

MICRO INGREDIENTS

Loading station



APPLICATION

The micro ingredient loading station unit is used for controlled dosing of the required amounts of small ingredients, generally in powdered form, such as enhancers, sugar, flour, salt, gums before subsequent transportation to the usage points. They are used for minor ingredients within a production process. They can be used to introduce different products to a (multi-product) production line.

It can be used for other non-food applications involving any type of solid material in powder form.

OPERATING PRINCIPLE

When the system requests the micro ingredients for the recipe, the products are transported from the different micro ingredient loading tanks to the micro ingredient scale using a worm screw, where the amount set by the system is dosed. It is possible to dose both the product itself and a blend of different ingredients from the micro ingredients station.

Various components are included to facilitate the emptying of the hopper and to transport the raw material it contains to the points of use, such as rotary valves, butterfly valves, worm screws, vibrators, extractors, and/or sifters. These are selected depending on the product and use. These elements enable transportation by vacuum.

DESIGN AND FEATURES

A micro ingredient sieve is used during discharging from the loading stations to prevent any foreign particles entering the production lines.

The number of micro ingredient loading tanks is determined by the customer's requirements.

Platform enables access to the equipment.

Manually operated powder aspiration system.

Stainless steel protective grate for manual feed of the loading tanks.

Micro ingredient loading station flow rates ranging from 60 kg/hour to 180 kg/hour.

*Flow rates always depend on the product used and the installation conditions.

Types of raw material: flour, starch, leaf, grain, sugar, salt.

DESIGN AND FEATURES

Solids level detector.

Weighing instruments.

A discharge vibrator to aid raw material transfer.

Extraction components are pressurised when the raw material is either sugar or salt.

TECHNICAL SPECIFICATIONS

Materials:

| | |
|-----------------------------------|----------------------------|
| Parts in contact with the product | AISI 316 |
| Other stainless steel parts | AISI 304 |
| Guards | AISI 316 |
| Seals in contact with the product | TR08 FDA cellular silicone |

Surface finish:

| | |
|----------|---|
| Internal | 2B with removed and polished welds, $Ra \leq 0.8 \mu m$ |
| External | 2B with brushed welds |

Operating thresholds:

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|---------------------|------------------------------------|
| Capacity | from 40 L to 115 L |
| Working pressure | Atmospheric |
| Working temperature | Ambient (equipment without jacket) |

OPTIONS

Semi-automatic tank loading system.

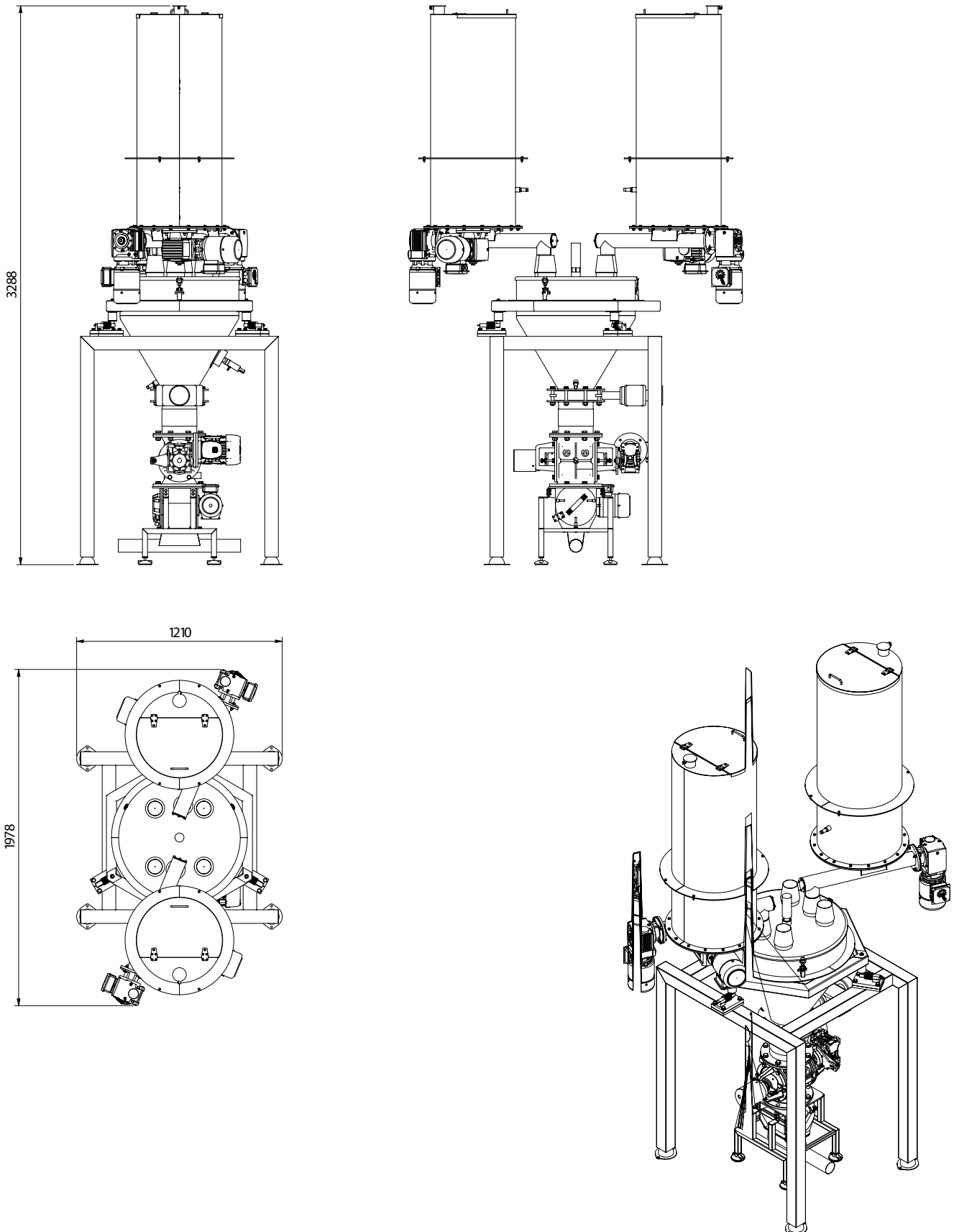
Installation of an automatic powder aspiration system.

