

**SYNTEGON**

PROCESSING & PACKAGING

# High speed bagger for Snacks

SVL 2310



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**SYNTEGON**

## □ About- Syntegon Packaging Technology India - Goa

- ❓ 28 years of existence in India.
- ❓ State-of-the-art manufacturing and development facility.
- ❓ We offer processing and packaging machines for Vertical, horizontal, and secondary packaging.
- ❓ Sustainable growth from inception.
- ❓ Inhouse innovation and application center.
- ❓ 150+ well qualified and experienced employees.
- ❓ Installed base of over 3,000 machines in India and overseas.
- ❓ Average age of employees 35 years.
- ❓ Total plant space 10,500 sqm.





## □ Target product segments

**Potato chips**



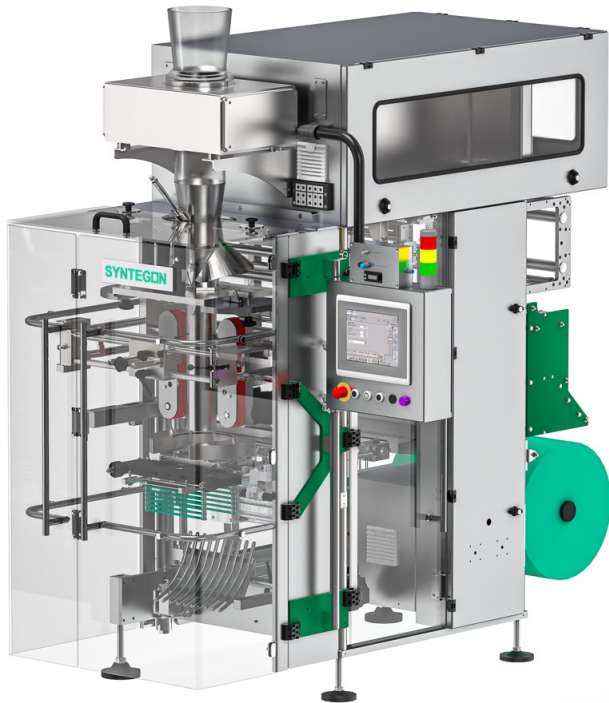
**Puff & pop corn**



## □ Bagger overview

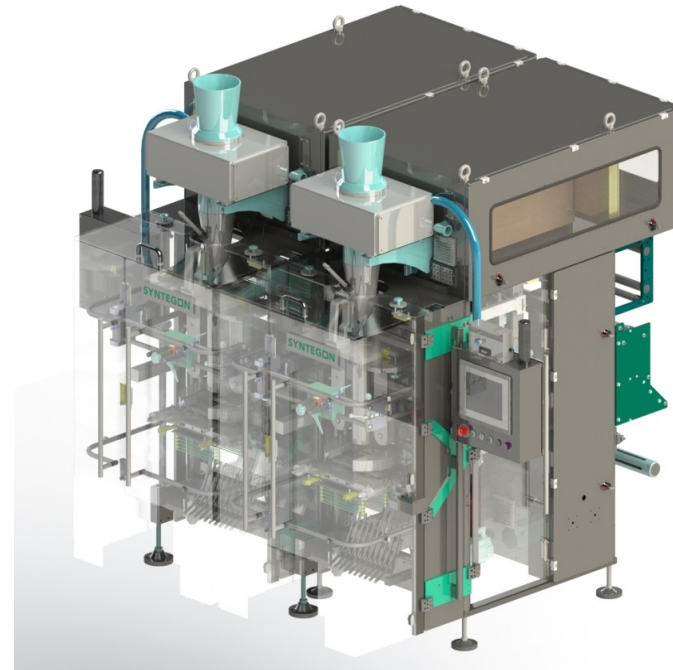
**Model:** SVL 2310

**Version:** Single

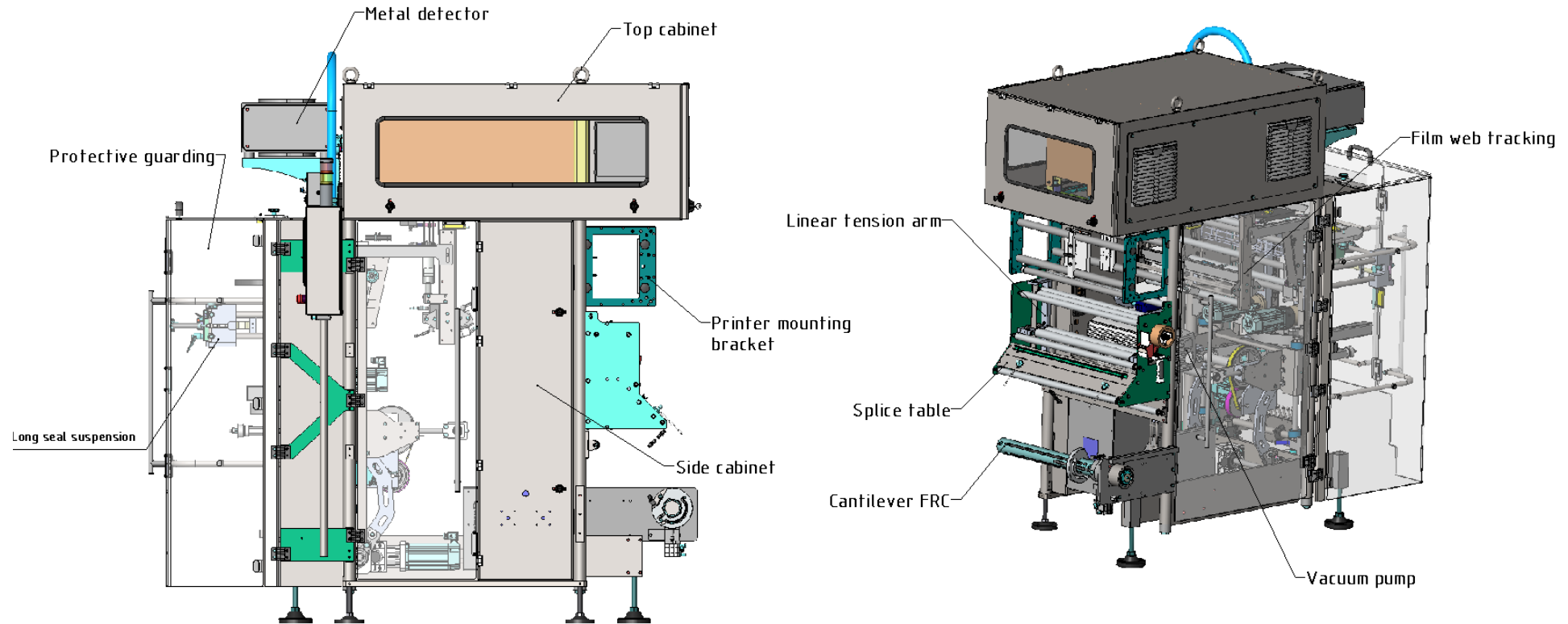


**Model:** SVL 2310 T

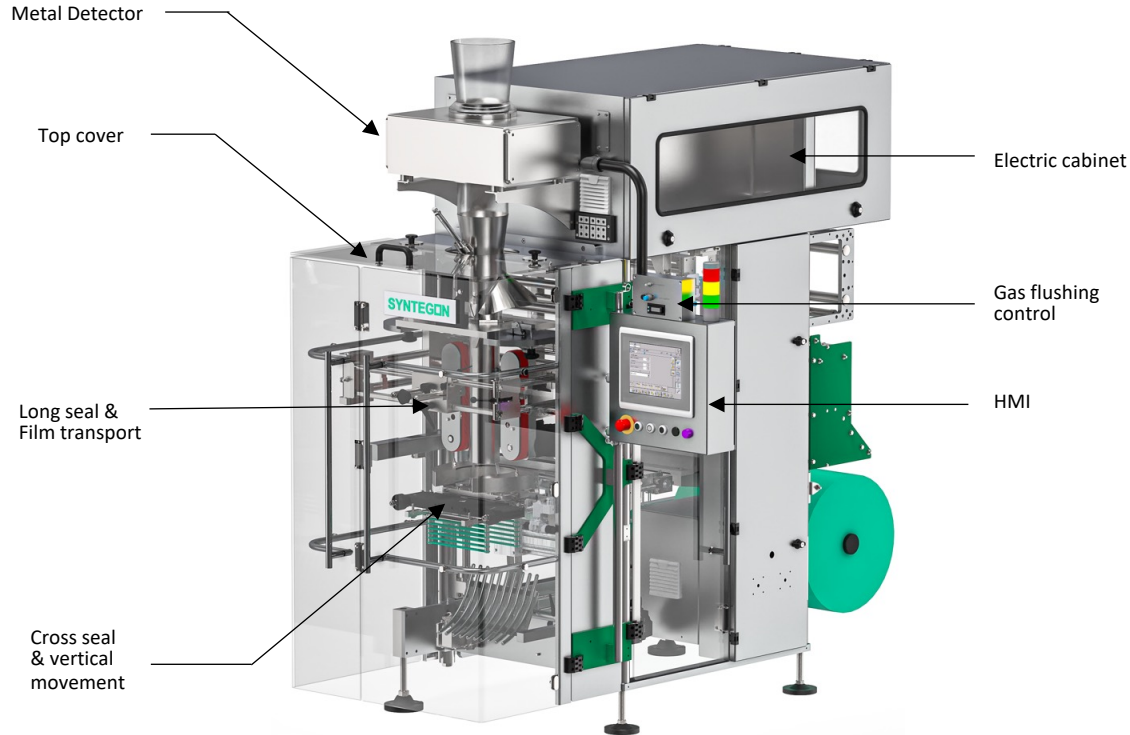
**Version:** Twin



## □ Bagger overview



## □ Bagger overview



### Machine utility requirements:

- ❓ Compressed air requirement: 6 bar
- ❓ Average air consumption: 50 Lpm (HS)
- ❓ Electrical requirement: 200 - 240 VAC Three Phase 50/60 Hz, 30 Amp
- ❓ Electrical consumption : <3.5 Kw

### Optional features:

- ❓ Gusset & block bottom bags as option
- ❓ Product choking sensor
- ❓ Integrated metal detector
- ❓ Option for vacuum splicing
- ❓ Splice tape detection
- ❓ Adjustable lip shoulder for format

