

Priming coat system without chemical influences. Adequate resistance against mineral oils and greases. For indoor applications.

Surface preparation according to DIN EN ISO 12944 part 4 (ISO 8501-1) with SA 2 1/2

All parts to be coated must be dry and free from sand, rust, oil and grease!

Priming coat

Designation: FEIDOLUX-primer (1 component)
 Basis: Primer based on special resin, dilutable with water
 Properties: Adequate resistance against mineral oils and greases, impeccable adhesion to all metals, can be varnished over with all types of varnish, quick drying; without silicone.
 Hue: Red brown, mat
 D.F.T.: 60 µm (arithmetic mean of a minimum of 24 individual values)

(the primer is painted in 2 coatings; 30 µm for each coating)

Attention: This painting system is not suitable for ex-machines

Abt. / Dept.	Q1	Kundenkennung / Item no.:		
Datum / Date	03.03.15	Typ	Description G Painting	ATB Schorch Auftrags-Nr.
Rev. / Rev.	04	Product code		ATB Schorch ref. no.
Name / Name	Hinrichs	Dok.-Nr. / Doc. no.	8992011021	Seite / Page 1 / 1

„Worldwide“ paint system (acc. to IEC 721-2-1) with adequate resistance against chemical influences. For indoor and outdoor applications (special painting for protection degree IP55).

Surface preparation according to DIN EN ISO 12944 part 4 (ISO 8501-1) with SA 2 1/2

“Worldwide“ paint system is in accordance with corrosiveness class C3 according to DIN EN ISO 12944 part 2 (protection period “low” according to DIN EN ISO 12944 part 5)

All parts to be coated must be dry and free from sand, rust, oil and grease!

Priming coat

Designation: FEIDOLUX-primer (1 component)
 Basis: Primer based on special resin, dilutable with water
 Properties: Adequate resistance against mineral oils and greases, impeccable adhesion to all metals, can be varnished over with all types of varnish, quick drying; without silicone.
 Hue: Red brown, mat
 D.F.T.: 30 µm (arithmetic mean)

Intermediate coat

Designation: Acrylic - Polyurethane (PUR) texture-finish paint (2 components)
 Basis: Isocyanate web-type acrylic resin
 Properties: Resistant against chemical and cleansing agents; appropriately stable to light; without silicone.
 Hue: RAL 7031 (blue-grey), silky
 D.F.T.: 50 µm (arithmetic mean)

Finishing coat

Designation: Acrylic - Polyurethane (PUR) enamel-finish paint (2 components)
 Basis: Acrylic - Polyurethane / aliphatic Isocyanat
 Properties: High resistant against chemicals, solvents, mineral oils, fuels and corrosive industrial atmosphere; without silicone.
 Hue: RAL (colours can be supplied on request), silky
 D.F.T.: 30 µm (arithmetic mean)

Total D.F.T.: 110 µm (arithmetic mean of a minimum of 24 individual values)

Remarks:

Bunche discharge:

Bunche discharge shall not be regarded as ignition for dust/air atmosphere: (see IEC TS 60079-32-1:2011; TRBS 2153:2009)

Electrostatics:

K1-160 µm Painting system” is suitable for use in Zone 1, 2, 21, 22 without restrictions, because dry film thickness on surface of housings are smaller than 200 µm.

Avoid particle flow streams capable of generating electrical charges.

Requirements of EN 60079-0 were performed by an independent testing laboratory

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Paint System "K1-160 µm"

Suitable for Ex machines without restrictions

SCHORCH

This paint system is especially suitable by risk of abrasion, sea water and chemical atmosphere, at high air humidity. For indoor and outdoor applications.

Surface preparation according to DIN EN ISO 12944 part 4 (ISO 8501-1) with SA 2 1/2

The K1-160 µm painting is in accordance with corrosiveness class C4 according to DIN EN ISO 12944 part 2 (protection period "medium" according to DIN EN ISO 12944 part 5)

All parts to be coated must be dry and free from sand, rust, oil and grease!

