# COATING SOLUTIONS FOR METALLIC STRUCTURES

Industrial Motors

Commercial & Appliance Motors

Automation

Digital & Systems

Energy

Transmission & Distribution

Coatings

Coatings that serve all types of environments, aiming at greater protection and durability.











# Solutions in Liquid Coatings

For the metallic structures sector, WEG has developed product lines that meet all kinds of environments, providing greater protection, durability and thus the satisfaction of the client. The following coating systems can be viewed at an information chart in the end of this brocure, making it easier to choose the product according to the environment classification required at ISO 12944 Standard.

# **Environments classification: (C2) according to ISO 12944**

The environments are classified as C2 whem the structure is placed in rural or urban areas with no aggressiveness or sea mist.

#### Option 1: for indoor and outdoor environments

1ª Coat

# W-LACK CVP 115

■ High performance, fast drying, alkyd resin based primer with inert corrosion inhibiting pigmentation. Recommended for the protection of carbon steel.

#### 2ª Coat

#### W-LACK SRA 111

Fast drying, alkyd based topcoat recommended for coating machines and equipment subject to low physical and chemical aggressiveness.

#### Option 2: for indoor and outdoor environments

1ª Coat

#### W-LACK CVD 121

■ Single component phenolyc alkyd based resin primer/topcoat with excellent anticorrosive protection.

# Environments classification: (C3) according to ISO 12944

The environments are classified as C3 when the structure is placed in rural or urban areas with low aggressiveness (atmospheric pollution), environments with high condensation levels (humidity) and no sea mist.

# **Option 1: for Indoor Environments**

#### 1ª e 2ª Coat

# **WEGPOXI CVD 323 / CVD 322**

Two-component high solids polyamide epoxy primer topcoat with zinc phosphate pigmentation. Extra fast drying time and excellent adhesion to carbon steel.

# **Option 2: for External Environments**

1ª Coat

# W-POXI ERP 322

■ Two-component high solids polyamide epoxy primer with zinc phosphate pigmentation.

# 2ª Coat

# **WEGTHANE HPA 501**

Two-component high gloss aliphatic, acrylic polyurethane topcoat with excellent durability and extended overcoating time.







# **Environments classification: (C4) according to ISO 12944**

The environmets classified as C4 are placed in urban areas with high atmospheric pollution levels, low to intermediate aggressive industrial environments and moderate sea mist.

#### Option 1

Painting scheme indoor environments	Product	Function	
1º Coat	WEGPOXI CVD 323	Primer / Topcoat	
Painting scheme outdoor environments	Product	Function	
1º Coat	W-POXI ERP 322	Primer	
2º Coat	WEGTHANE HPA 501	Topcoat	

# Option 2

Painting scheme indoor environments	Product	Function	
1º Coat	W-P0XI ZSP 315 N1277	Primer	
2º Coat	WEGPOXI CVD 323	Primer / Topcoat	
Painting scheme outdoor environments	Product	Function	
1º Coat	W-P0XI ZSP 315 N1277	Primer	
2º Coat	W-POXI ERP 322	Primer	
3º Coat	WEGTHANE HPA 501	Topcoat	

# **Environments classification: (C5) according to ISO 12944**

Environments classified as C5 are placed in industrial or urban areas with high chemical aggressiveness (vapors and gases), high condensation levels (humidity) and no sea mist.

# Option 1

Painting scheme indoor environments	Product	Function
1º Coat	WEGPOXI WET SURFACE 89 PW	Primer / Topcoat
2º Coat	WEGPOXI WET SURFACE 89 PW	Primer / Topcoat
Painting scheme outdoor environments	Product	Function
1º Coat	WEGPOXI WET SURFACE 89 PW	Primer / Topcoat
2º Coat	WEGTHANE HPA 501	Topcoat



Painting scheme indoor environments	Product	Function		
1º Coat	W-P0XI ZSP 315 N1277	Primer		
2º Coat	WEGPOXI WET SURFACE 89 PW	Primer / Topcoat		
Painting scheme outdoor environments	Produto	Função		
1º Coat	W-P0XI ZSP 315 N1277	Primer		
2º Coat	WEGPOXI WET SURFACE 89 PW	Primer / Topcoat		
3º Coat	WEGTHANE HPA 501	Topcoat		



For this environment, surface must be treated by near white abrasive blasting, Sa 2 1/2 visual standard.

# **Description of products used**

# W-POXI ERP 322

■ Two-component high solids polyamide epoxy primer with zinc phosphate pigmentation.

# **WEGPOXI CVD 323 / CVD 322**

■ Two-component high solids polyamide epoxy primer topcoat with zinc phosphate pigmentation. Extra fast drying time and excellent adhesion to carbon steel.

# W-POXI ZSP 315 N1277

■ Two-component zinc rich poliamide epoxy primer. Provides anticorrosive protection to carbon steel. Fast drying time, increasing productivity.



# **Environments classification: (C5) according to ISO 12944**

Environments classified as C5 are placed in industrial or urban areas with no chemical aggressiveness in regions near to the sea shore (up to 10 kilometers away from the shore).

