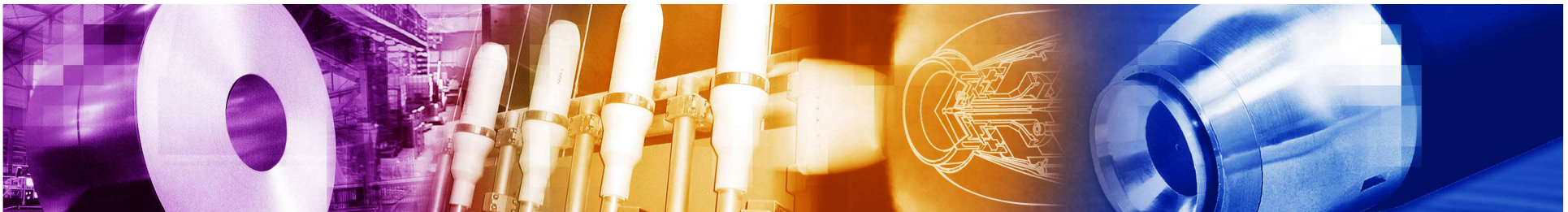




COIL COATING SOLUTIONS

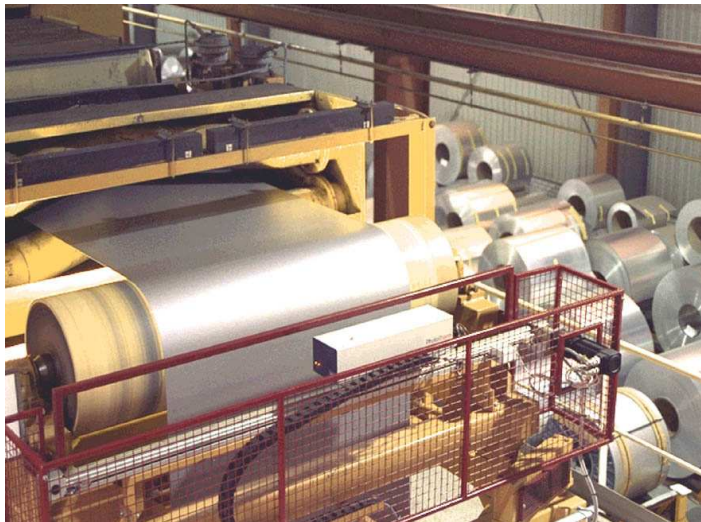


Two kind of applications are involved in the coil coating process:

A - Protection: grease application for corrosion free, primer application or base application.

B - Dry-lub: lubricant application for better steel work.

These two processes are available either in both powder or in liquid application.



Powder application

As per as the liquid application, SAMES offers you approved solutions, flexibility, productivity and the best finishing.

- ◆ **Powder circulating: Long distance powder supply (> 30 m) with accurate flow: LDPS**
Also available: high flow transfer pump supplying powder from big bag.

- ◆ **Application: Electrostatic powder bell solution (InoBell)**
Advantages:
 - Better finish thanks to thickness uniformity of the film
 - Powder savings thanks to the highest transfer efficiency available on the market
 - Maintenance time reduced thanks to high reliability of the equipment

- ◆ **Booth: Static plastic booth:**
Time savings on color changes and maintenance.

