

## GRANITEN FLEXLINE APPLICATION: PRIMARY BOTTLE LINE CLINICAL TRIALS

The modular and scalable Graniten Flexline platform, has a close-to-zero (C2Z) changeover time, allowing for an efficient and agile move towards personalized medicine, and 'batch size one'.

This Graniten Flexline example, handles the primary packaging step of filling, and capping plastic bottles, leaving the line as traceable bottles. The eight modules selected, correspond to the customer's specific process needs, but can be altered to fit your process.

### Main Features

- Line includes following process steps:
  - Bottle unscrambling
  - Bottle air rinsing
  - Desiccant dispensing
  - Tablet inspection, counting, and filling
  - Manual station (if required)
  - Bottle capping
  - Cap induction sealing
  - Cap retorquing
  - Outfeed, reject, and sample point
- Handling minimum 9 types of bottles (3 round, 6 rectangular), for this example with  $\varnothing$  40-60 mm, and H 60-120 mm.
- Packaging minimum 5 types of caps.
- Scalable & upgradeable - new modules can be easily added or upgraded at a later stage, thereby extending the life of the investment.
- One HMI controlling the entire line, and communicating to the local MES system.



### Technical Data

#### Applications:

Bottles

#### Capacity

15 bottles per minute

#### Technical changeover time:

< 3 min. allows for minimal order sizes

#### Flexibility

Bottle - cuboid (LxWxH):  
min 40x35x60 mm, max 55x45x120 mm  
Bottle - square (LxWxH): 45x45x80 mm  
Bottle - round ( $\varnothing$ xW): min 40x60 mm,  
max 48x80 mm  
Cap ( $\varnothing$ xH): min 35x17,5 mm, max  
45x17,5 mm  
Closure ( $\varnothing$ xH): min 34x29 mm, max  
45x29 mm  
Canister and sachet: A broad range  
provided

#### Scalable and upgradeable:

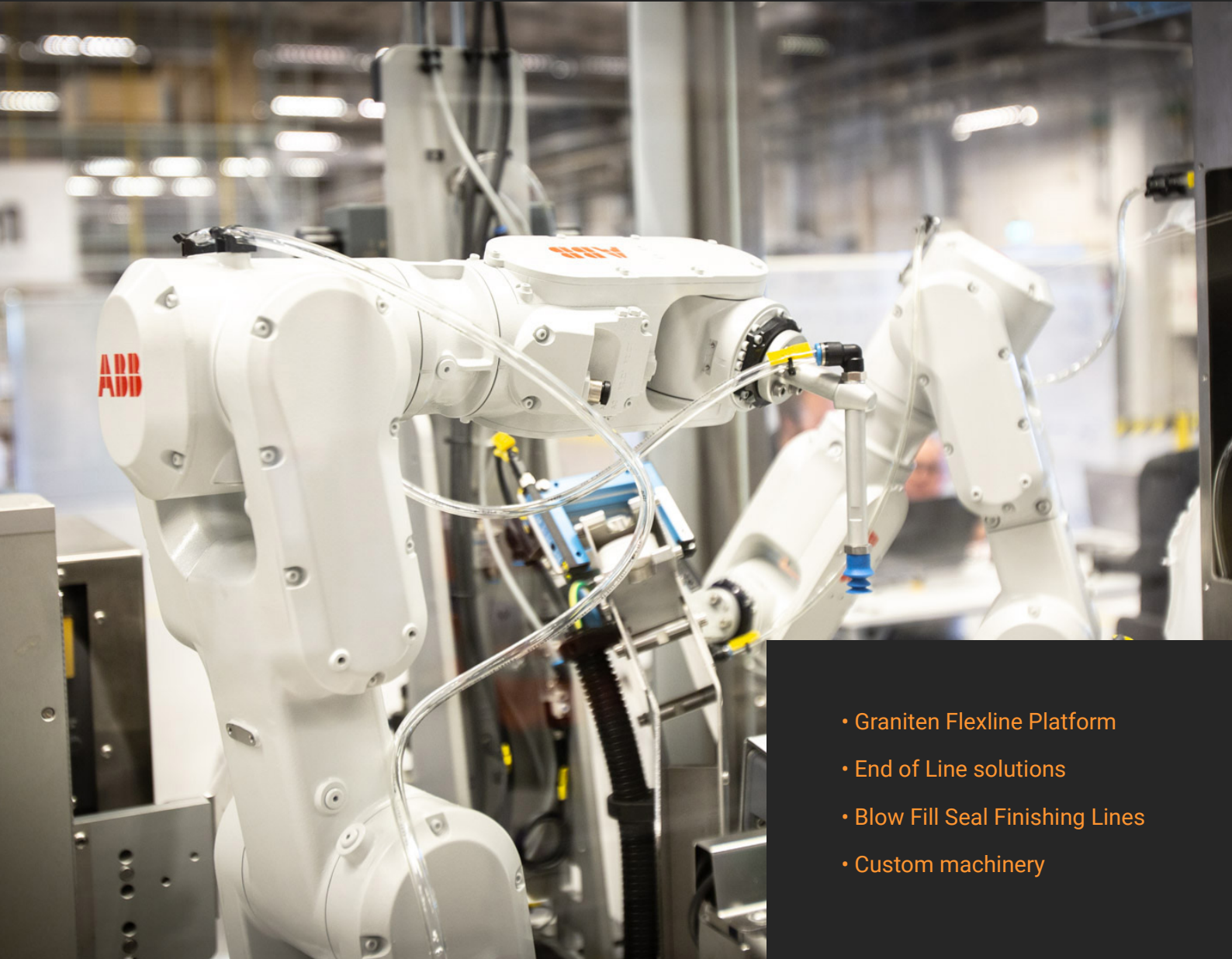
Adapt to your changing production requirements

#### Footprint:

6,75 m long & 1,8 m wide



*Graniten offer turn-key machinery innovation for the Pharma and Healthcare industry, focusing on faster and more reliable changeovers and low total cost of ownership with a small footprint to increase overall efficiency.*



- Graniten Flexline Platform
- End of Line solutions
- Blow Fill Seal Finishing Lines
- Custom machinery

## GRANITEN

Kärrastrandsvägen 125A  
451 76 Uddevalla  
Sweden  
Phone: +46 (0)522 239 00  
Email: [info@graniten.com](mailto:info@graniten.com)

As one of the world's most innovative automation companies, we help our customers to use automation efficiently, to increase their productivity and to lower environmental impact in a sustainable way. Our product range for Pharma, focuses on primary and secondary packaging of small batches, and a wide variety of tertiary end of line packaging. From clinical trials to full scale production equipment, and custom innovations.

**Scalable | Upgradable | Flexibility Modularization | Vision Technology  
Intelligent Solutions | Robotic Applications**

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