



PART OF GEURTSEN GROUP

#### Gemini Techniek B.V.

Metaalstraat 22 7483 PD Haaksbergen The Netherlands

+31 (0)53 428 3000 info@gemini-techniek.com www.gemini-techniek.com

## **Filling**

Filling can be divided into two main technologies:

- Volumetric.
- Gravimetric.

## Volumetric filling machines

Volumetric filling machines are based on a self-priming cylinder. A piston is moving inside this cylinder and the stroke length and diameter of the piston determines the filling volume.

## Gravimetric filling machines

Gravimetric filling machines are measuring the exact weight using a valve that is placed over an electronic scale. The scale in combination with the weighing program controls the valve operation resulting in a weighing process.

Decision conditions	Volumetric (By volume)	Gravimetric (By weight)
Difficult product properties (air bubbles, large particles, etc.)	X	V
Large volumes (over 20 liters)	X	V
Small/medium volumes (20 liters or less)	V	V
Budgeted cost (gravimetric is generally more expensive)	€	€€€

## **GemiFill S**

## Semi-automatic volumetric filling machine

The GemiFill S is a fully pneumatic operated filling machine. It has a high accuracy, reproducibility, self priming (without the need of a pump) and easy to clean.



### **GemiFill C**

## Fully automatic volumetric filling machine

The GemiFill C is a fully pneumatic operated filling machine (compared to the GemiFill S). This machine is provided e.g. with a transport system and a quick width-adjustment (stepless).





## **GemiFill GR**

#### **Gravimetric filling machine**

The GemiFill GR can fill 1 product directly from a storage container. This is done by means of a pump (pneumatic/electric) or based on gravity with a 2-step pneumatic operated filling valve for coarse and fine flow filling.

## **GemiFill GR-M**

## Gravimetric filling machine for multiple components

The GemiFill GR-M is standard suitable for filling up to 40 different products. This is done by means of a pump (pneumatic/electric) or based on gravity (compared to the GemiFill GR).





## **GemiFill DF**

#### **Drum & IBC filling machine**

The GemiFill DF can fill into 25 ltr. (jerry)cans, 200 ltr. drums and/or 1.000 ltr. IBC containers.

# **TT** Dispensing



#### Batch Dispensing

Ideal for clients who distribute large batch volumes

Large homogenized vessels (up to 6.000 kg)

Requires filling system if sold in small volume sales packaging



#### In-can Tinting

Ideal for clients with varying short-run products

Small sales packaging (such as 1 ltr containers)

Eliminates the need for dedicated filling system Paint dispensing (often referred to as blending, dosing or tinting) can be divided into two production methods: Batch Dispensing and In-can Tinting.

Batch Dispensing means that the various individual components are dispensed into large batches, mixed and connected to a filling system to be accurately placed into the final sales packaging. Batch dispensing is a great solution for users who already have a filling system or prefer larger homogenized dispensed batches for their material.

In-can Tinting means that various individual components are dispensed directly into the sales packaging. This method bypasses the need to produce a large batch or for a dedicated filling system. It also eliminates the need for regularly cleaning the mixing vessel(s) and filling system after each product change.





## Dispensing machine

The FlexoKing FT is standard suitable for dispensing up to 40 base materials and/or colorants. This machine is typical suitable for batch dispensing as well as in-can tinting.

## FlexoKing CD

#### **Gravimetric Compact Dispensing machine**

The FlexoKing CD can dispense up to 24 base materials and/or colorants in a compact construction. This machine is typical suitable for in-can tinting as well as batch dispensing.



## **GemiTint ED**

#### **Gravimetric Easy Dispensing machine**

The GemiTint ED is a semi-automatic dispensing machine by means of a filling program (optional) or manual dispensing. Standard suitable for dispensing up to 20 components.

## MicroDispenser MD

Gravimetric Dispensing machine for small quantities with an extremely high accuracy

The MicroDispenser MD is standard executed for dispensing of max. 36 components. It has an extreme high accuracy with reproduceable drops up to 2 / 3 mg.





## **Gemini WPD**

Gravimetric Wallpaper Plastisol Dispensing installation

The Gemini WPD is standard executed with up to 40 dispense valves for PVC paste, colorants and return paste.

## **GemiClean VW**

#### **Vessel Washing machine**

The GemiClean VW is suitable to clean open top vessels or open top 200 ltr. drums. There are 3 different models available: small / medium / large. This machine will result in safer production processes and better working conditions.





## **GemiClean TS**

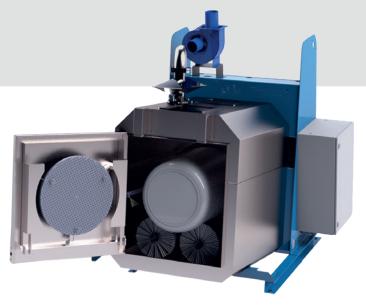
#### **Tub Scraping machine**

The GemiClean TS is suitable to clean tubs (PE) with PVC return paste. The cleaning cyclus is executed by means of rotating scraper blades, brushes and spray nozzle system.

### **GemiClean DW**

#### **Drum Washing machine**

The GemiClean DW is suitable to clean the complete drum on the inside as on the outside. The machine can be executed based on the specifications of the customer.





## **GemiClean RW**

#### **Squeegee Washing machine**

The GemiClean RW is suitable to clean squeegees with a maximum quantity of 6 pieces incl. paint tray per washing cyclus.

## **GemiClean SW**

#### Screen Washing machine

The GemiClean SW is suitable to clean screens with a maximum of 2 screens simultaniously. It can be executed with 1 or 2 vertical wash cabinets.





## **GemiClean CW**

#### Screen & Squeegee Combi Washing machine

The GemiClean CW is suitable to clean 2 screens and 2 squeegees simultaneously.



## Tanks and piping

Gemini can also offer a wide range of different tanks and piping besides the filling, dispensing and cleaning machines. The tanks and piping can be integrated into an existing or new system with different options and features, such as several stainless steel qualities. They are deliverable including measuring, engineering and assembling on site. Tanks are available with optional agitators, level sensors, heating system, etc.

## **Specials**

Besides our machines for filling, dispensing and cleaning, we also manufacture tailor made special machinery. Some examples of these 'specials' are:

- Can closing device with bottom coding (automatic).
- Pail closing device (semi-automatic).
- Rack for additional exchangeable filling cylinders.
- Pump skid including a 2-step filling valve.
- Inkjet Domino printer (ATEX Zone II executed).

## **Disclaimer**

Please contact Gemini for the specific machine flyer with detailed features and specifications.



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