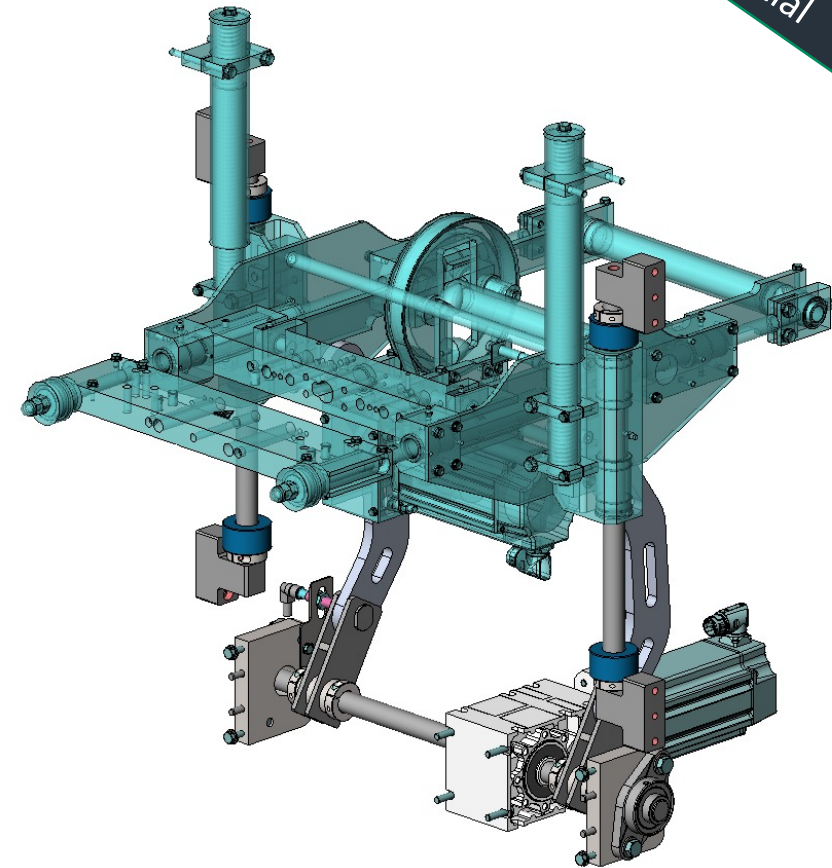


## □ Vertical movement drive

- ❓ Dual-guided vertical movement for smooth and controlled cross seal housing movement.
- ❓ Servo motor with 90-degree motion transfer gearbox.
- ❓ Low-inertia motor with high resolution encoders.
- ❓ Stripping function for better seal integrity at high speeds.
- ❓ Accurate positioning of CSJ with safety sensor interlock.

### Benefits:

- ❓ Controlled vertical movement based on the bag length will reduce the cycle time and increase the machine speed.
- ❓ Servo motor for precise motion even at smaller dimensions and good efficiency control.
- ❓ Easily accessible and robust design for maintenance



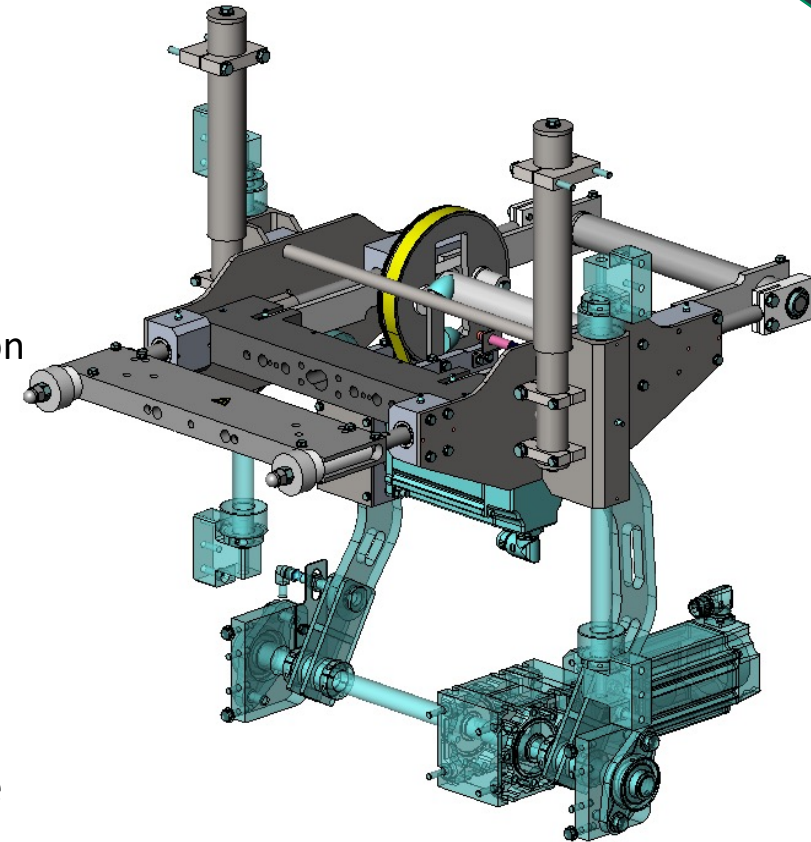


## □ Cross seal jaw housing

- ❓ Dual-guided shaft design for smooth operation, less friction, better movement, easy settings.
- ❓ Robust design for good stability and less vibrations stimulus in better sealing accuracy.
- ❓ Improved hygiene design with stainless steel sheet metal housing
- ❓ Option to implement side gusseting/block bottom/PE film sealing jaws on same assembly.
- ❓ Option of conventional or front-block mounted accessible knife design.

### Benefits:

- ❓ SS housing improved hygiene design, ease access for cleaning and maintenance.
- ❓ Controlled horizontal movement based on the bag depth will reduce the cycle time and increase the machine speed.