For this environment, surface must be treated by near white abrasive blasting, Sa 2 1/2 visual standard.

# **Option 1**

Painting scheme indoor environments	Product	Function
1º Coat	WEGPOXI WET SURFACE 89 PW	Primer / Topcoat
2º Coat	WEGPOXI WET SURFACE 89 PW	Primer / Topcoat
Painting scheme outdoor environments	Product	Function
1º Coat	WEGPOXI WET SURFACE 89 PW	Primer / Topcoat
2º Coat	WEGTHANE HPA 501	Topcoat

#### Option 2

- Para				
Painting scheme indoor environments	Product	Function		
1º Coat	LACKPOXI N 1277	Primer		
1º Coat	LACKPOXI N 2630	Primer		
2º Coat	LACKPOXI N 2628	Topcoat		
Painting scheme outdoor environments	Product	Function		
1º Coat	LACKPOXI N 1277	Primer		
2º Coat	LACKPOXI N 2630	Primer		
3º Coat	LACKTHANE N 2677	Topcoat		

# For galvanized surfaces

Surface preparation: solvent or degreasing cleaning, phosphating, slight sanding or sweeping blast. Verify Technical Data Sheet.

Painting scheme indoor environments	Product	Function	
1º Coat	W-POXI GNP 415	Primer / Topcoat	
2º Coat	WEGPOXI CVD 323 / CVD 322	Primer / Topcoat	
Painting scheme outdoor environments	Product	Function	
1º Coat	W-THANE SRD 501	Topcoat	

# **LACKPOXI N 1277**

■ Two-component polyamide, zinc rich epoxy primer. The product offers anticorrosive protection for carbon steel by galvanic action of the metallic zinc pigment.

# **WEGPOXI WET SURFACE 89 PW**

■ Two-component high build high solids epoxy primer/topcoat. Product tolerant to surfaces: applicable to blasted, dry, humid hydroblasted steel substrates with manual or mechanical treatment.

#### **LACKPOXI N 2630**

Two-component, high solids high build polyamide epoxy primer with and anticorrosive zinc phosphate pigmentation.

# W-THANE SRD 501

■ Two-component high performance aliphatic acrylic polyurethane primer/top coat. Provides good chemical and weathering resistance, excellent adhesion over galvanized and carbon steel, great color and gloss retention. High impact and hardness performance.

#### **LACKTHANE N 2677**

Two-component high solids high gloss acrylic aliphatic polyurethane topcoat. It composes an anticorrosive protection system with high waterproofing power, chemical resistance and resistance to natural weathering.



**Outdoor environments** 

#### **LACKPOXI N 2628**

■ Two-component, high solids high build epoxy topcoat cured with polyamide. Topcoat for anticorrosive protection in aggressive environments with high humidity and salt spray.

#### W-POXI GNP 415

■ Two-component epoxy primer, recommended for coating aluminium, galvanized steel, fiber and degreased steel surfaces. Provides high anticorrosive and chemical resistance, fast drying time, reducing total time of the coating process.



# Powder Coatings Solutions

Besides the liquid coating schemes, we have powder coating schemes. For metallic structures, we have the lines:

- POLITHERM Epoxy System / Hybrid System / Polyester System
- W-Zn (Zinc rich System)

# For low aggressiveness environments

Surface preparation: the substrate must be free of greases, mold release agents, dusts or other contaminants phosphate conversion coating is recommended to increase the resistance to corrosion. Chrome plating is recommended for aluminum substrates.

# **POLITHERM 20 / 22 (LOW-CURE)**

■ Hybrid powder coating with good adhesion and flexibility, good physical and chemical resistance. It is not recommended for outdoor applications.

#### **POLITHERM 26 / 27 LINE (LOW-CURE)**

■ Polyester coating with excellent adhesion and flexibility, great physical resistance, good chemical resistance, excellent resistance to weathering and yellowing.

# **POLITHERM HB LINE (50, 54 AND 56)**

■ High thickness powder coating. It provides layers from 100 to 150 microns in a single cold application, replacing the application of two layers, increasing the productivity, generating time and energy savings. Available in the hybrid, epoxy and polyester resins.



# For medium aggressiveness environments

# **Option 1: for indoor environments**

Surface preparation: the substrate must be free of greases, mold release agents, dusts or other contaminants.

Phosphate conversion coating is recommended to increase resistance to corrosion. Chrome plating is recommended for aluminum substrates.

# **Option 2: for outdoor environments**

Surface preparation: the substrate must be free of greases, mold release agents, dusts or other contaminants. Phosphate conversion coating is recommended to increase resistance to corrosion.

Chrome plating is recommended for aluminum substrates.

# **POLITHERM 24**

■ Epoxy coating with excellent adhesion, flexibility, physical and chemical resistance. Excellent anticorrosive protection, low resistance to weathering and moderate resistance to yellowing. It is not recommended for outdoor applications.

