



## FEEDING AND SCATTERING SOLUTIONS



An innovative technology for accurate,  
fast and clean « dry substances » - feeding

**MEPI** *Fine dosing*

*Expertise in solid material feeding*

# The fine art of

## Gravimetric micro feeders of high accuracy



Automatic filling machine for the pharma industry



4A class gravimetric micro feeder



Table top feeder, accurate filling of pots



Accurate, fast and reliable

### A & 2A class micro feeders

Gravimetric micro feeders Fine dosing SPA for discontinuous process, are probably the first on the market to reach such levels of excellence in term of accuracy, short dosing time and flexibility.

- A class : balance resolution of 100 mg
  - 2A class : balance resolution of 10 mg
- Suitable for fine powders, granulates or tablets:

Hygienic design, accuracy up to standard deviation below 10 mg.

### 3A & 4A class micro feeders

3A class or 4A class micro feeders (balance resolution 1 mg or 0.1 mg) are designed to reach ultimate accuracy, with short dosing time.

These feeders are proposed as table top machines for manual filling applications, or can be integrated on automated lines. Inaccurate doses are automatically eliminated.

The easy clean system for quick component dismounting, facilitate cleaning and maintenance operations.

## Gravimetric feeders



Gravimetric filling of bags for pre mix



Fine filling of sachets (pharmaceutical application)

### Bag filling systems

We have introduced a full range of gravimetric filling machines for bags, pots, sachets.

Our innovative solutions offer measurable competitive advantages (with accuracy and flexibility) through short cleaning and changeover times.

These feeders can reach the same efficiency even with difficult components like starch, TiO<sub>2</sub>, fumed silica or free flowing products like spheres.

The design is tailored to the task of each application to make it easy for the operator to control such dosing process simply and securely.

# fine dosing . . .



Hygienic loss in weight feeders



A design dedicated to the highest efficiency

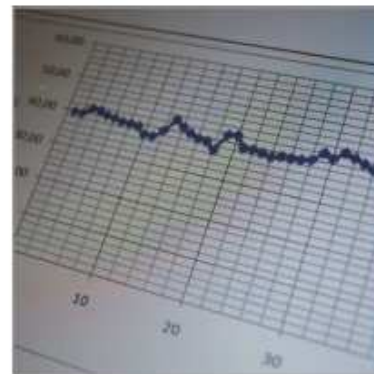
## Loss -in- weight feeders

Our loss in weight feeders are unique, not only for their design, but especially, for their performance and ease in cleaning. The design of these feeders was made for end users looking for efficiency, simplicity, weary of the losses of time spend in the cleaning operations, weary of the costs of maintenance. In comparison with screw feeders, they offer incredible results in terms of accuracy and dosing time for batch process, and short term stability for continuous process.

## Weighing controller



High performances behind a friendly interface



To ensure a full control of the process

## Feeding controllers

MCPI process controllers are designed to take all the advantages of MCPI Fine dosing technology and provide users with an ergonomic solution, intuitive, flexible, accurate and secure.

The advantages as follows :

- Feeding with 3 adjustable flow rates to ensure accuracy and short dosing time.
- Automatic correction of overshoot (with max. and min. limits).
- Weighing with 100 000 resolution points.
- 100 Product recipes can be stored.
- Recording of 800 000 feeding results (data exchange with USB key or network connection).
- 6" or 10" colour touch screen.
- User-friendly interface which is easy to operate.

## Volumetric micro feeder



For fast & adjustable and accurate micro doses



Volumetric feeder for doses from 0.05 gram to 10 grams.

## Accurate volumetric feeders

For fast and reliable feeding. In batch processes, it is possible to reach up to 3600 cycles per hour, for quantities between a few milligrams up to some dozens of grams.

The same feeder can operate a large variety of materials in a wide range of output flow.

These feeders (thanks to their endurance) can be installed on large scale production lines, with their proven ability to rapidly produce precise doses.

- Dosing time, from 0.2 "
- Dose : from 50 mg

## Powder scatters



Powder scatter mounted on a "C" shape trolley.



Topping of desserts



Fine distribution of granules



« A final touch »

## Powder transfers



Transfer tube between 2 process equipments



Feeding system for cosmetic powder

### Powder scatters

A powder scatter is evaluated on three main process criteria :

- Long and short term stability of output flow.
- Good profile distribution on the machine width.
- Coverage of ingredient onto a surface (free of defects).

MCPI customers benefit from extensive know how in this sector. We provide optimal systems for all type of ingredients up to 2 m width, with hygienic design. They are used in numerous applications, from pharmaceutical and food to metal industries.

### Multi heads feeders

The unique MCPI's Multi-head Feeder, is probably the best solution on the market, to give on multiple application points, a simultaneous, quick and accurate dispensing of ingredients, with perfect sprinkling effect.

#### Advantages

Cadency : up to 75 cycles per minute.  
Ingredients : fine powder similar to icing sugar or granulates as large as nuts.  
Max width : up to 2 m  
Number of tracks : number & width can be modified to fit the machine to several production lines.  
Can work on continuous or discontinuous basis.  
The movable "C" trolley, facilitate cleaning operations.

### Powder transfers

Can convey small and medium amount of dry materials over lengths up to 1.5 m. The design and manufacturing are made according to hygienic rules. It is possible to flush these transfers with water.

#### Applications

Alimentation of feeders, sieves, reactors, mixers ... transfer between equipments.

# The MCPI Fine dosing systems advantage



## Process

- Accuracy & fast : probably the most efficient system.
- Short reaction time : giving fast and repeatable feeding in volumetric mode.
- Extraction capacity over large width, giving regular scattering.
- Capacity to dose difficult material, thank to high and controlled extraction energy.
- Protect your sensitive products, thanks to very reduced mechanical frictions applied on the ingredient.
- Almost no particle size segregation.

## Cleaning

- Compare with others technology, MCPI Fine dosing systems, offer consistent advantages :
- Disassembly time : few seconds, without mechanical parts, screws or couplings to be removed.
- All parts in contact with the ingredient are in Stainless steel. No risk of pollution with lubricants.
- Most of our systems (except gravimetric micro feeders) can be flush with water.

## Reliability

- Wearing free system with no friction between the mechanical parts and the material.
- No risk of pollution of the material with metal particles coming from mechanical friction.
- Maintenance : Our systems are designed to work along the day at high cadency. Maintenance limited to lubricant change every 2 years.

## A winning principle

MCPI Fine dosing innovating and patented extraction principle is based on a oscillating movement with fast return speed.  
This reliable technology offers numerous benefits that maximize feeding accuracy and production yield.



# MCPI Competence center



## Test station

*We take care of the processing of your product. We test the best combination on our pilot machines backed up by experienced and qualified people. Our commitment is based on these results.*

## Conceptual design

*We have all the necessary skills and facilities to design our system, including mechanical and electrical engineering.*

## Tailor made system

*Ours unique experience in powder feeding enables us to realize tailor made individual solutions.*

## Maintenance and service

*Repairs can be carried out in our workshop with reduced delay. We offer production and maintenance training for your staff.*



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