

# VALUECELL FILL

SEMI-AUTOMATIC AND REFRIGERATED BAG FILLING  
SYSTEMS FOR CELL & GENE APPLICATIONS



A **NEW TOOL** FOR CELL & GENE THERAPY APPLICATIONS



**COMECER**

AN **ATS** COMPANY

# VALUECELL FILL

SEMI-AUTOMATIC AND REFRIGERATED BAG FILLING SYSTEM  
FOR CELL & GENE APPLICATIONS

*The ValueCell FILL is a first of its kind technology for assisting customers during their downstream aseptic bag filling operations. The ValueCell FILL is one of COMECER's many offerings designed from the ground up to meet the unique challenges in the fields of Cell & Gene therapies and related areas (Viral filling, Media filling, Cryo filling).*

*The primary goal of ValueCell FILL is to dispense production bulks (held in a suitable source bag) into a series of final or intermediate bags.*

## Unique Features

- Bag dispensing is performed in a one-by-one filling fashion. In the ValueCell FILL receiving bags are assembled together in a pre-sterilized Single-Use Set, sharing a common manifold.
- Bag dispensing typically needs to be carried out in grade A, as the filling is an open activity. In the ValueCell FILL, filling is performed under closed conditions, so the machine is suitable to be used in lower room classifications such as Grade C environments.
- Air removal from the filling line happens through an initial bag collecting air in the pre-sterilized tubes while priming the line.
- Product saving is another critical factor and takes place by reverse pumping at the end of the filling process, to avoid discarding of vital product left over in the lines.

## ValueCell Fill strengths

- All-in-one, closed aseptic filling plug-n-play solution for Pharma & CGT applications:
  - Integrated large capacity refrigerator, with ample storage of source material
  - Gentle paddle-mixers for each bag ensures a homogeneous mixture
  - Pump speed selection for reduced cell stress
  - Near zero product loss with reversible pump - maximum product yield!
- Dual bag filling paths for efficient throughput
  - "As needed" mixing surge bags for minimized mixed time outside of cryo
  - Air removal and built-in Q/C bag with each pre-sterilized bag manifold
  - While manifold is filling, the other is prepped - for continuous operation

- Scalable batch sizes to match your production growth and adapt to changes
  - Fill rate - up to 150 bags in 1 hour (20 mL fill)
  - Customizable bag size range (50-250ml standard) for future flexibility
- Intuitive setup with programmable filling "formulas" via touchscreen HMI
  - In-line bubble sensors and weigh scales ensure proper dispensing
  - Allen Bradley or Siemens based
- Designed for cGMP production
  - Suitable to be used in lab or Grade C cleanroom environments
  - Designed to fill: viral vectors, final cell product, intermediates, media, etc
- Automated bag sealing solution improves operator efficiency.



The filling rack portion with bags, bubble sensors and pinch valves



The refrigeration module contains multiple paddle mixers for gentle squeezing of source bags, ensuring a homogeneous mixture

The reservoir bag utilized for line priming and air collection typically becomes your QC bag

*The ValueCell FILL has a modular structure where three main components can be identified:*

### The storage area

where the source bag is kept can be refrigerated or not, and it allows for weighing controls on the source bags, for dispensing calibration and monitoring.

### The distribution rack and the automated bag sealing and cutting system

They allow individual filling and closing of final product containers.

### The peristaltic pump filling system

are designed for ATMP's, with low shear stress and suitable connections.



## Optional features

An automated mixing system can be added in the refrigerated storage compartment, to allow an initial formulation of the product solution to be dispensed, e.g., adding dilution or cryopreserving components before dispensing in the final bags.

Where required, the ValueCell FILL can be equipped with gentle paddle mixers, in order to keep the density of the dispensed solution as constant as possible during the aseptic filling process.

Specific customer needs can be investigated and Comecer can provide a personalized version of ValueCell FILL.

## Miscellaneous

**Bag formats:** a certain degree of customization is available to meet specific customer needs. To know more about available formats and potential new applications, please get in contact with our Sales Team.

**The filling module** can be adapted, in terms number of bags on manifold and fill volumes. One bag is always kept as reservoir for the air in the tubing system (it can be used as a QC sample too) giving customers flexibility over several features of different applications.

**Closing system:** automated thermal welding of the bags are currently under development and will be available in the future as a standard option.

## Technical data

Support frame material		Alluminio 6061-T6
External casing material		AISI 304 - Scotch-Brite™
Refrigerator case material		AISI 304 - Scotch-Brite™
External dimensions		2400 x 815 x 1980 (w x d x h)
Refrigerator compartment internal dimensions	mm	848 x 543 x 1498 (w x d x h)
Bag holder shelf dimensions	mm	900 x 110 (w x d)
Shelf dimensions for peristaltic pump test	mm	900 x 110 (w x d)
Weight	kg	900

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