Non-standard ATEX marking.

Other configurations and products to be consulted.

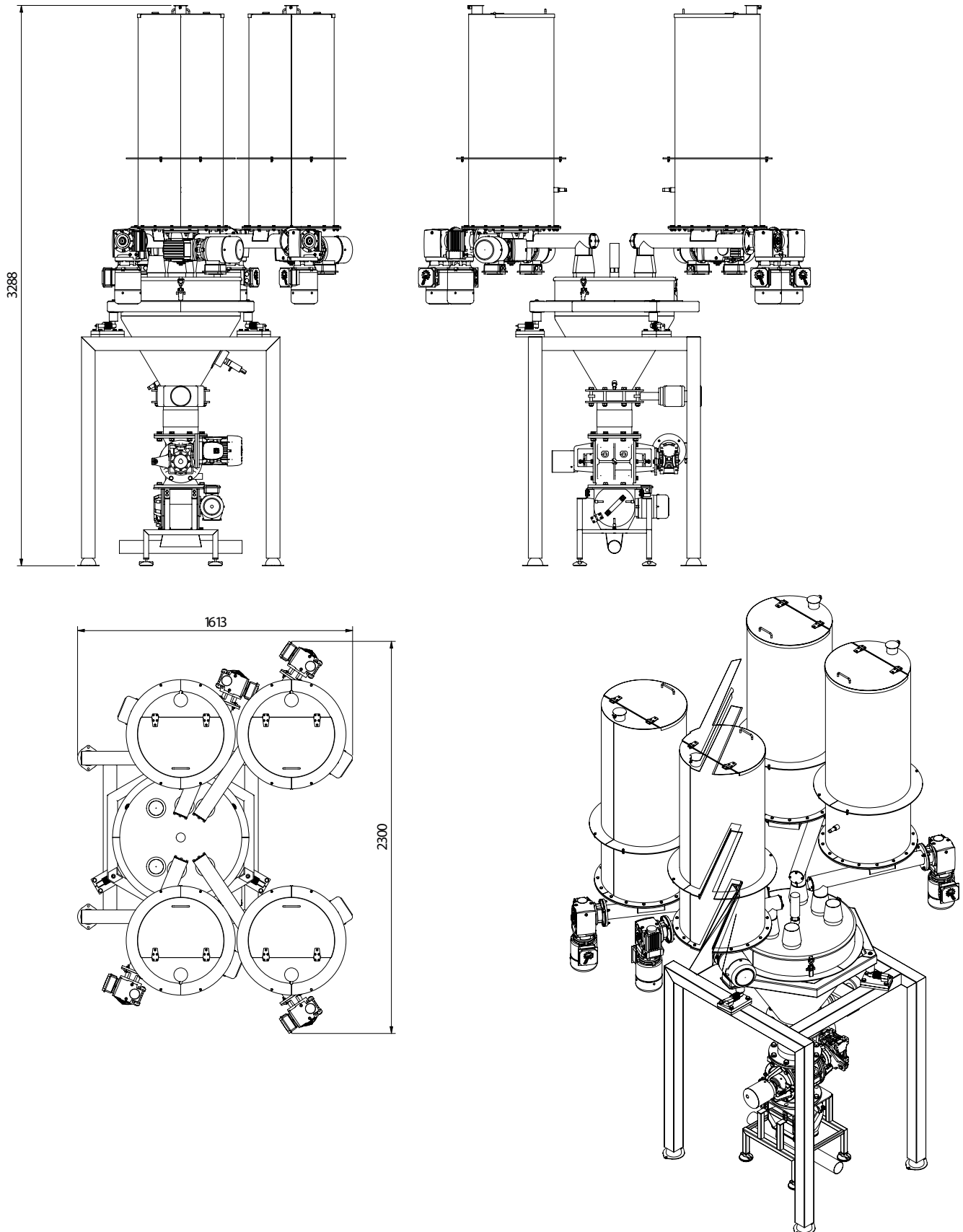
GENERAL DIMENSIONS

Dimensions: micro ingredient loading station with 2 tanks



GENERAL DIMENSIONS

Dimensions: micro ingredient loading station with 4 tanks



GENERAL DIMENSIONS

Dimensions: micro ingredient loading station with 6 tanks

