



Rapid Coat
POWDER COATINGS

ENERGY SAVING LOW BAKE POWDER COATINGS



LOW BAKE POWDER COATINGS

About Low Bake

Low Bake Powder Coatings reduce the baking temperature and curing time in the oven without compromising on physical and chemical properties of the coatings.

Applications

Heavy Metal Articles

Such substrates take longer time to attain high curing temperature and hence require huge amount of energy.

Sensitive Metals

Copper and Brass substrates are prone to thermal oxidation and hence deteriorate at higher curing temperatures.

Benefits

Faster Line Speed

Low Bake Powder allow for faster attainment of target curing temperature, thereby enhancing productivity by approximately 30%.

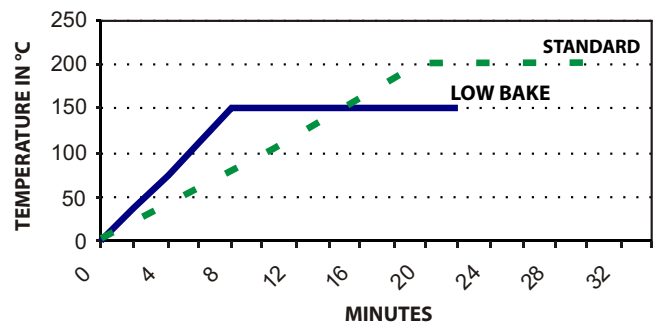
Colors and Finishes

Rapid Coat offers a wide range of shades as per internationally accepted RAL, Pantone and NSC standards in a variety of gloss levels and finishes. We also offer custom matched colors and finishes as per customer's requirements.

Thick and Thin wall articles

Low Bake is ideal for complex articles with thick and thin wall composition and gives uniform finish and avoid degradation by curing at temperature much below the peak temperature.

	Time to reach Curing Temperature	Curing Time	Total Time
Standard@ 200°C	20 min.	12 min.	32 min.
Low Bake@ 150°C	9 min.	12 min.	21 min.

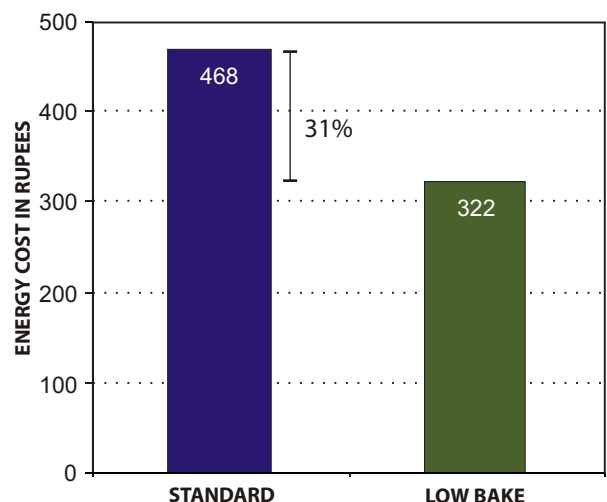


Upto 30% Energy Saving

Lower curing temperature also consumes much less energy-reducing electricity/diesel cost.

$Q = (\text{Mass}) \times (\text{Specific Heat}) \times \Delta(\text{Temperature})$
Electricity required to cure 1000 Kg batch load of Mild/Steel article.

200°C Metal Temperature	150°C Metal Temperature
$Q = 1000 \times 0.42 \times (200-40)$ = 67,200 Kcal	$Q = 1000 \times 0.42 \times (150-40)$ = 46,200 Kcal
Energy Cost = $\frac{67200 \times 6^{\#}}{860^*}$ = Rs. 468	Energy Cost = $\frac{46200 \times 6^{\#}}{860^*}$ = Rs. 322
Saving = 468 - 322 = Rs. 146	
In % = $(146 \times 100) / 468 = 31\%$	



*1 KWH produces 860 Kilocalories of heat
Per unit cost of electricity

Technical Data Sheet

Powder Properties		Standard
Specific Gravity ASTM - D - 153		1.6 ± 0.1
Theoretical Coverage @ 50 microns		11.8 - 13.3 sq.mtrs/ kg
Gel Time	@ 180C	70 -110 sec.
	@ 150C	130 -170 sec.
Particle Size Distribution	<32 m	30-50 %
	<63 m	70-90 %
On Alpine Air Jet Sieve	<63 m	70-90 %
Model A-200 LS	<80 m	90-100 %
	<100 m	95-100 %
Storage Stability @ 25°C		Four months

