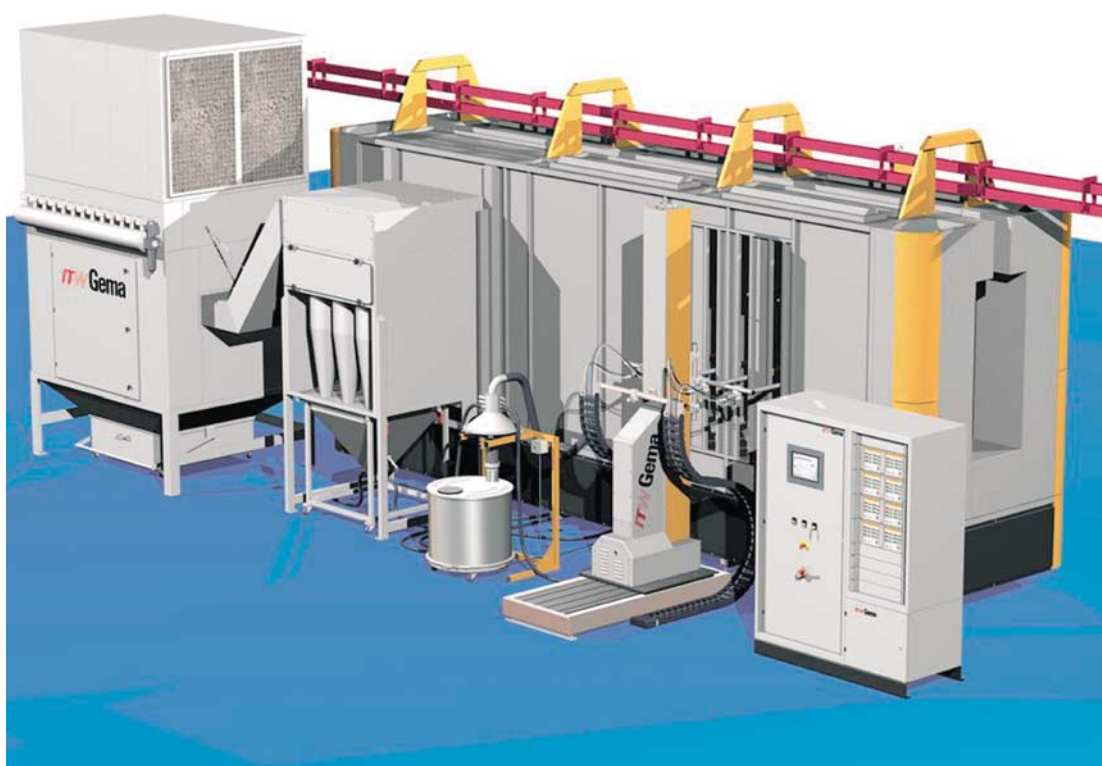


## THE FLEXIBLE BOOTH SYSTEM

The versatile and expandable standard system for single and multiple color operation.



- Multicyclone technology for color changes
- High powder recovery efficiency
- Filter plate technology for main colors
- Combined main/multi color operation
- Stainless steel or plastic walls

1

## Booth control

Used in conjunction with the workpiece recognition, the booth control monitors all system components. It is installed in the ICS switch cabinet and supplied as a unit with the well known OptiMatic gun control.



2

## Squeegee system

The squeegee system automatically pushes the excess powder from the booth floor into the fluidizing channel from where it is returned via a sieve to the powder hopper. The recovered powder is subsequently fed via injectors to the guns.



3

## Multicyclone

Multicyclone powder recovery is ideal for multi-color operation due to high recovery efficiency and constant exhaust air flow rate. Its compact design ensures easy cleaning.



4

## After-Filter

The after-filters are highly efficient in operation and made especially robust for long-life usage. The extremely high separation efficiency from 99.99% is another benefit achieved by this technology.



5

## Powder Transport System (PTS)

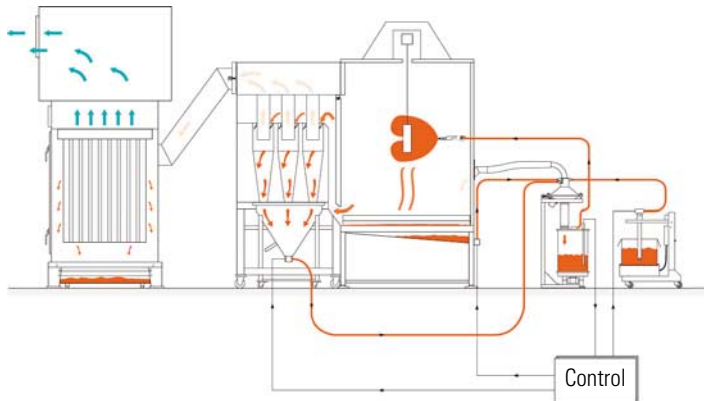
The powder transport system (PTS) is especially designed for multi-cyclone booths. The powder is pumped from the lower part of the recovery container within the multi-cyclone and feeds the powder via the vibratory sieve to the powder hopper and from there by injectors to the guns.



