

Colour your imagination



BETTER COVERAGE

BETTER FINISH

POLY BOND COATING PVT. LTD. a professionally managed company, situated at Mahape, Navi Mumbai, Maharashtra is equipped to manufacture Powder Coating Powders by latest Twin Screw and Air-condition Milling technology for better coverage and shelf life of powder.



POLY BOND Powder Coatings are available in three generics viz, Pure Epoxy, Epoxy Polyester and Pure Polyester in various shades, gloss and finishes like Structure, Texture, Metallic and Antique.

POLY BOND Powder Coatings provide protection and aesthetics to the substrate and offers various advantages in terms of quality, versatility & durability. The ACM plant controls the moisture content in the product resulting in better chargeability, improved fluidisation, better transfer efficiency & superior finish. Product development with the on-going technology results in superior mechanical, corrosion and durability properties.

POLY BOND is deeply committed to manufacture high-tech powders for a variety of uses and applications for decorative and industrial purpose.

The most advanced techniques of pre-mixing, extrusion, grinding and sieving will enable POLY BOND to produce powders of international standards especially with precise control on the particle size distribution.

POLY BOND thus envisages a quantum leap from CONFORMANCE QUALITY to PRODUCT RELIABILITY.

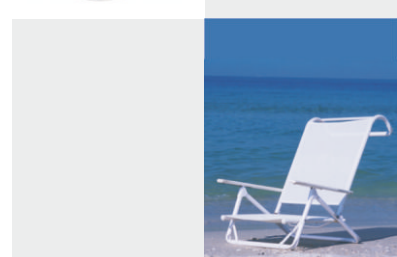


POLY BOND has a well knit team of young and competent technical personnel, totally dedicated to meet the needs of industry.



Powder Coatings have many desirable features. The benefits & advantages extended by powder coatings are:

1. No primer coats are needed.
2. Overspray losses are greatly reduced.
3. Labour and energy costs are reduced.
4. Cleaning of wet paint booth is eliminated.
5. Powders are supplied ready for use and hence do not require thinning or mixing before application.
6. Reject rates are low.
7. Plant occupies less space.
8. Cost of paint storage is reduced.
9. No flame proof equipment needed.



- No solvents, which means:
 - No objectionable odours, fumes etc. polluting the plant atmosphere.
 - Greatly reduces fire hazard.
- Upto 98% powder utilization.
- Only one coat is needed to give adequate coating thickness in the recommended range of 50-60 microns.
- No mixing necessary. Ready to use as supplied. Therefore no chance of error on the part of operator.
- No primers required, material develops excellent adhesion as a result of chemical reaction that takes place during curing.
- Process can be easily automated. Inexperience personnel can become proficient within a short period of time.
- Any powder spillage on operator's clothes or on ground can be just brushed away or vacuum cleaned.

- No run, sags, drips.
- Better edge coverage due to wrap around property.
- Superior scratch resistance.
- Superior chipping resistance.

Note: The information is true to the best of our knowledge.

However, no guarantee of results is implied since conditions of use are beyond our control.

Sp. Gr.	Film Thickness in Microns										
	50	53	55	58	60	63	65	68	70	75	80
1.50	145.2	137.0	132.0	125.2	121.0	115.2	111.7	106.8	103.7	96.8	90.8
1.55	140.5	132.6	127.7	121.1	117.1	111.5	108.1	103.3	100.4	93.7	87.8
1.60	136.1	128.4	123.8	117.3	113.4	108.0	104.7	100.1	97.2	90.6	85.1
1.61	135.3	127.6	123.0	116.6	112.7	107.4	104.1	99.5	96.6	90.2	84.5
1.62	134.4	126.8	122.2	115.9	112.0	106.7	103.4	98.9	96.0	89.6	84.0
1.63	133.6	126.1	121.5	115.2	111.3	106.0	102.8	98.2	95.4	89.1	83.5
1.64	132.8	125.3	120.7	114.5	110.7	105.4	102.2	97.7	94.9	88.5	83.0
1.65	132.0	124.5	120.0	113.8	110.0	104.8	101.5	97.1	94.3	88.0	82.5
1.66	131.2	123.8	119.3	113.1	109.3	104.1	100.9	96.5	93.7	87.5	82.0
1.67	130.4	123.0	118.6	112.4	108.7	103.5	100.3	95.9	93.2	86.9	81.5
1.68	129.6	122.3	117.9	111.8	108.0	102.9	99.7	95.3	92.6	86.4	81.0
1.69	128.9	121.6	117.2	111.1	107.4	102.3	99.1	94.8	92.1	85.9	80.5
1.70	128.1	120.9	116.5	110.4	106.8	101.7	98.6	94.2	91.5	85.4	80.1
1.71	127.4	120.2	115.8	109.8	106.1	101.1	98.0	93.7	91.0	84.9	79.6
1.72	126.6	119.5	115.1	109.2	105.5	100.5	97.4	93.1	90.4	84.4	79.1
1.73	125.9	118.8	114.5	108.5	104.9	99.9	96.8	92.6	89.9	83.9	78.7
1.74	125.2	118.1	113.8	107.9	104.3	99.3	96.3	92.0	89.4	83.4	78.2
1.75	124.5	117.4	113.1	107.3	103.7	98.8	95.7	91.5	88.9	83.0	77.8

Actual coverage depends on the following factors

- Transfer efficiency of the powder coating gun.
- Recovery efficiency of the powder coating booth.
- Percentage of wastage during the handling.

