

TEKNOPOX 3290 EPOXY SYSTEMS WITH LOW SOLVENT CONTENT

K60

	L	М	Н
C2	0	0	0
СЗ	0	0	Zn
C4		Zn	Zn
C 5	Zn	Zn	Zn

5 9.2.2012

Coating systems for anti-corrosive painting on steel and zinc surfaces. In the systems high solid content TEKNOPOX 3290 Epoxy Coating is used. The systems' paints are suitable to use for maintenance painting on wire-brushed surfaces (St 2).

STEEL SURFACES:

Teknos Coating System Symbol	K60a	K60b	K60c	K60d	K60e	K60i
EN ISO 12944-5 (2007) symbol / corrosivity category / durability range	-	A3.09/C3/H	A4.08/C4/M	A5I.03/C5-I/M A5M.01/C5-M/M	A5I.02/C5-I/H A5M.02/C5-M/H	A4.09/C4/H
EN ISO 12944-5 (1998) symbol / corrosivity category / durability range	-	S3.18/C3/H S4.12/C4/L S7.02/C5-M/L	S3.19/C3/H S4.13/C4/L	S7.03/C5-M/M	S4.23/C4/H S6.04/C5-I/H S7.04/C5-M/H	S4.14/C4/H S6.03/C5-I/H
SFS 5873 corrosivity category / durability range	-	-	R25.08/C4	R25.10/C5	-	-
The coating system structure:	EP120/1- FeSa 2½	EP200/2- FeSa 2½	EP240/2- FeSa 2½ (St 2)	EP300/2- FeSa 2½ (St 2)	EP320/3- FeSa 2½	EP280/3 FeSa 2½
INERTA MASTIC or INERTA MASTIC MI- OX Epoxy Primer	-	-	1 x 80 μm	-	1 x 80 μm	1 x 80 μm
TEKNOPOX 3290 Epoxy Coating	-	1 x 80 μm	-	1 x 150 μm	1 x 120 μm	1 x 100 μm
TEKNOPOX 3290 Epoxy Coating	1 x 120 μm	1 x 120 μm	1 x 160 μm	1 x 150 μm	1 x 120 μm	1 x 100 μm
Total film thickness	120 μm	200 μm	240 μm	300 μm	320 μm	280 μm
Coating system VOC, g/m²	30	50	61	75	81	71

ZINC SURFACES:

Teknos Coating System Symbol	K60f	K60g	K60h	K60j
EN ISO 12944-5 (2007) symbol / corrosivity category / durability range	A7.10/C4/M	A7.11/C4/H A7.11/C5-I/M A7.11/C5-M/M	A7.12/C4/H A7.12/C5-I/M A7.12/C5-M/M	A7.13/C5-I/H A7.13/C5-M/H
EN ISO 12944-5 (1998) symbol / corrosivity category / durability range	S9.10/C3/H S9.10/C4/M	S9.11/C4/H S9.11/C5-M/M	-	-
The coating system structure:	EP120/1- ZnSaS	EP160/1- ZnSaS	EP240/2- ZnSaS	EP320/2- ZnSaS
TEKNOPOX 3290 Epoxy Coating	-	-	1 x 120 μm	1 x 160 μm
TEKNOPOX 3290 Epoxy Coating	1 x 120 μm	1 x 160 μm	1 x 120 μm	1 x 160 μm
Total film thickness	120 µm	160 µm	240 μm	320 μm
Coating system VOC, g/m²	30	40	60	80

Example of the coating system marking: K60b - EN ISO 12944-5/ A3.09(EP200/2-FeSa 21/2)

Usage

Protection for steel and zinc surfaces exposed to atmospheric corrosion.

Teknos symbol	Typical use
STEEL SURFACES:	
K60a	Protection for steel surfaces in corrosivity categories C2 and C3.
K60b	Protection for steel surfaces in corrosivity categories C3 and C4.
K60c	Protection for steel surfaces in corrosivity categories C3 and C4. Also maintenance system in accordance with standard SFS 5873 (system R25.08) for corrosivity category C4.
K60d	Protection for steel surfaces in corrosivity category C5. Also maintenance system in accordance with standard SFS 5873 (system R25.10) for corrosivity category C4.
K60e	Protection for steel surfaces in corrosivity categories C4 and C5.
K60i	Protection for steel surfaces in corrosivity category C4.
ZINC SURFACES:	
K60f	Hot-dip-galvanized surfaces outdoors in categories C3 - C5.
K60g	Hot-dip-galvanized surfaces outdoors in categories C4 and C5.
K60h	Hot-dip-galvanized surfaces outdoors in categories C4 and C5.
K60j	Hot-dip-galvanized surfaces outdoors in categories C4 and C5.