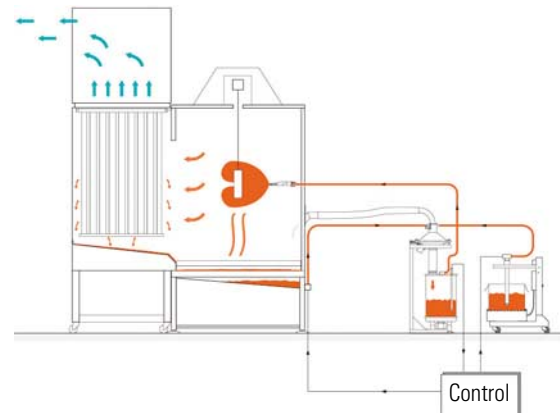
The heart of the powder coating system are our modern, highly efficient powder guns. They guarantee the best coating results and uniform powder coating. Whether long or short stroke: quieter running and high load carrying distinguish the ITW Gema reciprocator equipment. Positioning and stroke lengths are automatically controlled via an object recognition unit.



# ITW Gema



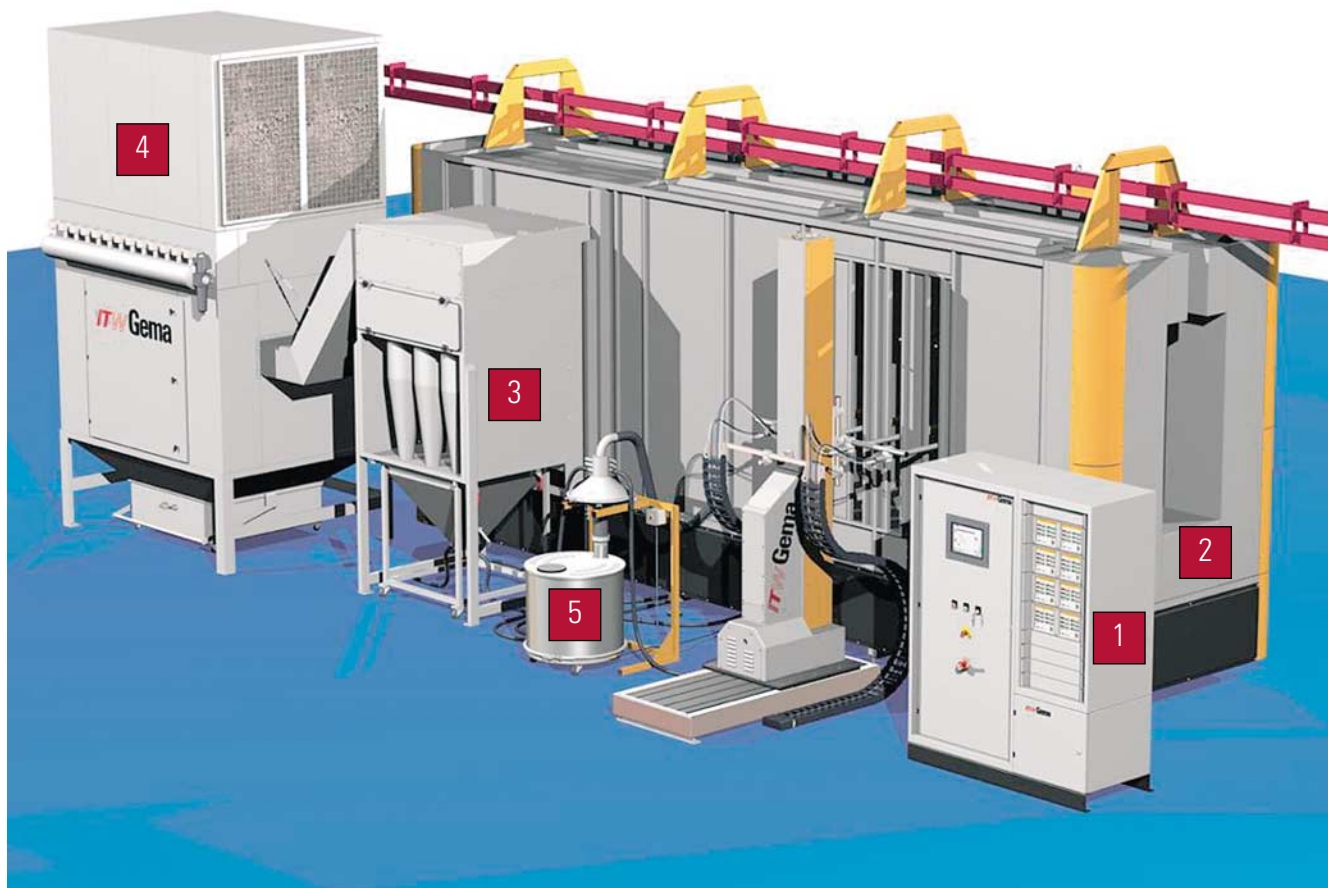
Powder circuit diagram for multi-cyclone recovery



