

# COATING SOLUTIONS FOR WIND TURBINES

Protective and functional coatings



# TIKKURILA COATINGS FOR WIND TURBINES



**Tikkurila** is one of the leading supplier for energy industry in Scandinavia, Baltics, Russia and in several other European and Asian countries. The company offers high performance coatings for anti-corrosion protection of wind turbines for both off-shore and on-shore environments as well as for interior and exterior surfaces.

**Tikkurila paint systems** meet requirements of the most useful and demanding standards as EN ISO 12944, EN ISO 20340 and NORSOK M-501.w

## THE ADVANTAGES OF TIKKURILA PROTECTIVE COATINGS:

- Wide range of the product portfolio
- High-quality products for competitive prices
- Various time-proven paint systems for different environment
- Reliable partner with strong technical support

## EXTERIOR STEEL SURFACES IN ON-SHORE AREAS (TURBINE TOWER, GEARBOX, ETC.)

System code	Paint system	DFT, µm	Type of the system	Corrosivity category
<b>High-solids, modified polyurethane systems (polyurea)</b>				
TP99	Temasolid SC-F 80	120	PUR120/1-FeSa2½	C3-M, C4-L
TP96	Temasolid SC 60	120	PUR120/1-FeSa2½	C3-H, C4-M
<b>Water-borne intermediate coat and topcoat</b>				
TH53	Temazinc 99 Fontecoat EP 50 Beige Fontedur HB 80	40 120 20	EPZn(R)EPPUR240/3-FeSa2½	C4-H, C5-I-M
<b>Single-coat epoxy and polyurethane paint systems</b>				
	Temacoat 50	100	EP100/1-FeSa2½	C3-H
	Temacoat 50	80	EP80/1-FeSa2½	C3-M
	Temadur HB 50	100	PUR100/1-FeSa2	C1, C2

## INTERIOR STEEL SURFACES (E.G. INNER SURFACES OF TURBINE TOWERS, GEARBOXES, ETC.)

System code	Paint system	DFT, µm	Type of the system	Corrosivity category
<b>Single-coat epoxy and polyurethane paint systems</b>				
	Temacoat 50	80	EP80/1-FeSa2½	C3-M
TP71	Temadur HB 50	100	PUR100/1-FeSa2	C1, C2
<b>Water-borne intermediate coat and topcoat</b>				
TF27	Fontecoat EP 50	100	EP100/1-FeSa2½	C1, C2
TF27	Fontecoat EP 50	2x80	EP160/2-FeSa2½	C2-H, C3-M
<b>Anti-condensation paint systems for areas, where condensation and dripping-water problems occur like inner surfaces of turbine towers</b>				
	Temacoat Primer GrafoTherm	80 250-410		C1, C2

## EXTERIOR STEEL SURFACES ABOVE THE WATER LINE IN OFF-SHORE AREAS (TURBINE TOWER, GEARBOX, ETC.)

System code	Paint system	DFT, µm	Type of the system	Corrosivity category
<b>NORSOK M-501 - approved systems</b>				
TP22	Temazinc 99 Temacoat GPL-S MIO Temadur 50	40 2x80 2x60	EPZn(R)EPPUR320/5-FeSa2½	C5-M-H
TP123	Temazinc 99 Temacoat Primer Temathane PC 50	60 160	EPZn(R)EPPUR280/3-FeSa2½	C5-M-H
<b>Water-borne NORSOK M-501 - approved system</b>				
TH53	Temazinc 99 Fontecoat EP 50 Beige Fontedur HB 80	60 2x80 60	EPZn(R)EPPUR280/4-FeSa2½	C5-M-H

## IMMERSED STEEL SURFACES (IMMERSED PART OF TOWERS, OTHER IMMERSED STEEL CONSTRUCTIONS)

System code	Paint system	DFT, µm	Type of the system	Corrosivity category
TE4	Temaline NL	2x250	EP500/2-FeSa2½	C5-I-H, C5-M-H, Im1, Im2, Im3

## MAIN PROPERTIES OF THE PRODUCTS

### WATER-BORNE PRODUCTS

**Fontecoat EP50/ EP 50 Beige:** A two-component, semi-gloss epoxy paint/primer provides very good resistance against mechanical and chemical stress. Can be used as a single-coat paint.

**Fontedur HB 80:** A high-built two-component, polyurethane topcoat with excellent gloss and colour retention.

### SINGLE-COAT PAINTS CONTAINING ANTI-CORROSIVE PIGMENTS

**Temadur HB 50/80:** A two-component semi-gloss polyurethane paint with hardener aliphatic isocyanate provides excellent weathering and abrasion resistance. Suitable as a single-coat paint, and as a topcoat for epoxy/polyurethane systems exposed to weathering and/or chemical attack.

**Temacoat 50:** A two-component resin modified epoxy paint. Excellent as a single-coat paint, but can be also used as a primer, intermediate or finish coat on surfaces exposed to weathering, mechanical and chemical stress.

### HIGH-SOLIDS SINGLE-COAT POLYUREA PAINTS, CONTAINING ANTI-CORROSIVE PIGMENTS

**Temasolid SC 60:** A two-component semi-gloss polyurea paint with hardener aliphatic isocyanate provides excellent weather and abrasion resistance.

**Temasolid SC-F 80:** A fast-drying two-component glossy polyurea paint with hardener aliphatic isocyanate provides excellent weather and abrasion resistance.

### HIGH-SOLIDS EPOXY PRIMER

**Temacoat Primer:** A two-component high-solids resin modified epoxy paint, containing zinc phosphates.

### PROVEN-IN-TIME ZINC-RICH PRIMER

**Temazinc 99:** A two-component, polyamide-cured zinc-rich epoxy paint, which provides cathodic protection of steel.

### LOW-SOLVENT EPOXY FOR IMMERSION

**Temaline NL:** A two-component epoxy coating with low solvent content, which withstands +150°C dry heat and +60°C in immersion.



## FUNCTIONAL ANTI-CONDENSATION COATING

**GrafoTherm:** A one-component water-borne, functional, anti-condensation coating for airless application. GrafoTherm is an ideal product, where condensation and dripping-water problems occur, e.g. for inner wind turbine surfaces.

## TECHNICAL SUPPORT

Tikkurila provides technical support to its customers during design of projects and later on during producing, painting or assembling. Its experienced staff will be pleased to:

- help customers to find long-lasting solution
- give advice on surface preparation and suitable application methods
- provide full information on coatings specifications and test reports

## ABOUT TIKKURILA

Tikkurila is the leading paints and coatings professional in the Nordic region and Russia. With our roots in Finland, we now operate in 16 countries. Our high-quality products and extensive services ensure the best possible user experience in the market.

Tikkurila is a strong player in water-borne technology. Company has modern very sophisticated water-borne products proven-in-time. Among others Tikkurila product range for steel surfaces various from traditional alkyd paints to modern high-tech single-coat polyurethanes including solvent-borne primers and topcoats, more environmentally friendly high-solids paints, solvent-free coatings, etc. The quality of the products is ensured by the Tikkurila operational system, based on the requirements of ISO 9001 and ISO 14001.