- ◆ **Reclaim: powder savings thanks to the high reclaim transfer**

InBell powder bell benefits

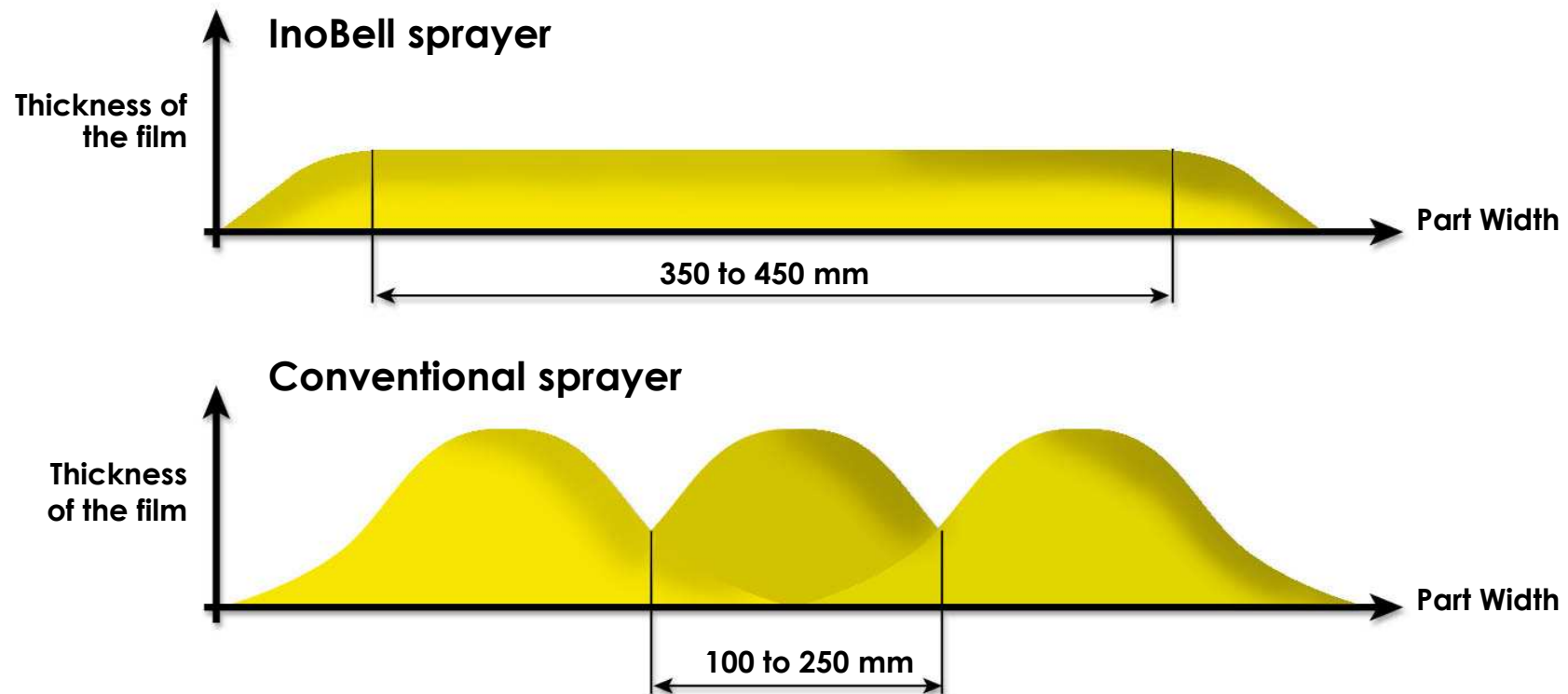
- ◆ High transfer efficiency
- ◆ Certified CE & FM
- ◆ Rotative electrode for better powder charge
- ◆ free ion collector - Orange peel free, better appearance
- ◆ Large spray pattern: from 300 to 450 mm
- ◆ Strong and flexible high voltage unit
- ◆ Up to 85 kV and 100 μ A with separated settings
- ◆ Easy off line maintenance
- ◆ No maintenance on line required due to quick disconnect on bell



InoBell: Large spray pattern, better finish

Sprayer dedicated to flat panels

- > Good charge thanks to low powder output speed and rotary electrode
- > Could spray all kind of powder, standard as well as thin powder

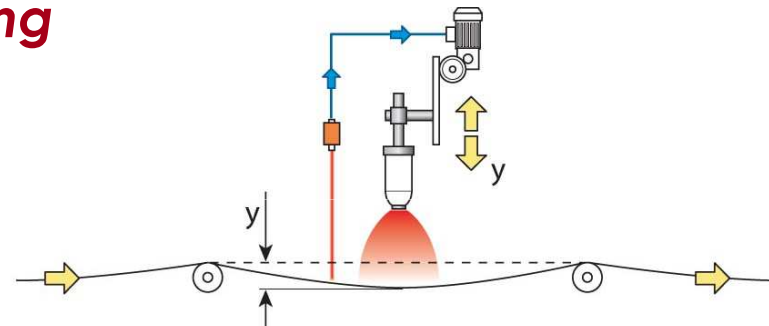


Additional equipments dedicated for Coil Coating application

Laser adjustment :