Test Panels

- 1) Degreased, derusted, phosphated, passivated 110*64 mm, 0.5 mm thick, M.S. Sheet
- 2) Degreased, chromated, passivated 110*64 mm, 0.6 mm thick, Aluminum Sheet

Application of Powders

Powder Application Gun Voltage	50-70 kV
Curing Temperature	150°C (Metal Temperature)
Curing Time	12 minutes
Film Thickness Recommended	50 - 70 µm - for smooth finish
	70 - 100 µm - for structural finish

Cured Film Properties	Method	Standard
Finish	ASTM-D-1729	Desired Finish*
Gloss @ 60° Head	ASTM-D-523	> 35 % [#]
Colour D-65, 10°	CIE L* a* b*	Δ E<1
Cross Hatch Test	ASTM-D-3359	GT 0 (Excellent)
Salt Spray Resistance	ASTM-B-117	> 500 hours
Humidity Resistance	DIN-50017	> 500 hours
Impact Forward kg. cm	ASTM-D-2794-69	100 (min.)
Impact Reverse kg. cm	ASTM-D-2794-69	100 (min.)
Conical Mandrel	ASTM-D-522	3 - 6 mm

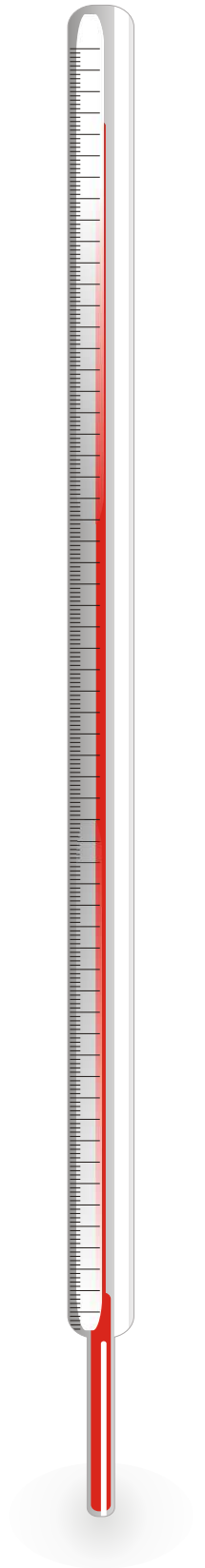
*We also offer coating powders which are
Non-Hazardous, TGIC-free, ROHS & REACH compliant*

Note:

* The product is available in Glossy, Semi Glossy, Structure, and Texture Finishes

[#] Currently available in gloss higher than 35%

Δ Mechanical Testing are done at coating thickness of 65±15 µm



ABOUT US

Rapid Coat Powder Coatings is manufactured by Rapid Engineering Co. Pvt. Ltd. The company started operations in 1974 and has been producing powder coatings since the past 25+ years. Its primary operations are located on 2 acres of land in a prime industrial area on the outskirts of New Delhi, India with approximately 100,000 sq. ft. of built up space. It sells its products to customers through a wide network of distributors and company owned sales offices.

PRODUCTS:

- Epoxy Polyester Powders for Powder Coatings: We are one of the largest manufacturers of this product in India with 9 production lines and a total manufacturing capacity of 7000 tons annually.
- Thermoplastic Powders for Plastic Coating: We are the leaders in India with a manufacturing capacity of 2500 tons annually.

CERTIFICATIONS:

- ISO 9001:2008 Quality Certificate No. TUV100 07 1477 from TUV SUD Management Service GMBH
- CRISIL Rated SE1B
- Government of India Recognized Export House Certificate



Plant & Corporate Office

A-11/1, Site-IV, Link Road, Sahibabad
 U.P. - 201010, INDIA
 Tel.: +91 120 2896655, 4041600
 Mob.: +91 9654292962
 Fax: +91 120 2896656
 Email: mail@rapidcoat.com

New Delhi Okhla

Tel.: +91 11 26813344
 Mob.: +91 9654292961
 Email: delhi@rapidcoat.com

Mumbai

Tel.: +91 22 28508438, 28508775
 Fax: +91 22 2850303
 Mob.: +91 9322641240
 Email: mumbai@rapidcoat.com

Pune

Tel.: +91 21 35204402
 Mob.: +91 8080880706
 Email: pune@rapidcoat.com

South India Sales

Mob.: +91 9654292959
 Email: south@rapidcoat.com

International Sales

Tel.: +91 120 4041670
 Mob.: +91 9654292970
 SKYPE: rapidcoat
 Email: exports@rapidcoat.com

www.rapidcoat.com