Surface preparation Remove from the surfaces any contaminants that might be detrimental to surface preparation and painting. Remove also water-soluble salts by using appropriate methods. The surfaces are prepared according to the different materials as follows:

> Steel surfaces: Remove mill scale and rust by blast cleaning to preparation grade Sa 21/2 (standard ISO 8501-1). Roughening the surface of thin-plate improves the adhesion of the paint to the substrate.

> Zinc surfaces: Hot-dip-galvanized steel structures that are exposed to atmospheric corrosion can be painted if the surfaces are sweep blast-cleaned (SaS) till matt all over. Suitable cleaning agents are, e.g. aluminium oxide and natural sand. It is not recommended to paint galvanized objects that are subjected to immersion strain.

> Old painted surfaces suitable for overcoating: Any impurities that might be detrimental to the application of paint (e.g. grease and salts) are removed. The surfaces must be dry and clean. Old, painted surfaces that have exceeded the maximum overcoating time are to be roughened as well. Damaged parts are prepared in accordance with the requirements of the substrate and the maintenance coating.

> The place and time of the preparation are to be chosen so that the prepared surface will not get dirty or damp before the subsequent treatment.

Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.

Prefabrication Primer

The coating systems are compatible with KORRO E Epoxy Prefabrication Primer, KORRO SE Zinc Epoxy Prefabrication Primer and KORRO SS Zinc Silicate Prefabrication Primer.

Application

Stir the paints thoroughly before use.

Apply the paints to a dry, dust-free surface to the required film thickness according to the specifications. The air temperature and the surface as well as the relative air humidity during the application and drying period must conform to the figures given in the table below.

The technical data of the paints are given in the table below and in the data sheets of the products.

Maintenance

Touch-up: Surfaces with rust grade Ri 3 can be repaired by touching-up.

Remove flaking paint and rust from damaged areas by scraping, wire-brushing or if possible by blast-cleaning. Extend the preparation over the edges over the damaged areas into the intact coating. If required, feather the edges of prepared areas. Touch-up the prepared patches with the paints of the system to the original film thickness.

If a uniform appearance is desired, the whole surface should be cleaned according to maintenance instructions given by Teknos and then overcoated with the system's top coat.

Complete renewal: When the surface rust grade is Ri 4 the maintenance painting is done as a renewal painting. Blast-clean the whole surface to grade Sa 2½ and renew the paint from start.

