

## **Technical Support**

Dear Customer,

**We believe that technical support for our customer is a part of our job, so please allow us to present our experience in powder coating trouble shooting, for any further questions or comments, please don't hesitate to contact us, our technical service dept. is very ready to cooperate.**

**Technical service dept.**

### **UNITED COATING INDUSTRIES (UCICOAT)**

The Company functions through continuous Development of our testing, research and development laboratories. Moreover, most of UCICOAT products acquired recently the approval of wide range of customers in Saudi Arabia.

It tries to always catch up with the latest technology in the powder coating world by the continuous collaboration with companies that have preference in this field, and by instructing and training its technicians and workers. Hence, it continues to develop its production with the aim of keeping abreast of scientific and worldwide evolution as far as powder coating products are concerned.

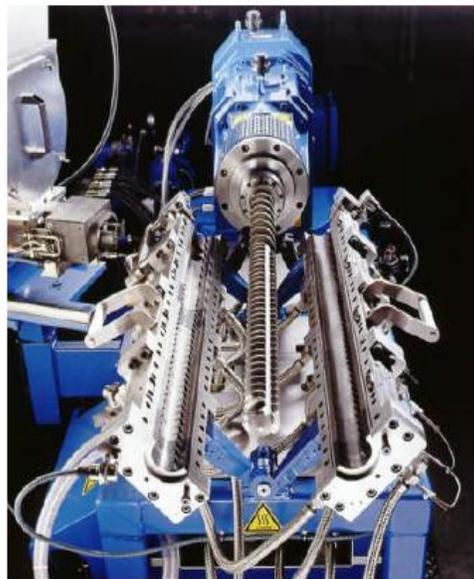
The company has the ability for developing new qualities and adding other products to its product lines.

### **TECHNICAL SUPPORT:**

Statistics show that as much as 90% of all coating failures are a result of poor surface Preparation and application. Good routines and correct application are essential to achieve long-term protection. Our Technical support team has a high level of education and experience, and ensures that you, as a customer get what you need by using different types of devices that enable us to Analyze what is the problem and how to solve it.

There is a requirement for excellent technical support in order to keep all processes running without significant downtime. Technical support can be used in conjunction with hardware and software systems, coordination and calibration of predictive process variables. Technical support team handle the support required for our customers with high level of processing. Technical support is gaining importance in determining a company's competitive advantage. More and more customers are turning to the benefits of customer service, ordering, payments, and technical support.







### Fluidized bed operation

Status	Possible causes	Possible solutions
1-Powder blowing out of hopper	1- air pressure too high 2- Too fine powder particle	1- Adjust the pressure 2(I)Too much reclaim added to the virgin powder (should be less than 10%) 2(II)Too fine originally manufactured powder
2 inadequate air percolation through the powder	1- Insufficient air pressure 2- plugged membrane  3- compacted powder 4- powder level too high	1- check air supply line 2- check the membrane 3- loosen the powder manually 4- Adjust powder level
3- Powder lumps inside container	1- powder stored for long time 2- powder stored at conditions differ than requested (temp > 25 c , humidity > 70%)	Sieve powder using 250 micron mesh screen

### Electrostatic coating operation

Status	Possible cause	Possible solutions
1- Fluctuation in the coating thickness	1-irregular powder feed  2-inadequate gun distance to the substrate 3- inadequate conveyer speed 4- High-voltage fluctuations	1-check powder free flowing properties 2-Readjust the distance between gun and substrate 3- Readjust the conveyer speed 4- Check the electrical continuity from the voltage source to the electrode
2-Low thickness coat	1- very low powder feed 2- high speed conveyer  3- large hook size compared to the substrate 4- poor earthing	1- adjust air pressure 2- adjust speed of conveyer 3- adjust hook size  4- check earth connections, all contact areas must be free of powder built up , grease or any other insulating material
3- poor penetration into recesses and gaps	1- gun voltage too high 2- powder delivery too low 3-poor earthing	1- turn voltage setting down 2- turn up powder delivery setting 3- check earth connections

	4-inadequate gun position	4- adjust gun position
4- Back ionization (powder repelled)	1- gun voltage too high 2- Gun too close to substrate	1- turn voltage setting down 2- adjust gun position

### Spray booth

Status	Possible cause	Possible solutions
1-appearance of bits (like mountains) on the top of coating surface	1-powder melt due to friction 2-dirt falls from conveyer or hooks 3-recycled powder sieve is defected	1- reduce inclines and angles of powder hoses 2- always clean conveyer and hooks 3- adjust or change recycled powder sieve
2-appearance of pin holes	1- powder is contaminated by another type of powder	1- in case of changing of powder type or source - even for the same color - all powder line should be thoroughly cleaned

### Curing oven

Status	Possible cause	Possible solutions
1-poor impact resistance	1-under cured film 2-too high film thickness 3-poor pretreatment	1-increase oven temperature and/or oven dwell time 2-adjust film application 3-check pretreatment
2-poor adhesion	1- poor pretreatment 2- under cured film	1- check pretreatment 2- increase oven temperature and/or oven dwell time
3-decrease in gloss level	1- powder is contaminated by another type of powder 2-high curing temp 3-high curing time	1- in case of changing of powder type or source - even for the same color - all powder line should be thoroughly cleaned 2- adjust curing temp 3- adjust curing time
4- increase in gloss level	1- powder is contaminated by another type of powder 2- grease or oil on substrate surface 3- water or oil in pressurized air	1- stop and clean 2-adjust pretreatment 3-check air filters
5- Cured film easily peeled off substrate	1- powder is contaminated by another type of powder 2- grease or oil on substrate surface 3- water or oil in pressurized air	1- stop and clean

		2-adjust pretreatment 3-check air filters
6-Small holes in film	1- moisture content of powder or on substrate too high	1- check powder and substrate humidity condition
7-Poor chemical resistance	1- under cured film	1- increase oven temperature