Measure the coil level in the booth depending on the weight. It automatically adjusts the spraying distance

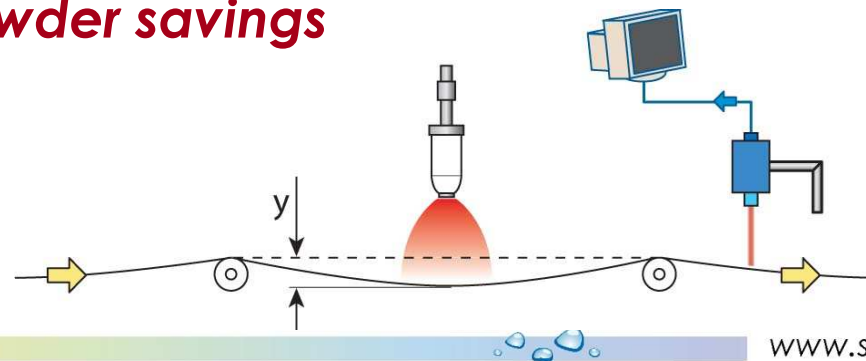
> offers a perfect finishing



Infrared thickness measurement on uncooked film built:

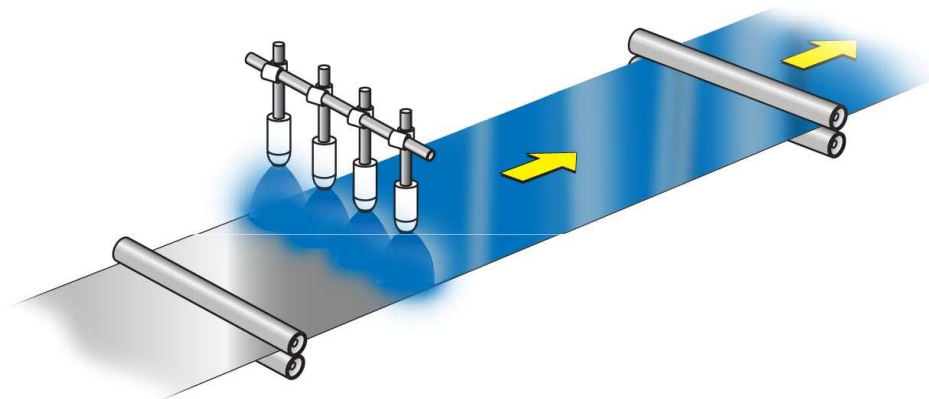
This device gives the powder thickness just after coating. This allows to adjust the powder flow according to the measurement (close loop)

> Productivity and powder savings



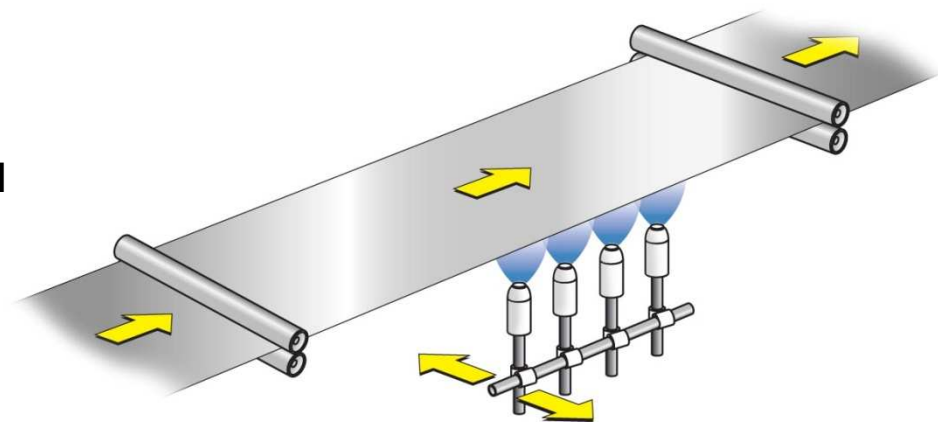
Process:

2 different solutions:

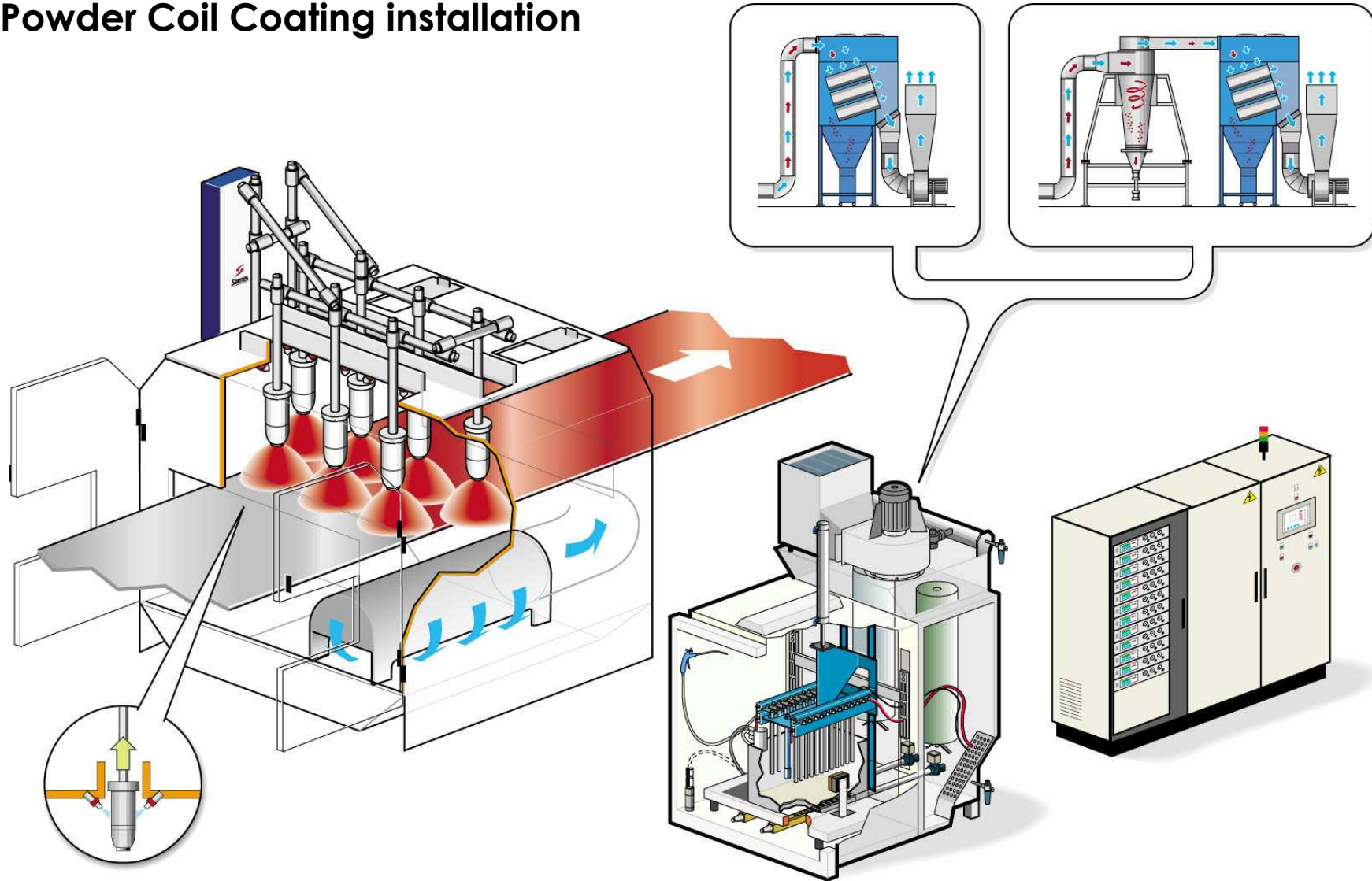


1/ The powder bells are mounted on lines crossing the coil and triggered as required by the coil width.

2/ The powder bells are mounted on one line along the coil. The stroke and flow will be adapted to the coil width and conveyor speed.