Priming coat

Designation: EPOXY zinc dust primer (2 components)
Basis: Epoxid resin
Properties: By adding a special hardener, a cross linked primer is obtained which is both tough and elastic. It is highly resistant against fresh and sea water, grease, oil, drilling oil and numerous solvents. In dry condition 92 % pure metallic zinc dust contents; without silicone.
Hue: RAL 7030 (stone-grey), mat
D.F.T.: 80 µm (arithmetic mean)
(Remark: Surfaces which cannot be prepared by steel-blasting, use of special primer)

Intermediate coat

Designation: Acrylic - Polyurethane (PUR) texture-finish paint (2 components)
Basis: Isocyanate web-type acrylic resin
Properties: Resistant against chemical and cleansing agents; appropriately stable to light; without silicone.
Hue: RAL 7031 (blue-grey), silky
D.F.T.: 40 µm (arithmetic mean)

Finishing coat

Designation: Acrylic - Polyurethane (PUR) enamel-finish paint (2 components)
Basis: Acrylic - Polyurethane / aliphatic Isocyanat
Properties: High resistant against chemicals, solvents, mineral oils, fuels and corrosive industrial atmosphere; without silicone.
Hue: RAL (colours can be supplied on request), silky
D.F.T.: 40 µm (arithmetic mean)

Total D.F.T.: 160 µm (arithmetic mean of a minimum of 24 individual values)

Remarks:

Bunche discharge:

Bunche discharge shall not be regarded as ignition for dust/air atmosphere: (see IEC TS 60079-32-1:2011; TRBS 2153:2009)

Electrostatics:

K1-160 µm painting system" is suitable for use in Zone 1, 2, 21, 22 without restrictions, because dry film thickness on surface of housings are smaller than 200 µm.

Avoid particle flow streams capable of generating electrical charges.

Requirements of EN 60079-0 were performed by an independent testing laboratory.

Abt. / Dept.	Q1	Kundenkennung / Item no.:		
Datum / Date	03.03.15	Typ	Description K1-160 µm	ATB Schorch Auftrags-Nr.
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Paint System "K1-240 µm"

Suitable for Ex machines with restrictions

SCHORCH

This paint system is especially suitable by risk of abrasion, sea water and chemical atmosphere, at high air humidity. For indoor and outdoor applications.

Surface preparation according to DIN EN ISO 12944 part 4 (ISO 8501-1) with SA 2 1/2

K1-240 µm painting is in accordance with corrosiveness class C4 according to DIN EN ISO 12944 part 2 (protection period "medium" according to DIN EN ISO 12944 part 5) and C5-I (protection period "low" according to DIN EN ISO 12944 part 5)

All parts to be coated must be dry and free from sand, rust, oil and grease!

Priming coat

Designation: EPOXY zinc dust primer (2 components)

Basis: Epoxid resin

Properties: By adding a special hardener, a cross linked primer is obtained which is both tough and elastic. It is highly resistant against fresh and sea water, grease, oil, drilling oil and numerous solvents. In dry condition 92 % pure metallic zinc dust contents; without silicone.

Hue: RAL 7030 (stone-grey), mat

D.F.T.: 80 µm (arithmetic mean)

(Remark: Surfaces which cannot be prepared by steel-blasting, use of special primer)

Intermediate coat

Designation: Acrylic - Polyurethane (PUR) texture-finish paint (2 components)

Basis: Isocyanate web-type acrylic resin

Properties: Resistant against chemical and cleansing agents; appropriately stable to light; without silicone.

Hue: RAL 7031 (blue-grey), silky

D.F.T.: 120 µm (arithmetic mean)

Finishing coat

Designation: Acrylic - Polyurethane (PUR) enamel-finish paint (2 components)

Basis: Acrylic - Polyurethane / aliphatic Isocyanat

Properties: High resistant against chemicals, solvents, mineral oils, fuels and corrosive industrial atmosphere; without silicone.

Hue: RAL (colours can be supplied on request), silky

D.F.T.: 40 µm (arithmetic mean)

Total D.F.T.: 240 µm (arithmetic mean of a minimum of 24 individual values)

Remarks:

Bunche discharge:

Bunche discharge shall not be regarded as ignition for dust/air atmosphere: (see IEC TS 60079-32-1:2011; TRBS 2153:2009)

Electrostatics:

„K1-240 µm Painting System“ is suitable for use in Zone 1, 2, 21, 22 without restrictions, if charge generating processes (e.g. the flow of insulating liquids or powders, high voltage spray charging and belt transmissions) on surface of housings are excluded.

Avoid particle flow streams capable of generating electrical charges.

Requirements of EN 60079-0 were performed by an independent testing laboratory.

