



Sumko Engg. Sys.

S No 78/1/1, Shed No 11, Shivkamal Indl Estate, New Ahire Gaon SHIVANE PUNE - 411023

Tel: +91 8308030700

E-mail: sumko@sumkosys.com

Visit us at www.sumkosys.com

We, at **SUMKO ENGG. SYS.** manufacture full range of powder coating systems - booths, recovery systems, conveyors, floor trolleys, ovens and pretreatment plants. Our experience of more than two decades guarantees innovative designs matched with quality and economy. Thus we understand your needs better than anybody else. We, at SUMKO, aim for practical and cost effective, energy efficient designs for any and every application of yours - batch or conveyorised. We maintain high standards of quality. And lastly, we value TIME and deliver ON TIME. So, there is no cost overrun or loss of production because of delay in execution of project.

POWDER COATING PLANT

A powder coating plant is a cluster of equipments designed for specific component or components so as to achieve required production rate. The basic objective behind design and installation of the plant is to use the minimum floor space, streamlined production, efficient material handling, ease of operation, optimum running cost and the highest quality of surface finish.

The plant can be designed either for batch type of operation or for the mass production; depending upon the rate of production. In broad terms a powder coating plant is a cluster of following equipments:

Pretreatment Plant - either dip type or spray type.

Powder Coating Booth.

Powder Curing Oven.

Material Handling System

Powder Recovery System

Electrical Control Panel.

Other accessories for the plant are:

Air Supply or Replacement Plant

Indirect Heating System for Oven. This can be one of the following:

- i. Hot Air Generator with LPG or LDO/HSD as fuel.
- ii. Thermic Fluid Boiler with LDO/HSD as fuel.
- iii. Hot Water Boiler with LDO/HSD as fuel.

D I or D M Water plant.

Water Softening Plant; if required.

Air Compressor and dryer.

Effluent Treatment Plant.

We, at **Sumko Engg. Sys.**; can supply any type of plant on turn key basis. Based on your production rate and the component size; we can design, manufacture, supply and install the plant at your premises, within shortest possible time. We ensure that the plant design is optimum, it's running cost minimum and material handling system is easy to operate.

POWDER COATING BOOTH

The basis for design of powder coating booth is always to suit the specific requirement. This calls for a modular concept for the booth design. the size of the booth is determined by the size of the objects to be coated and the production volume.

For production where there are no frequent colour changes; a booth with gravity operated suction hopper and a cyclone recovery system is economical design.

The bottom portion of the booth is provided with a conical shaped hopper with gyrating volume adjustor plate. The over sprayed powder falls on the sloped wall of the hopper. Because of the high velocity of the air, volume adjustor plate is made to swing around the axis. This causes instant increase in the air velocity along the slopes of the hopper. The oversprayed powder is sucked into the suction duct that is connected to the inlet of the cyclone recovery unit.

A powder coating booth design is basically a design for controlled airflow. The controlled airflow and velocity ensures maximum powder recovery, lower contamination of powder due to efficient recovery and thereby optimum utilization of the powder.

CYCLONE RECOVERY SYSTEM

Economics of Powder Coating depends on the operational efficiency of the powder recovery system.

The Cyclone Powder collector and powder feeder units simplest way to maintain high powder recovery up to 98% of the powder exhausted from the powder spray booth.

Because of specially designed unique “twist” centrifugal action cyclone and controlled air velocity, we can assure the maximum powder recovery; to the extent of 98%.

Air exhausted from powder booth contains oversprayed powder. This powder-laden air is fed into the cyclone at reasonably high velocity. This air-powder mixture is applied with unique rotary “twist” motion; which causes the powder particles to undergo a high centrifugal force. This causes throwing away of heavier powder particles from the air stream. The powder particles then drops down into the collection chamber due to specially designed hopper cone at the bottom.

The collection chamber of the cyclone can be equipped with powder feeder unit for automatic recirculation of the powder.

The collected powder passes through a vibratory sieving machine to feeder unit. A feeder unit pump feeds this recovered powder and fresh powder to the powder spray gun with the help of air pump.

POWDER COATING BOOTH

Listed below are standard sizes of our Powder Coating Booths. We can also supply specially designed booth to suit your job size.

BATCH TYPE

CODE NO	FRONT OPENING “B”	“H “	MOTOR HP
SEBPB 750	600	600	1.00
SEBPB 1200	750	750	1.5
SEBPB 1800	900	900	2.00
SEBPB 3000	1200	1200	3.00
SEBPB 4750	1500	1500	5.00
SEBPB 7000	1800	1800	7.5
SEBPB 9500	2100	2100	10.00

CONVEYORISED FRONT

CODE NO	FRONT OPENING		SIDE OPENING		MOTOR HP
	“B”	“H “	“D”	“H “	
SECPB 1500	600	600	400	600	1.5
SECPB 2500	750	750	400	750	3.0
SECPB 4000	900	900	600	900	5.00
SECPB 6200	1200	200	600	1200	7.5
SECPB 10000	1500	1500	800	1500	10.0

CONVEYORISED BACK TO BACK

CODE NO	FRONT OPENING OPENING		SIDE OPENING		MOTOR HP
	“B”	“H “	“D”	“H “	
SECPBB 2500	600	600	400	600	3.0
SECPBB 4000	750	750	400	750	5.0
SECPBB 6000	900	900	600	900	7.5
SECPBB 10000	1200	1200	600	1200	10.0
SECPBB 7000	1500	1500	800	1500	2 x 7.5