

# PRI

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**ii GEMINI**  
by **PRI**

## Filling Systems for Paints, Coatings, Inks & Chemicals

Standard or Custom Product Lines | Gravimetric or Volumetric | Flexible Options



# Large or Small Scale Filling Systems

Custom-designed to fit your application, in either gravimetric or volumetric.

Gemini by PRI™ filling systems are available in either volumetric or gravimetric technologies. Using either a measured volume to fill or by measuring the fill to a specific weight. The chart below show the areas were either method is best suited.

**Volumetric Filling Systems** are based on a self-priming cylinder. A piston moves inside the cylinder, and the diameter and length of the stroke are measured, determining the filling volume.

**Gravimetric Filling Systems** measure the precise weight of the fill material through the use of a valve and load cell. The filling is electronically-controlled and programmed, ensuring an accurate amount of product is placed in the container each time.



Decision Conditions	Gravimetric <i>(by weight)</i>	Volumetric <i>(by volume)</i>
<b>Difficult Product Properties</b> <i>(air bubbles, large particles, etc.)</i>	✓	✗
<b>Large Volumes</b> <i>(over 20 Liters)</i>	✓	✗
<b>Small/Medium Volumes</b> <i>(20 Liters or less)</i>	✓	✓
<b>Budgeted Cost</b> <i>(gravimetric is generally more expensive)</i>	\$\$\$	\$



## Volumetric Filling Systems

### GemiFill™ S - semi automatic

- Self-priming, fills directly out of a drum or vessel, no pump needed
- Seven preset volumes or stepless adjustment
- Easy to clean removable filling cylinder or automatic rinse cycle
- Adjustable stainless steel work table
- Fully pneumatic operation
- ATEX explosion proof

### GemiFill™ C - fully automatic

Includes the GemiFill™ S line, plus the following features:

- Transport system
- Lid closing and/or lid placing system
- Optional check weighing

## Gravimetric Filling Systems

### GemiFill™ GR - semi or fully automatic

- Fills directly from a tote tank, storage container, dissolver etc.
- Height adjustable filling valve for different types of packaging
- Fills by means of a pump or gravity
- Easy to clean by automatic rinse cycle and dismantable filling valve
- Simple to operate batch controller (with self-learning parameters)
- Easy to expand with a roller track, lid closer (pressing/crimping), screw cap closer, sub-level filling lance etc.
- Upgradeable to fully automatic by means of conveyors, lid systems

### GemiFill™ GR-M - multiple products

Includes the GemiFill™ GR line, plus the following features:

- Standard for filling up to 40 products
- Circular or linear dispensing depending on the container sizes
- Two-step filling process (coarse and fine flow) of a single ingredient or formulations
- Batch controller with self-learning parameters
- Can connect up to three scales between 15 kg up to 6,000 kg
- Available as ATEX explosion proof or non explosion-proof

## Direct Drum or IBC Filling Systems

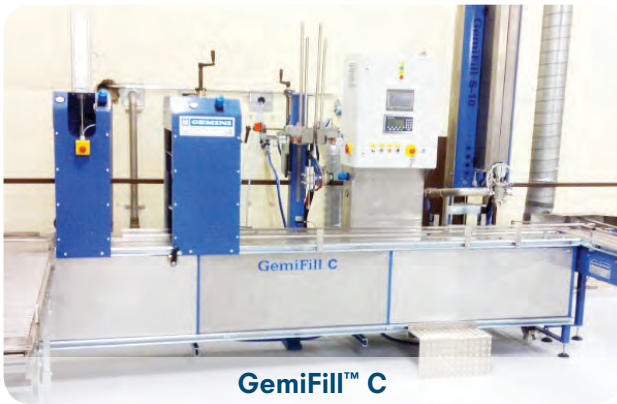
### GemiFill™ DF - fill while palletized and bundled

- Fills from 5 gallon buckets, 55 gallon drums, to 250 gallon IBC's
- Fills using pneumatic or electric pump
- Fills directly on a floor scale or by means of a roll conveyor system
- Movable filling nozzle for positioning just above the drum bunghole
- Batch controller with self-learning parameters
- Suitable for non-foaming (top fill) & foaming (bottom fill) products
- ATEX explosion proof

## Filling Line Accessories

### Pail or Can Closing, Crimping, and Coding

- Can closing with bottom coding (automatic)
- Pail closing device (semi-automatic)
- Rack for additional exchangeable filling cylinders
- Stand-alone 2-step filling valve with support frame
- Fully automatic paint filling machine with combined volumetric filling (for small volumes) and gravimetric filling of drums



GemiFill™ C



GemiFill™ GR-M



GemiFill™ DF



Lid Placement, Closure Systems

# Compare Filling System Models:



GemiFill™ Systems:	S/C	GR	GR-M	DF
Models Available:	S2.5: 125 ml - 2.5 L	custom	custom	custom
	S7.5: 250 ml - 7.5 L			
	S12.5: 500 ml - 12.5 L			
	S20: 500 ml - 20 L			
Volume Range:	125 ml - 20 L	15 kg - 6000 kg	15 kg - 6000 kg	25 L - 1,000 L
Accuracy of Fill:	< 0.5% deviation	depends upon scale type	depends upon scale type	depends upon scale type and product characteristics
Filling Method:	volumetric	gravimetric	gravimetric	gravimetric
Air Pressure:	6 - 8 bar	6 - 8 bar	6 - 8 bar	6 - 8 bar
Filling Valves:	1	1	up to 40	1
Materials of Construction	SS/PTFE wetted parts	SS/PTFE wetted parts	SS/PTFE wetted parts	SS/PTFE wetted parts
Dimensions	8 x 4 x 4 ft	custom size	custom size	custom size

## Other Process Solutions from PRI:



Filling Systems



Container Washing Systems



Solvent Recycling Systems



Progressive Recovery, Inc.

Solvent Wash & Recovery | Biowaste Sterilization | Custom Process Skids | Service

700 Industrial Drive, Dupon IL 62239, (618) 286-5000, [www.progressive-recovery.com](http://www.progressive-recovery.com)