Abt. / Dept.	Q1	Kundenkennung / Item no.:		
Datum / Date	03.03.15	Typ	Description K1-240 µm	ATB Schorch Auftrags-Nr.
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Painting system „K2“

Suitable for Ex machines with restrictions

SCHORCH

The high quality painting system is especially suitable in case of environments with either high erosion, or seawater, or chemical influence as well as high humidity. Suitable for indoor and outdoor use.

The K2-painting is in accordance with corrosiveness class C5-M according to DIN EN ISO 12944 part 2 (protection period "high" according to DIN EN ISO 12944 part 5) and C5-I (protection period "high" according to DIN EN ISO 12944 part 5)

Surface preparation according to DIN EN ISO 12944 part 4 (ISO 8501-1) with SA 2 1/2

All parts to be coated must be dry and free from sand, rust, oil and grease!

Primer

Designation: Epox-zinc dust color (2 components)

Base: Epoxy resin

Properties: After addition of the hardener a viscoplastic network polymer film with excellent adhesion properties occurs.
The coating has an excellent resistance against fresh and salt water, grease, oil, drilling oil and numerous chemical solvents.

The dry film consists of 92 % metallic zinc dust and is free of silicone.

Thickness: 80 µm (average value)

(Note: Surfaces, which couldn't be blasted will be primed with a adhesive primer)

Intermediate coat

Designation: Polyurethane (PUR) structure base (2 components)

Base: Isocyanate bonded polyol

Properties: This material is low on chemical solvent, so-called "high solids". A viscoplastic, very abrasion resistant film occurs. High solids content. This coating is to combine with almost all coating systems; free of silicone.

Thickness: 200 µm (average value)

Final coat

Designation: Acrylic - polyurethane (PUR) – enamel paint (2 components)

Base: Acrylic - polyurethane/aliphatic Isocyanate

Properties: Best light-, color- and varnish resistance and a very good resistance against chemicals, chemical solvents, mineral oil, fuels, as well as aggressive industry- and urban atmospheres; free of silicone.

Color: RAL . . . (according to the customers request), satin-gloss

Thickness: 40 µm (average value)

Total thickness: 320 µm (arithmetic average value within 24 individual values at least).

Remarks:

Bunche discharge:

Bunche discharge shall not be regarded as ignition for dust/air atmosphere: (see IEC TS 60079-32-1:2011; TRBS 2153:2009)

Electrostatics:

„K2 Painting System“ is suitable for use in Zone 1, 2, 21, 22 without restrictions, if charge generating processes (e.g. the flow of insulating liquids or powders, high voltage spray charging and belt transmissions) on surface of housings are excluded.

Avoid particle flow streams capable of generating electrical charges.

Requirements of EN 60079-0 were performed by an independent testing laboratory.

Abt. / Dept.	Q1	Kundenkennung / Item no.:		
Datum / Date	03.03.15	Typ	Description K2-Painting	ATB Schorch Auftrags-Nr.
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1. General

The "ATB Schorch paint systems" developed in collaboration with the company FEIDAL represent lasting protection against corrosion, and are characterized by the following features:

- Enduring protection
- Application on any surface
- Offering a variety of surface effects
- Non-polluting
- Economic

2. Contact person for issues concerning corrosion protection

For questions, concerning corrosion protection, contact our Mr. Hinrichs under Telephone No. +49-(0)2166-925-453, or Fax No. +49-(0)2166-925-9453).

3. Site conditions

The ATB Schorch Paint System has been subjected to long-time endurance tests and has been found suitable for the following site conditions:

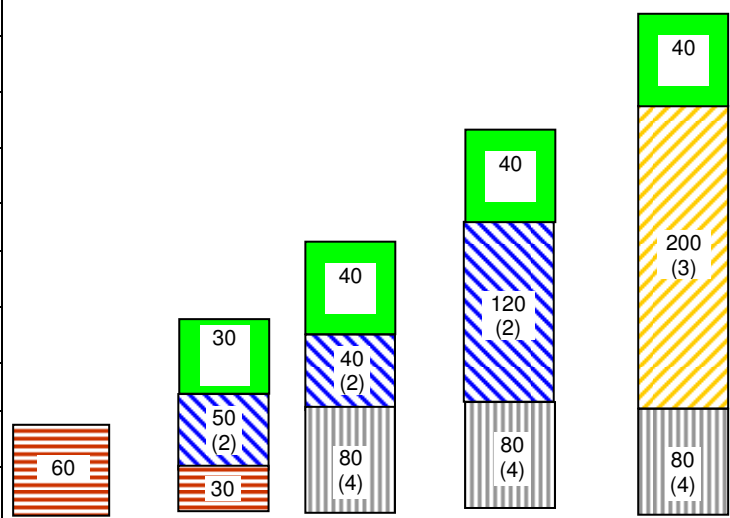
Paint System	Installation		Site conditions	DIN EN ISO 12944-2	By default, used for
	Indoor	outdoor			
"G" (primer)	X		Primer without chemical influences. Adequate resistance against oils and greases	---	Standard machines
"W" (world-wide)	X	X	Adequate resistance against chemical influences	C3 1)	Standard machines, trans-standard machines and water housing cooled machines; without trans-standard Exd machines
"K1-160 µm"	X	X	Suitable by risk of abrasion, sea water and chemical atmosphere, at high air humidity	C4 2)	Trans-standard Exd machines
"K1-240 µm"	X	X	Suitable by risk of abrasion, sea water and chemical atmosphere, at high air humidity	C4 2) and C5-I 1)	Trans-standard Exd machines
"K2"	X	X	Suitable by risk of abrasion, sea water and chemical atmosphere, at high air humidity	C5-M 3)	Large machines

- 1) Protection period „low“ according to DIN EN ISO 12944-5
- 2) Protection period „medium“ according to DIN EN ISO 12944-5
- 3) Protection period „high“ according to DIN EN ISO 12944-5

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4. Components and film thickness

Painting components (silicone free!)	ATB Schorch painting and dry film thickness in µm				
	G	W (1)	K1-160 µm	K1-240 µm	K2
1-C = one component 2-C = two components ↗					
Finishing coat					
• Acrylic-PUR finishing paint „RUCO“ (2-C)					
Intermediate coat					
• Acrylic-PUR texture-finish „ZS10“ (2-C)					
• PUR high-filling paint „ZG14“ (2-C)					
Primer					
• FEIDOLUX-primer „AG30“ (1-C)					
• Epoxy zinc dust primer „MG46“ (2-C)					
Total dry film thickness (arithmetic mean !)	60	120	160	240	320



Remarks:

- (1) varnished inside the fan cap and fan
- (2) fine texture (RAL 7031)
- (3) rough texture (RAL 7032)
- (4) components which cannot be steel-blasted, use of special primer FEIDOPUR – Uni-Primer “ZG59” (2-C)

Requirements according to EN 60079-0 (VDE 0170-1):2014-06 part 7.4 Electrostatic charging of nonmetallic materials on external surfaces

Limitations for nonmetallic film thicknesses for group IIB 2,0 mm and for group IIC 0,2 mm according to table 8 of EN 60079-0.

Consequences for ATB Schorch Painting System:

“W-Painting System” and “K1-160 µm Painting System”

Elektrostatic on surfaces of housings according to EN 60079-0:

“W-Painting System” and “K1-160 µm Painting system” is suitable for use in **Zone 1, 2, 21, 22 without restrictions**, because dry film thickness on surface of housings is less than 200 µm.

“K1-240 µm Painting System” and “K2 Painting System”

Elektrostatic on surfaces of housings according to EN 60079-0:

“K1-240 µm Painting System” and „K2 Painting System“ is suitable for use in **Zone 1, 2, 21, 22 without restrictions**, if charge-generating processes on its surface (e.g. as rapid flow of (insulating) bulk materials through pipes or hoses, flow of (insulating) fluids during filling or emptying, belt drives) are excluded. The proof according to EN 60079-0 has been furnished by an independent testing laboratory.

Charge generating particle flow shall be avoided

If strongly charge-generating processes can not be ruled out, the K1-160 micron paint system has to be used.

Brush discharge

shall not be regarded as ignition for dust/air atmosphere: (see IEC TS 60079-32-1:2011; TRBS 2153:2009)

Attention! untested painting systems can not be used in explosion protection areas (certificate according to EN 60079-0 by an independent test laboratory)

Remarks:

Strong charging processes

E.g. the flow of insulating liquids or powders, high voltage spray charging and belt transmissions

Low charging processes

E.g. rubbing, cleaning with a cloth, raising from a seat, walking, wiping of clothes

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