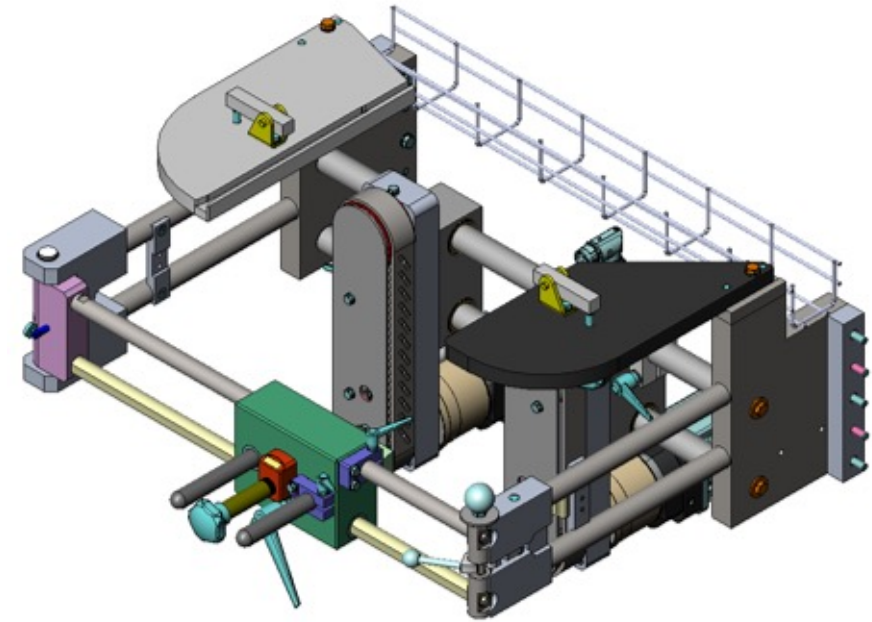


## □ Film transport

- ❓ Independent servo motor drive for both sides of film transport belt.
- ❓ Precision planetary gearbox with low backlash for precise positioning.
- ❓ Vacuum belt film transport
- ❓ Long seal suspension, format suspension & film transport integrated in common mounting unit for better maintenance.
- ❓ Fine setting & adjustment possible.

### Benefits:

- ❓ Vacuum film transport belt, increase in belt life and reducing maintenance cost compared to friction belt.
- ❓ Servo motor for precise motion even at smaller dimensions and good efficiency control and better bag length repeatability.
- ❓ Suspension compatible with all long-seal types- Drag seal, Band seal, short long seal, PE monolayer film sealing.