Powder circuit diagram for plate filter recovery

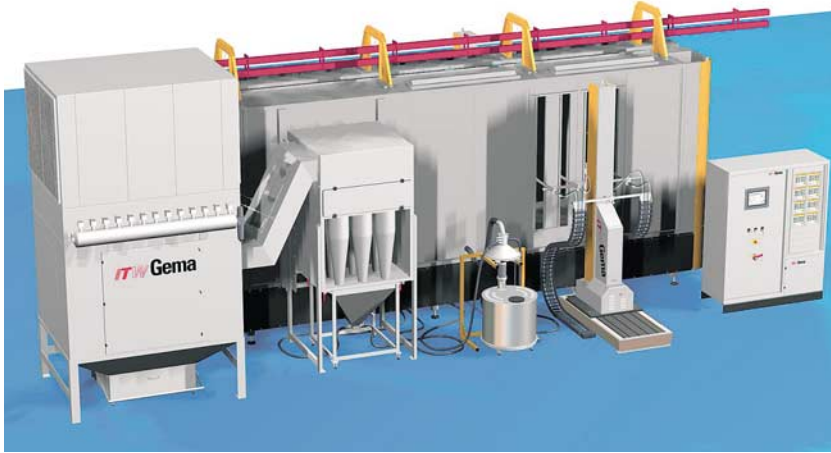
**Versatile usage, compact, robust design, and ease of operation.  
The MRS system fulfills all demands for all kinds of usage.**

Whether for organic or enamel powders: the MRS system is optimized to each application in powder coating. The walls of the booth are made of robust and long life stainless steel sheet material. For automatic powder recovery from the floor of the booth a squeegee system can be installed. Short powder paths and an integrated powder hopper make sure that the MRS is user-friendly and time and cost saving.





**MRS version with multi-cyclone recovery system**



**MRS version with plate filter recovery system and squeegee**



**Criteria for choosing the recovery system**

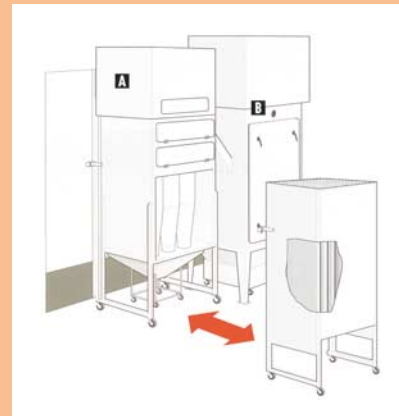
| Type of recovery system | Number of colours |     |     |     |               |     |     |     |     |     | Recovery efficiency % |
|-------------------------|-------------------|-----|-----|-----|---------------|-----|-----|-----|-----|-----|-----------------------|
|                         | Main colours      |     |     |     | Other colours |     |     |     |     |     |                       |
|                         | 1                 | 2   | 3   | 4   | 5             | 6   | 7   | 8   | 9   | 10  |                       |
| Filter plates           | Red               | Red | Red | Red | Red           | Red | Red | Red | Red | Red | 99.9                  |
| Multi-cyclone           | Red               | Red | Red | Red | Red           | Red | Red | Red | Red | Red | 95 - 98               |

**Recovery with multi-cyclone or plate filters:**

The corresponding units (multi-cyclone in multi-color operation and filter plates in single-color operation) can be connected to the same booth opening, depending on the production run. An ideal solution, for example, in multi-color operation with a main color.

The **pulse cleaning unit (A)** is permanently mounted to the booth wall but is used only in conjunction with the plate filter unit.

Also **the after-filter (B)** has a fixed mounting and is used as required, that is, in multi-color operation with the multi-cyclone.



ITW Gema AG  
 Mövenstrasse 17  
 CH-9015 St.Gallen  
 Switzerland  
 Tel. (+41) 71 313 83 00  
 Fax (+41) 71 313 83 83  
 info@itwgema.ch  
 www.itwgema.ch

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