

## ■ Process: Manufacturing of Chewing Gum



Pict.1: Herding® Filter Units



Pict. 2: Packing machine

## ■ The Task

The process of manufacturing chewing gum consists of mixing many materials together, such as latex and sugars, creating a soft and chewy texture.

The gum base (latex) is coarsely grinded into a powder and mixed until uniform consistency, then dried. After drying, the gum base is cooked until melted in large kettles. Additional ingredients such as fine powdered sugar are stirred into kettles. Kneading the mass until the proper texture is done with large machines. Rolling it onto a slab attains proper thickness. Prior to scoring, the gum is dusted with powdered sugar and broken into pieces, thus creating more dust. Some gums will be spray coated, and then tumbled to dry. Finally the gums are packaged.

The ingredients stated above, are of artificial and organic components, which include oils and rubbers.

Furthermore, the cooking process may generate flammable material. The powdery substances account for dust around work areas and in the air. Proper filtering and ventilation will eliminate nearly all dust. This will better ensure safety for personnel, and cleanliness of work areas/machines and the gum.

## ■ The Solution

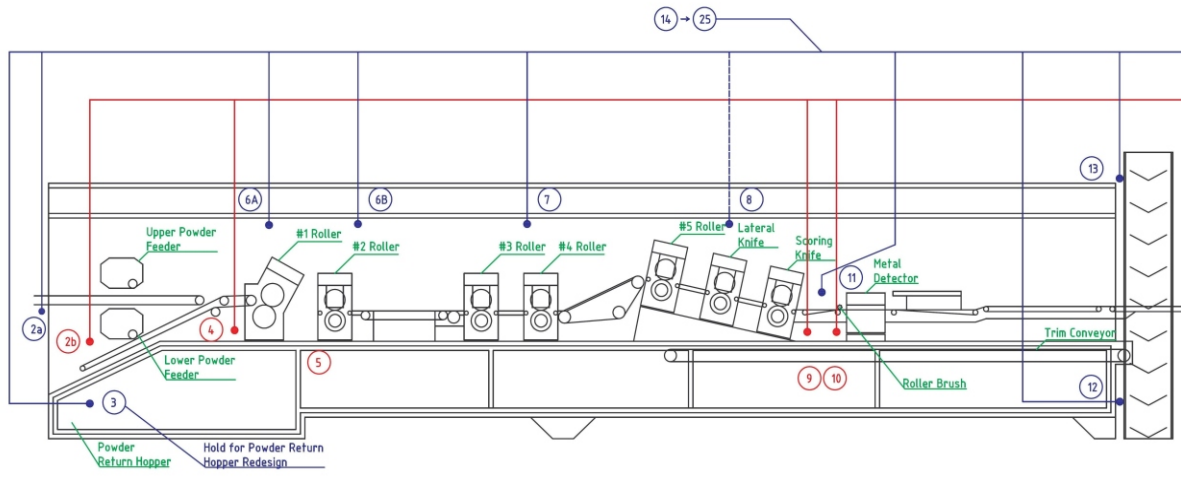
### Herding® Filtration Dust Extraction System

**Types:**  
HSL 1500-12/18 GZ and HSL 1500-24/18 GZ

#### Technical features:

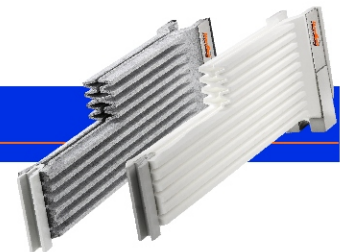
- ▶ Consistency of 0.2 mg/m<sup>3</sup>;  
HEPA filter class R (HEPA H11)
- ▶ Extremely high useful life of filter media due to pure surface filtration
- ▶ Clean air recirculation into the working environment is possible
- ▶ Dissipative, so-called antistatic filter elements and equipotential bonding to avoid active ignition sources
- ▶ Explosion protection by venting, suppression or containment
- ▶ Optimal recovery of filtered products back into production, due to a non-linting filter media

# Herding® Filtration in the Chewing Gum Industry



## Advantages Herding® Sinter-plate Filters

- ▶ Very high availability due to the long service life of the Herding® Sinter-plate Filter
- ▶ Expected dust concentration in clean gas <math>< 0.2 \text{ mg/m}^3</math>
- ▶ Low pressure loss due to the relatively large filter area
- ▶ Consistent surface filtration using PTFE coating
- ▶ Contamination-free product recovery



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