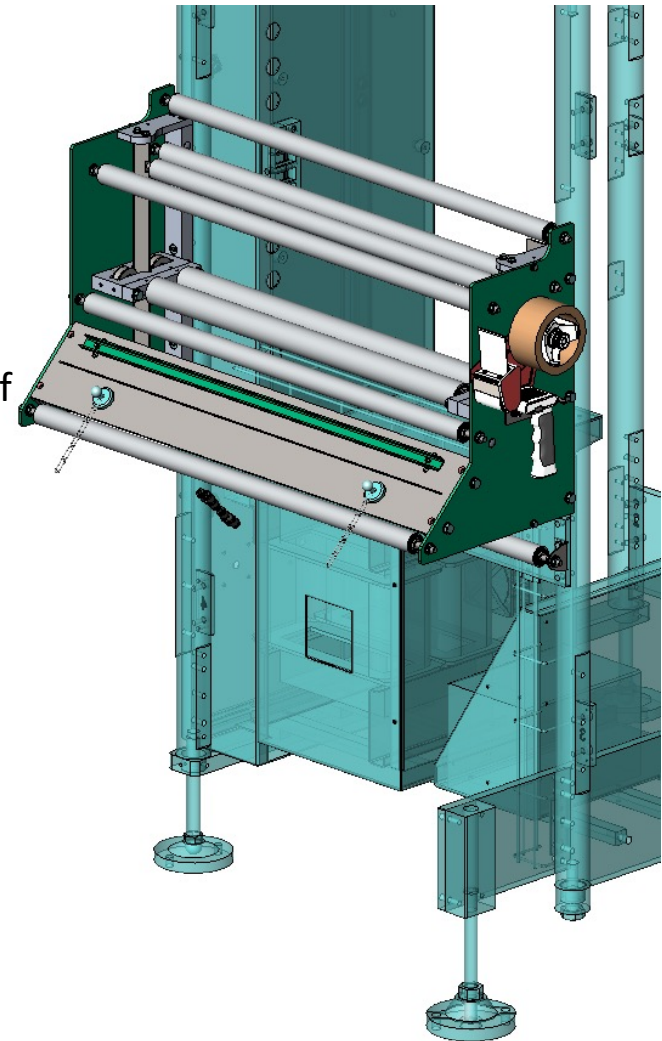


## ❑ Splice table with linear tensioner

- ❑ Weight/gravity based linear-tensioning roller, no more hassle of tension settings, which was directly influencing on the pouch repeatability.
- ❑ Ergonomic splice table – easy to splice & join film rolls.
- ❑ Magnetic & pneumatic film clamping during splicing.
- ❑ Sensor logic for film tension sensing, auto machine stop at low film/end of reel.
- ❑ Reduce film tracking effect with v-groove rollers in linear movement.

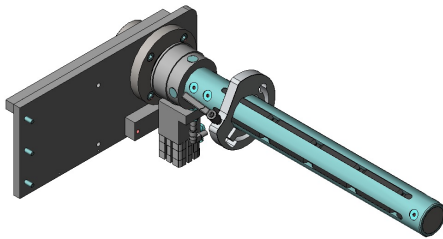
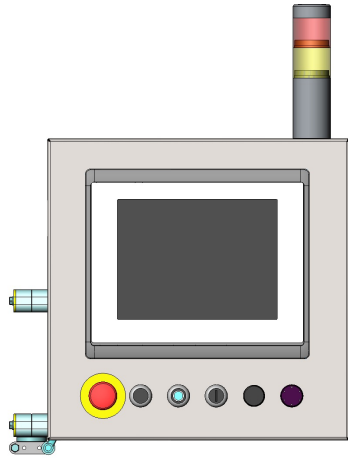
### Benefits:

- ❑ Compact and robust design, ease accessible for routing the film, cleaning and maintenance.
- ❑ No need of frequent check on the film tension.
- ❑ Reliable design for better pouch repeatability.





## □ Key features in the bagger

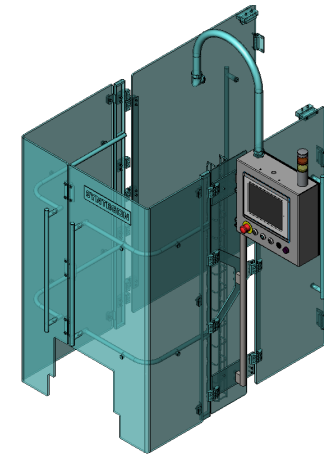
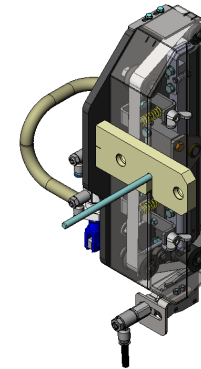


**10.4-inch Touch panel with tracking & gas flushing controls enabled through HMI.**

**Lap/fin seal for BOPP & PET-PE films without changing sealing system- using band sealer**

**Ergonomic film loading, near end of reel warning, auto-stop at end of film reel.  
Cantilever film reel carrier as standard.**

**Easy-swivel design HMI for operator friendly**



## □ Key features in the bagger

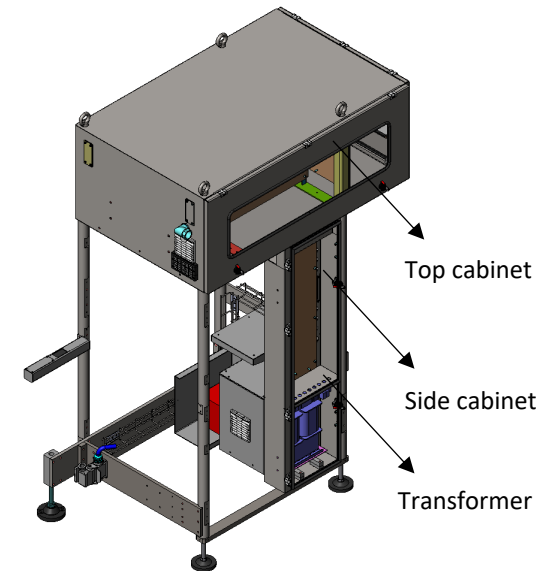


**Allen-Bradley controls, 4 –Axis continuous servo controls through 10.4” AB-HMI, Integrated with AB-Programmable logic controllers (PLCs).**

