INERTA 270 A –EPOXY SYSTEM

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Intended to be used in nuclear power stations as a protective coating system for steel surfaces. The system consists of chemically curing, so-called high-solid epoxy paint. The system comes up to the specifications of STUK-YTO-TR 210 (Research Report VTT-CR-01507-20 by the Technical Research Centre of Finland).

ISO 12944-5:2019 symbol / corrosivity category / durability range	**C5.03/C5/H**
The coating system structure:	EP300/2-FeSa 2½
INERTA 270 A Epoxy Paint	2 x 150 µm
Total film thickness	300 µm
Paint system VOC, g/m²	80

Marking of the coating system: ISO 12944-5/C5.03(EP300/2-FeSa2½).

USAGE

For protection of steel surfaces in nuclear power stations in controlled indoor areas that are exposed to radiation and decontamination, specially in spaces with high moisture content and condensation.

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 2½ (standard ISO 8501-1). Roughening the surface of thin-plate improves the adhesion of the paint to the substrate.

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.

For more detailed information about the above-mentioned products please see individual product data sheets.

PTO

Application

Stir the components until they are homogeneous before use. Mix base and hardener with each other in the proportions given on the paint labels and stir the mixture thoroughly. Take into consideration the pot life of the mixture when estimating the amount to be mixed.

Apply preferably by airless spray as only this method provides the recommended film thickness in a single operation. The temperature of the air 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. At elevated temperatures the drying process speeds up. The surface must be dry and free from dust.

The technical data of the paint are given in the table below and in the product data sheet.

Maintenance

Repair, maintenance and renewal painting is done according to separate instructions given for the nuclear power plant, observing valid local orders issued by the authorities.

Technical Data

Paint		INERTA 270 A	
Data Sheet	No.	1990	
Paint Type		two-pack epoxy paint with low solvent content	
Colours		by agreement	
Finish		gloss	
Thinner		TEKNOSOLV 9506	
Methods of application		airless spray	
Airless spray nozzle		0.018 - 0.026"	
Application conditions - min. temperature - max. relative humidity	 °C %	 +10 80	
Safety markings		See Safety Data Sheet	
Volume solids	%	75 ±2	
Total mass of solids	g/l	abt. 1300	
Volatile organic compound (VOC)	g/l	abt. 200	
Recommended film thickness - wet - dry	 µm µm	 200 150	
Theoretical spreading rate	m²/l	5.0	
Drying time, +23°C / 50 % RH - dust free (ISO 9117-3:2010) - touch dry (ISO 9117-5:2012)		(dry film 150 µm) after 6 h after 7 h	
Overcoatable, 50% RH		by itself:	
		min.	max*
	+10°C	after 24 h	after 4 d
	+23°C	after 12 h	after 2 d

* Maximum overcoating interval without roughening.