

SCHAETTI COAT 1110

PRODUCT

SCHAETTI COAT 1110 is a thermoplastic polyolefine-based coating powder. It has been developed specifically for fluidised bed coating applications. Even on relatively thin-walled parts, its good flow characteristics lead to homogeneous, smooth-flowing protective films which are distinguished in particular by outstanding anti-corrosive properties. Through the use of special additives, both adhesion to metallic substrates and resistance to many aggressive media have been significantly improved.

TYPICAL APPLICATIONS

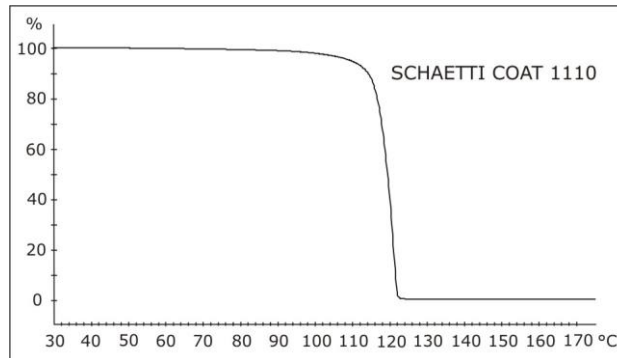
SCHAETTI COAT 1110 is used for coating workpieces which are vulnerable to corrosion, such as pipes and pipe fittings, battery trays and containers, as well as for wire goods.

COATING PROCEDURE

Recommended pretreatment: alkaline degreasing, phosphating or passivation. Rust removal by abrasive blasting substantially improves adhesion.

COATING PARAMETERS

SCHAETTI COAT 1110 is preferably used for fluidised bed coating. Scattering procedures are also possible provided that the preheating requirements are observed.
Preheating: 260-340°C (object temperature).
Dipping time: 3-6 seconds (depending on the thickness of film and material).



Typical melting curve

Physical Properties

Melting point (Main Peak):	DSC	°C	120- 130
Melting range:	Kofler	°C	on: 124 off: 134
Melt-flow rate, 2.16kg, g/10min	MFR	190°C	16 - 20
Hardness	Shore		D56
Density	DIN 53479	g/cm ³	0.93
Vicat temperature	ASTM D 1525	°C	101

Coating Properties

Brittle point:	DIN 53446	°C	- 40
Elongation at break	DIN 53455	%	200
Peel resistance	DIN 30670	N/cm	> 40
Dielectric strength	DIN 53481	kV/mm	> 20
Erichsen static stamping	ISO 1520	mm	8
Salt spray test, scribed (1000h)	DIN EN ISO 9227 Infiltration		< 10 mm
Salt spray test, unscribed (2000h)	DIN EN ISO 9227		no bubbles
Water condensation test (Kesternich test)	DIN EN ISO 6988, 0.2 SO ₂ , 15 cycles		no changes
QUV-B weathering test	DIN EN ISO 11507 2000 h		no crackings

Chemical Resistance*

Diluted acid	very good
Diluted bases	very good
Organic solvents	good
Mineral salt solution	very good

* For specific requirements, resistance properties should be checked separately.

Delivery units and storage conditions

Units	20 kg PE-bags, big-bags on request
Conditions	dry storage at <25°C, up to 2 years

Particle sizes

Fluidised bed coating	100 – 400 µm
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RESULT

Smooth, glossy coatings with a film thickness of 250 to 800 µm, depending on the preheating temperature and dipping time. The powder consumption is approximately 250 to 800 g/m².

PROCESSING

Any workpiece which is not subjected to dimensional change at the specified preheating temperatures is suitable for coating. Metals (excluding tin, zinc, lead, Wood's metal, etc.) and alloys are especially suitable.

The design of the workpiece is also important: sharp edges should be smoothed, air gaps between welded parts eliminated, no porous cast parts should be used. Screwed and riveted joints should be avoided where possible as well as large cross-sectional variations in a single piece. The holding points should be chosen so that they can either remain uncoated (threads, drill holes, dowel holes, etc.) or can easily be coated at a later stage.

PRECAUTIONS

When used in the appropriate manner, SCHAETTI COAT 1110 is not known to have any noxious effects on operators. It is nevertheless advisable to fit fluidised bed coating tanks with a rim extraction system and/or an extractor hood.

TRANSPORT AND STORAGE

SCHAETTI COAT 1110 is supplied in 20 kg disposable bags or delivered in reusable big bags on request. In its original packaging SCHAETTI COAT 1110 is fully protected against dust and dirt. Damage to packaging should be avoided to prevent the ingress of dirt and moisture. Store in a dark, dry and cool place (<25°C).