

K75 coating system C5 H NDFT 300µm

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1 Area of application

1.1 Corrosivity category

C5 (ISO 12944)

1.2 Protection lifetime¹

H (High); 15 to 25 years

1.3 Examples for the associated environment according to international standards

ISO 12944

Outdoors: Industrial areas with high humidity and aggressive atmosphere and coastal atmosphere with high salt levels

Indoors: Buildings or areas with almost constant condensation and severe contamination and pollution

ISO 9223

Outdoors: Moderate and subtropical climatic zone, atmospheric environment with very high air pollution (SO_2 : 90 ... 250 $\mu\text{g m}^{-3}$), and/or with significant influence as a result of chlorides, e.g. industrial areas, coastal areas, protected areas along the coastline

Indoors: Rooms where condensation occurs very frequently and/or high air pollution from production processes, e.g. mines, excavated areas for industrial purposes, non-ventilated halls in subtropical and tropical climatic zones

This coating system can also be used for:

Corrosivity category	Protection lifetime
C4	VH (Very high); over 25 years

¹The protection duration does not represent a "warranty time" (ISO 12944-1 and -5). Rather, it should help customers define a maintenance/repair program. The specified "expected protection lifetime" represents the predicted protection lifetime of this coating system for the environmental conditions according to ISO 12944-2. The suitability and classification of the protection lifetime of the coating system for the particular corrosivity category is based on the results from load tests according to ISO 12944-6.

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2 Coating system

The coating system has the following structure:

Primer²

Coating compound	1-component epoxy ester/acrylic resin dip primer ³ 2-component epoxy resin spray primer
NDFT coating thickness ⁴	60 µm

Intermediate coat⁵

Coating compound	2-component epoxy resin coating
NDFT coating thickness ⁴	160 µm

Topcoat⁵

Coating compound	2-component acrylic polyurethane coating
NDFT coating thickness ⁴	80 µm
Color	RAL 7030 (other colors optionally available)

Total paint coat thickness⁴ 300 µm

If not ordered differently, stainless steel, aluminum, non-ferrous metals and plastics are not coated.

²Also on inner surfaces, with the exception of machined surfaces, for example shafts and active parts.

³Only for complex cast parts

⁴Specified "nominal dry film thickness" (NDFT)

⁵If not ordered differently, then these coatings are only applied to external surfaces. For production-related reasons, they can also be found on inner surfaces.

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3 Pretreatment of steel and cast-iron components for applying primer

3.1 Removing surface irregularities

Preparation grade P2 for weld seams, edges and other surfaces (ISO 8501-3)

3.2 Surface preparation before applying primer

Cast-iron components Blasted with round or angular abrasives
 SCRATA evaluation:⁶ A3, B1, C2, H1
 Average grade of surface roughness acc. to ISO 8503-2
 Parts free of:Dust⁷, Grease, Contaminants⁸

Steel parts Blasted with round or angular abrasives
 Wall thickness \geq 3 mm Grade Sa 2 1/2 (ISO 8501-1)
 Average grade of surface roughness acc. to ISO 8503-2
 Parts free of:Dust⁷, Grease, Contaminants⁸

Steel parts Surface preparation grade St 3 (ISO 8501-1)
 Wall thickness < 3 mm Parts free of:Dust⁷, Grease, Contaminants⁸

⁶Cast surfaces are assessed according to ISO 8503-2. SCRATA comparison standards are used for special local effects on caste surfaces.

⁷Particle size Class \leq 2 / dust quantity characteristic value \leq 2 (ISO 8502-3). Light up to average discoloring of the adhesive tape as a result of graphite particles for cast iron parts is unavoidable and permissible.

⁸Water soluble contaminants: Maximum: 40 mg m⁻² NaCl (ISO 8502-6 and ISO 8502-9)

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