if present, remove with an alkaline detergent. Agitate the surface to activate the cleaner and before it dries, wash the treated area by low-pressure water cleaning using fresh water.

If maximum over coating interval is exceeded the surface should in addition be carefully roughened to ensure good inter coat adhesion.

### Areas for immersed exposure

Average temperature during drying/curing

23 °C

Itself

extended

### Other conditions that can affect drying / curing / over coating

#### Repair of coating system

##### Damages to the coating layers:

Prepare the area through sandpapering or grinding, followed by thorough cleaning/vacuuming. When the surface is clean and dry the coating may be over coated by itself or by another product, ref. original specification.

Always observe the maximum over coating intervals. If the maximum over coating interval is exceeded the surface should be carefully roughened in order to ensure good intercoat adhesion.

##### Damages exposing bare substrate:

Remove all rust, loose paint, grease or other contaminants by spot blasting, mechanical grinding, water and/or solvent washing. Feather edges and roughen the overlap zone of surrounding intact coating. Apply the coating system specified for repair.

## Quality assurance

The following information is the minimum required. The specification may have additional requirements.

- Confirm that all welding and other metal work has been completed before commencing pre-treatment and surface preparation
- Confirm that installed ventilation is balanced and has the capacity to deliver and maintain the RAQ
- Confirm that the required surface preparation standard has been achieved and is held prior to coating application
- Confirm that the climatic conditions are within recommendations in the AG, and are held during the application
- Confirm that the required number of stripe coats have been applied
- Confirm that each coat meets the DFT requirements in the specification
- Confirm that the coating has not been adversely affected by rain or other factors during curing
- Observe that adequate coverage has been achieved on corners, crevices, edges and surfaces where the spray gun cannot be positioned so that its spray impinges on the surface at 90° angle
- Observe that the coating is free from defects, discontinuities, insects, abrasive media and other contamination
- Observe that the coating is free from misses, sags, runs, wrinkles, fat edges, mud cracking, blistering, obvious pinholes, excessive dry spray, heavy brush marks and excessive film build
- Observe that the uniformity and colour are satisfactory

All noted defects shall be fully repaired to conform to the coating specification.

### Caution

This product is for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to Jotun's technical documentation. Applicators and operators shall use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. Any suggested deviation to suit the site conditions shall be forwarded to the responsible Jotun representative for approval before commencing the work.

For further advice please contact your local Jotun office.

### Health and safety

Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not inhale spray mist. Avoid skin contact. Spillage on the skin should immediately be removed with suitable cleanser, soap and water. Eyes should be well flushed with water and medical attention sought immediately.

### Accuracy of information

Always refer to and use the current (last issued) version of the TDS, SDS and if available, the AG for this product. Always refer to and use the current (last issued) version of all International and Local Authority Standards referred to in the TDS, AG & SDS for this product.

### Colour variation

When applicable, products primarily meant for use as primers or antifoulings may have slight colour variations from batch to batch. Such products and epoxy based products used as a finish coat may chalk when exposed to sunlight and weathering.

Colour and gloss retention on topcoats/finish coats may vary depending on type of colour, exposure environment such as temperature, UV intensity etc., application quality and generic type of paint. Contact your local Jotun office for further information.

### Reference to related documents

The Application Guide (AG) must be read in conjunction with the relevant specification, Technical Data Sheet (TDS) and Safety Data Sheet (SDS) for all the products used as part of the coating system.

When applicable, refer to the separate application procedure for Jotun products that are approved to classification societies such as PSC, IMO etc.

## Symbols and abbreviations

min = minutes

h = hours

d = days

°C = degree Celsius

° = unit of angle

µm = microns = micrometres

g/l = grams per litre

g/kg = grams per kilogram

m<sup>2</sup>/l = square metres per litre

mg/m<sup>2</sup> = milligrams per square metre

psi = unit of pressure, pounds/inch<sup>2</sup>

Bar = unit of pressure

RH = Relative humidity (% RH)

UV = Ultraviolet

DFT = dry film thickness

WFT = wet film thickness

TDS = Technical Data Sheet

AG = Application Guide

SDS = Safety Data Sheet

VOC = Volatile Organic Compound

MCI = Jotun Multi Colour Industry (tinted colour)

RAQ = Required air quantity

PPE = Personal Protective Equipment

EU = European Union

UK = United Kingdom

EPA = Environmental Protection Agency

ISO = International Standards Organisation

ASTM = American Society of Testing and Materials

AS/NZS = Australian/New Zealand Standards

NACE = National Association of Corrosion Engineers

SSPC = The Society for Protective Coatings

PSPC = Performance Standard for Protective Coatings

IMO = International Maritime Organization

ASFP = Association for Specialist Fire Protection

## Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.