Actual coverage can also be calculated by formula

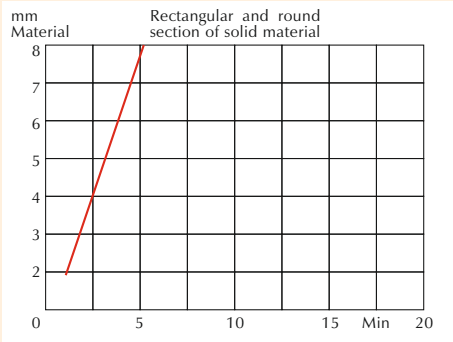
$$T \text{ cvrg} = (1000 * 3.3 * 3.3) / (\text{Sp Gr} * \text{DFT})$$

T cvrg - Coverage in square feet

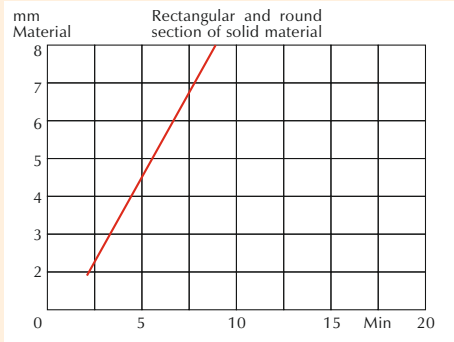
Sp Gr - Specific Gravity

DFT: Dry Film Thickness in micron

Heat-up time for various substrates in air at 200° C

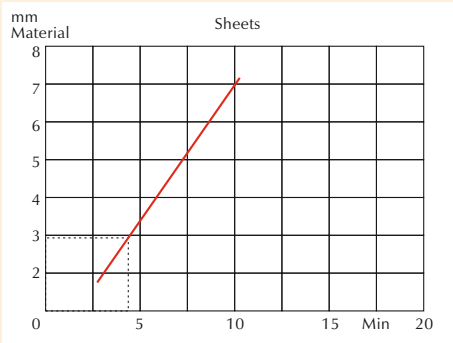


Aluminium

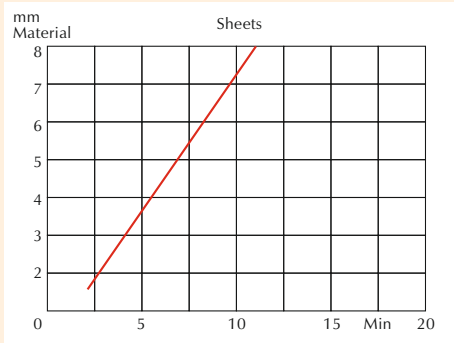


Iron

Time takes for various substrates to reach 190° C in an oven temperature of 200° C



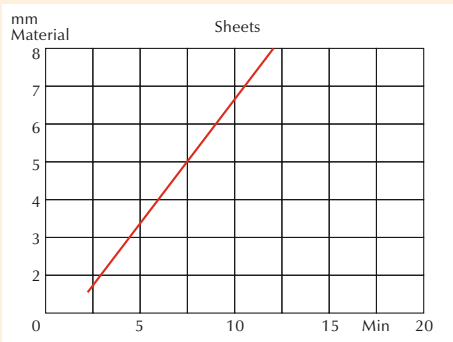
Aluminium



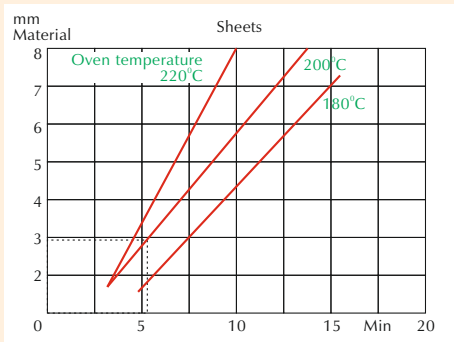
Magnesium

Example:

It takes 4 minutes to heat up 2 mm aluminium sheet to a material temperature of approx 190° C



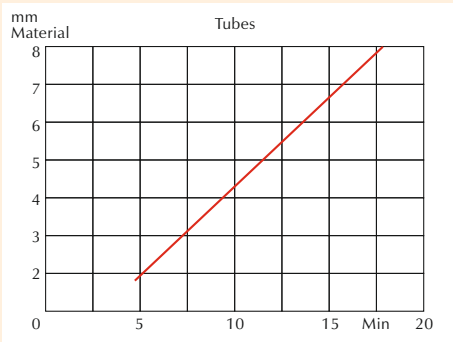
Aluminium



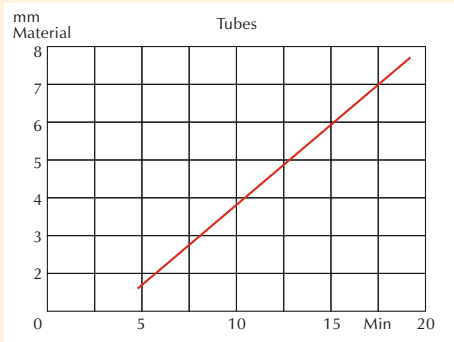
Iron sheet and Aluminium tube

Example:

It takes 6 minutes to heat up 2 mm steel sheet to a material temperature of approx 190° C



Copper



Iron