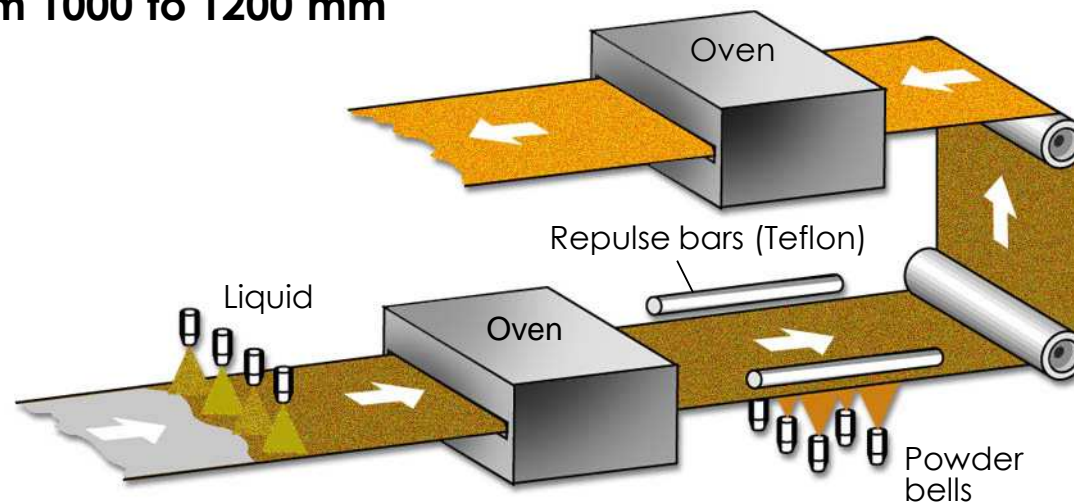
Powder Coil Coating installation



Example of installation: customers PRECOR

Technical specification

- ◆ coil coating: 1 side in liquid, 1 side in powder
- ◆ 2 booths: 1 dedicated for white, one for other colors
- ◆ roll on / roll off booths, on one line
- ◆ 3 powder bells SRV 037 per booth
- ◆ Coil thickness: 0.25 à 0.90 mm
- ◆ conveyor speed: 8 m/min
- ◆ paint thickness: 50 µm (100 µm maxi)
- ◆ width of coils: from 1000 to 1200 mm



References in powder coil coating

PRECOR (Peru): 4 SRV037 bells

IPAC (Chili): 4 SRV037 bells

SEIL (Korea): 7 SRV037 bells

OTEFAL (Italy): 10 bells InoBell (time two)

PROLACK (Spain) 8 bells InoBell (time two)

OTEFAL (France): 5 bells SRV037

Coming soon : NUHPANEL (Turkey) : 12 bells InoBell, integrated in a fast colour changing booth PVV.

Liquid application

SAMES offers a complete and integrated solution, giving flexibility, productivity and the best finish quality.

> Paint circulating: Complete, with modular mixing room for conductive or insulated products.

> Application: Electrostatic rotary bell in the following range...

- PPH 308 to spray one product only.
- PPH 607 Double Circuit Integrated for two products

Advantages:

- Better finish thanks to thickness uniformity of the film
- High thickness control for the film built (up to 0.3 g/m²)
- Product saving thanks to high transfer efficiency
- Maintenance time reduced thanks to high reliability of the equipment

> Booth: Designed for this specific application

PPH 308: Liquid Bell Atomizer



EC65 Vortex bell cup

PPH 308: Customers' benefits

◆ **High transfer efficiency:**

The electrostatic charge of the paint, combined with the bell effect allows a high transfer efficiency (>80%) whatever the moving speed of the atomizer

◆ **Paint atomization:**

The design of the rotating bell/shaping air assembly, combines the spraying of very fine paint droplets with the mastery of the paint pattern, for an impeccable finish

◆ **Large choice of bell cups:**

A large choice of bell cups and associated shrouds covers the spraying of all kind of paints, oil or clearcoat, including high solids contents (up to 80 %)

◆ **Integrated high voltage unit:**

Enhances the safety of the system, fire hazards are greatly diminished

◆ **Easy maintenance:**

The PPH308 was designed to is reduced the time of maintenance operation

◆ **High reliability:**

No high voltage cable, magnetic air bearing (no wear), etc...