Technical Data

Volume solids % 80 ±2 80 ±2 Total mass of solids g/I INERTA MASTIC: abt. 1200 INERTA MASTIC MIOX: abt. 1100 Volatile organic compound (VOC) g/I abt. 210 abt. 200 Recommended film thickness - wet - μm - dry - μm 100 - 200 - 200 - 80 - 160 80 - 160 Theoretical spreading rate m²/I 10.0 - 5.0 - 10.0 - 5.0 (dry film 120 μm) - 40 - 40 - 40 - 40 - 40 - 40 - 40 - 4	inicai Data					
NERTA MASTIC MIOX: 549	Paint	_		TEKNOPOX 32	90	
INERTA MASTIC aluminium INERTA MASTIC aluminium INERTA MASTIC MIOX: grey (MIOX-pigmented) Semi matt 3290-08: gloss	Data Sheet No.			997		
INERTA MASTIC MIOX: grey (MIOX-pigmented) Semi matt 3290-08: gloss	Paint Type	Epoxy Coating	9	Epoxy Coating		
Thinner	Colours	INERTA MAS	TIC MIOX: grey	Teknomix-tinting		
Methods of application airless spray, brush or roller airless spray, brush Airless spray nozzle 0.015 - 0.021" 0.013 - 0.018" Application conditions - min. temperature - max. relative humidity % 80 +10 80 80 Safety markings See Material Safety Data Sheet See Material Safety Data Sheet Volume solids % 80 ±2 80 ±2 Total mass of solids g/I INERTA MASTIC: abt. 1200 INERTA MASTIC MIOX: abt. 1100 Volatile organic compound (VOC) g/I abt. 210 abt. 200 Recommended film thickness - wet μm - dry μm 100 100 - 200 80 - 160 Theoretical spreading rate μ²/I 10.0 10.0 - 5.0 10.0 - 5.0 Drying time, +23 °C / 50 °R RH - dust free (ISO 9117-3:2010) - touch dry (DIN 53150:1995) (dry film 120 μm) after 4 h after 6 h by itself; TEKNOPLAST 50 or 90, INERTA 50 or with TEKNODUR-series top coats: min. max. min. max. min. max. min. max. min. max. after 1 d	Finish	semi matt		3290-08: gloss		
Airless spray nozzle Application conditions - min. temperature - max. relative humidity % Safety markings See Material Safety Data Sheet Volume solids % Safety mass of solids Volatile organic compound (VOC) Recommended film thickness - wet - um - dry - my - dry - my - touch dry (DIN 53150:1995) Overcoatable, 50% RH +10° C +10 - +10 - 0.013 - 0.018" 0.013 - 0.018" +10 - +10 - 0C +10 - +10 - 80 - 80 - 80 - 80 - 22 - 80 ±2 - 80 ±2 - 80 ±2 INERTA MASTIC: abt. 1200 INERTA MASTIC: abt.	Thinner	TEKNOSOLV	9506	TEKNOSOLV 9	506	
Application conditions - min. temperature - max. relative humidity - max. so f solids - max.	Methods of application	airless spray,	brush or roller	airless spray, brush		
- min. temperature	Airless spray nozzle	0.015 - 0.021"		0.013 - 0.018"		
Volume solids % 80 ±2 80 ±2 Total mass of solids g/I INERTA MASTIC: abt. 1200 INERTA MASTIC MIOX: abt. 1100 Volatile organic compound (VOC) g/I abt. 210 abt. 200 Recommended film thickness - wet - dry - dry - m μm - dry - m 100 - 20	- min. temperature					
Total mass of solids g/l INERTA MASTIC: abt. 1200 INERTA MASTIC MIOX: abt. 1100 Volatile organic compound (VOC) g/l abt. 210 abt. 200 Recommended film thickness - wet	Safety markings	See Material Safety Data Sheet		See Material Safety Data Sheet		
INERTA MASTIC MIOX: abt. 1100	Volume solids %	80 ±2		80 ±2		
(VOC) g/l abt. 210 abt. 200	Total mass of solids g/l	INERTA MAS				
- wet	· ·	abt. 210		abt. 200		
Drying time, +23 °C / 50 % RH - dust free (ISO 9117-3:2010) - touch dry (DIN 53150:1995) Overcoatable, 50% RH (dry film 120 μm) after 4 h after 6 h by itself, TEKNOPLAST 50 or 90, INERTA 50 or with TEKNODUR-series top coats: min. max. +10 °C (dry film 120 μm) after 4 h after 6 h by itself to after 7 d after 1 d	- wet μm					
- dust free (ISO 9117-3:2010) - touch dry (DIN 53150:1995) Overcoatable, 50% RH after 4 h after 6 h by itself, TEKNOPLAST 50 or 90, INERTA 50 or with TEKNODUR-series top coats: min. max. #10°C after 4 h after 6 h by itself; TEKNOPLAST 50 or 91, INERTA 50 or with TEKNOPLAST 50 or 92, INERTA 50 or with TEKNOPLAST 50 or 93, INERTA 50 or with TEKNOPLAST 50 or 94, INERTA 50 or with TEKNOPLAST 50 or 95, INERTA 50 or with TEKNOPLAST 50 or 96, INERTA 50 or with TEKNOPLAST 50 or 97, INERTA 50 or with TEKNOPLAST 50 or 98, INERTA 50 or with TEKNOPLAST 50 or 99, INERTA 50 or with TEKNOPLAST 50 or 90, INERTA 50 or with	Theoretical spreading rate m²/l 10.0			10.0 - 5.0		
+10°C after 1 d after 7 d after 1 d after 14 d	- dust free (ISO 9117-3:2010) - touch dry (DIN 53150:1995)	after 4 h after 6 h by itself, TEKNOPLAST 50 or 90, INERTA 50 or with		after 4 h after 6 h		
alter to alter to alter to alter to		min.	max.	min.	max.	
123°C	+10°C	after 1 d	after 7 d	after 1 d	after 14 d	
after 6 h after 7 d after 8 h after 14 d	+23° C	after 6 h	after 7 d	after 8 h	after 14 d	