#### **POLITHERM 24 + POLITHERM 26 SYSTEM**

■ Powder coating system that combine chemical, weathering and corrosion resistance. Very recommended for metallic structures which will be exposed to outside areas with intermediate chemical aggressiveness.

# For high aggressiveness environments

For this environment, surface must be treated by near white abrasive blasting, Sa 2 1/2 visual standard.

# **POLITHERM 24 W-Zn**

■ Anticorrosive zinc rich epoxy powder coating recommended for painting metallic parts. Developed for coating metal parts in situations where conventional phosphate conversion coating is not possible and anticorrosive protection is required. It can be used alone as topcoat or as primer of a system with epoxy, hybrid or polyester topcoat.

The use of POLITHERM 24 W-Zn as a primer in double layer coating systems requires special care at application and baking. Verify Technical Data Sheet.

# **POLITHERM 55 HB C5H**

■ Epoxy powder paint with excellent adhesion, flexibility, and physical and chemical resistance. Excellent corrosion protection and formulated with low-cure technology.

# PAINTING SCHEME - LIQUID COATINGS

ISO 12944 Classification	Environment	Painting scheme	Total Dry (µm) *	Durability Expectation ISO 12944
C2	Internal	CVD 322/323 (120µm)	120	High (from 15 up to 25 years)
62	External	CVP 315 (70µm) + HPA 501 (50µm)	120	
<b>C</b> 3	Internal	CVD 322/323 (120µm)	120	Medium (from 7 up to 15 years)
U3	External	CVP 315 (70µm) + HPA 501 (50µm)	120	
<b>C</b> 3	Internal	ERP 322 (80μm) + CVD 322 (100μm)	180	High (from 15 up to 25
U3	External	ERP 322 (120µm) + HPA 501 (60µm)	100	years)
C4	Internal	CVD 322/323 (120µm)	120	Low (up to 7 years)
64	External	CVP 315 (70µm) + HPA 501 (50µm)	120	
C4	Internal	ERP 322 (80µm) + CVD 322 (100µm)	180	Medium (from 7 up to 15
04	External	ERP 322 (120μm) + HPA 501 (60μm)	100	years)
C4	Internal	ERP 322 (120µm) + CVD 322 /323 (120µm)	240	High (from 15 up to 25 years)
64	External	CVD 323 (180µm) + HPA 501 (60µm)	240	
C5	Internal	ERP 322 (80μm) + CVD 322 (100μm)	180	Low (up to7 years)
U3	External	ERP 322 (120µm) + HPA 501 (60µm)	100	
C5	Internal	ERP 322 (120µm) + CVD 322 /323 (120µm)	240	Medium (from 7 up to 15
US	External	CVD 323 (180µm) + HPA 501 (60µm)		years)
C5	Internal / Extenal	GFD 362 (240μm) + HPA 501 (60μm)	300	High (from 15 up to 25 years)
C5	Internal / External	ZSP 315 (60μm) + CVD 323 (150μm) + HPA 501 (50μm)	260	High (from 15 up to 25 years)

<sup>\*</sup> Total thickness - Consider dry film thickness.

# PAINTING SCHEME - POWDER COATINGS

ISO 12944 Classification	Environment	Painting scheme	Total Dry (µm) *	Durability Expectation ISO 12944
C2	Internal	Politherm 50	120	High (from 15 up to 25 years)
62	External	Politherm 56	120	
	Internal	Politherm 50	120	Medium (from 7 up to 15
<b>C</b> 3	External	Politherm 56	120	years)
US	Internal	Politherm 54	140	High (from 15 up to 25
	External	Politherm 25 (100µm) + Politherm 26 (80µm)	180	years)
	Internal	Politherm 54	140	Medium (from 7 up to 15
C4	External	Politherm 25 (100µm) + Politherm 26 (80µm)	180	years)
64	Internal	Politherm 25 (100μm) + Politherm 50 (120μm)	220	High (from 15 up to 25
	External	Politherm 25 (100μm) + Politherm 56 (120μm)	220	years)
	Internal	Politherm 25 (100μm) + Politherm 50 (120μm)		Medium (from 7 up to 15
	External	Politherm 25 (100μm) + Politherm 56 (120μm)	220 -	years)
<b>C</b> 5	Internal	Politherm 24 W-Zn (90µm) + Politherm 50 (130µm)		High (from 15 up to 25
00	External	Politherm 24 W-Zn (90µm) + Politherm 56 (130µm)		years)
	Internal/ External	Politherm 24 W-Zn (100μm) + Politherm 88 WFS AC (150μm)		Very High (up to 25 years)

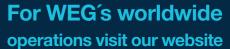
<sup>\*</sup> Total thickness - Consider dry film thickness.

<sup>\*</sup>The liquid paint and powder paint plans presented above are for carbon steel substrate with a minimum standard mechanical blasting treatment of Sa 21/2.

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The scope of WEG Group solutions is not limited to the products and solutions presented in this brochure.

To know our portfolio, contact us.

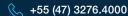




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