

LOW CURING TEMPERATURE POWDER COATINGS.

COOL POWDER is a coating system with a reduced curing temperature: starting from 140°C.



ENVIRONMENTAL SENSITIVITY = REDUCTION OF ENERGY CONSUMED.

The studies conducted by the IPCC (Intergovernmental Panel on Climate Change) have clearly and unambiguously established that the reduction of carbon dioxide (CO₂) emissions (as envisaged by the Kyoto protocol) is a mandatory path to ensure a livable world for future generations. Manufacturing companies are the first to be called upon to implement new production processes and/or use new materials that allow a reduction in the energy consumed, and therefore a reduction in the amount of CO₂ emitted into the atmosphere, a sign of responsibility and respect for the environment.

COOL POWDER powder coatings are coating systems characterized by a reduced curing temperature, starting from 140°C, which allows for the

REDUCTION OF ENERGY COSTS UP TO 20-30% *.



A winning set of advantages, directly in the hands of the coaters:

- **ECONOMIC:** the low curing temperature makes it possible to **reduce the consumption of electricity** (or gas) necessary to bring the coating to complete hardening.
- **ENVIRONMENTAL:** the reduction in electricity (or gas) consumption translates into a **cut in CO₂ emissions**.
- **TECHNICAL:** the low temperature curing cycle makes it possible to **mitigate the problems related to the coating of products with high thickness and thermal mass**, which often struggle to reach conventional temperatures of 180-190°C.
- **VERSATILE:** the availability of a wide selection of RAL shades and finishes in our warehouses, allows to have **quickly available** even small quantities of powder.

Thanks to the different chemistries and finishes available, COOL POWDER powder coatings are excellent for both indoor and outdoor use, capable of meeting every single need of the coater: from industrial processes to applications that seek high value-added results.

*Compared to the standard 170/180°C. The estimation considers a reduction in energy costs up to 5-10% for each 10°C lowering of the curing temperature, a value influenced by different factors, for example the type of oven that is used.

COOL POWDER FOR INDOOR USE

CHEMISTRY	FINISH	BRIGHTNESS	COLOUR	CURING CYCLE
Epoxy Epoxy-polyester	Smooth	Glossy – Semi-glossy	Any	140°C x 20 min
	River texture			
	Fine texture	Matt – Semi-matt		

The lowering of the curing temperature does not affect the general properties of the products even in case of extremely delicate systems such as anticorrosive primers.



ISO 9227 – Neutral salt spray – 5000h
Metal plates with zinc phosphate pre-treatment by immersion.

EY-654-7300-001
(Anticorrosive primer COOL POWDER)
PO-855-9010-001
(Topcoat COOL POWDER)

COOL POWDER FOR OUTDOOR USE

CHEMISTRY	FINISH	BRIGHTNESS	COLOUR	CURING CYCLE
Polyester (industrial)	Smooth	Glossy – Semi-glossy	Any	140°C x 20 min
	River texture			
	Fine texture	Matt – Semi-matt		

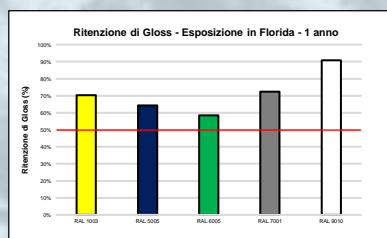
COOL POWDER polyesters for industrial use are characterized by the excellent balance of mechanical performance and resistance to UV radiation.



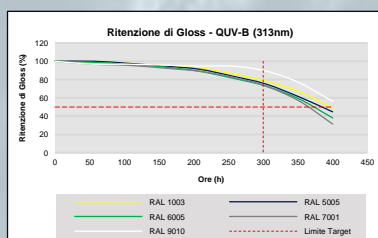
ASTM D 2794 and ISO 1520
Metal plates in different colours after indirect impact test (2.5 nm) and after deep drawing test.

CHEMISTRY	FINISH	BRIGHTNESS	COLOUR	CURING CYCLE
Polyester (high performance)	Smooth	Matt	Any	160°C x 20 min
	River texture	Glossy – Semi-glossy		150°C x 20 min
	Fine texture	Matt – Semi-matt		

COOL POWDER polyesters for higher quality results, available in different finishes, have been specially designed to achieve mechanical properties, gloss retention and colour variation over time comparable to those of the finishes normally used in the architectural sector.



Florida Test
Gloss retention of some glossy finishes of the COOL POWDER series. The values are comparable to those of the finishes normally used in the architectural sector.



QUV-B (313nm)
Gloss retention of some glossy finishes of the COOL POWDER series. The values are comparable to those of the finishes normally used in the architectural sector.

CONTACT US.

For any questions relating to powder coatings, our team is at your side to help and advise you.



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P o w d e r C o a t i n g s

M O R E T H A N C O L O U R