**Top mounted, modularized electrical cabinet, Frequently-accessed switchgear on side cabinet for easy-reach. (LOTO provision)**

**Operator friendly UI design. Bifurcation of power and communication cables side & top cabinet. Remote service access.**

**Bottom mounted transformer. 42 Volt heating elements, with option for 220 V.**



## □ Key features in the bagger

Pressure regulator with digital display



Energy-saving air service unit

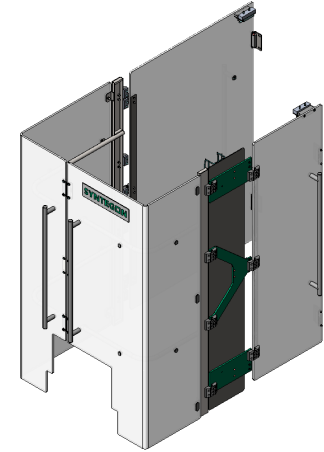
Festo pneumatics with the valve bank secured by guard interlock, digital pressure sensor with display.

Gas flushing pressure regulator with digital controls,

SS enclosure (optional) & seamless connectivity from component to cloud with automation suite (optional).

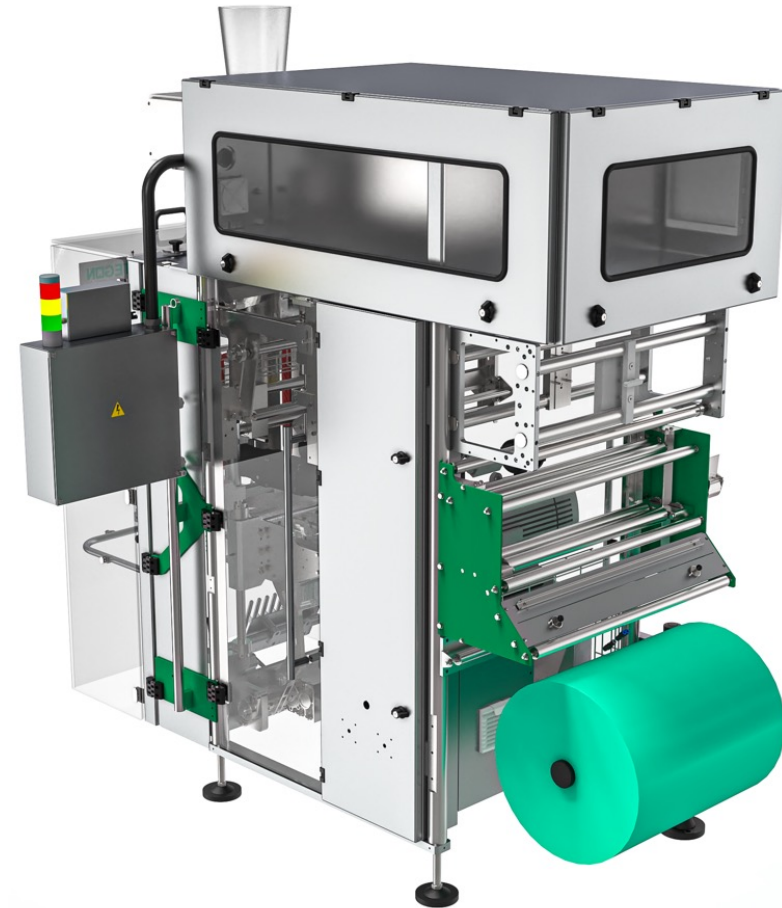
Transparent polycarbonate guarding's, with safety interlock inline with EN-ISO 13857

CE certified machine.

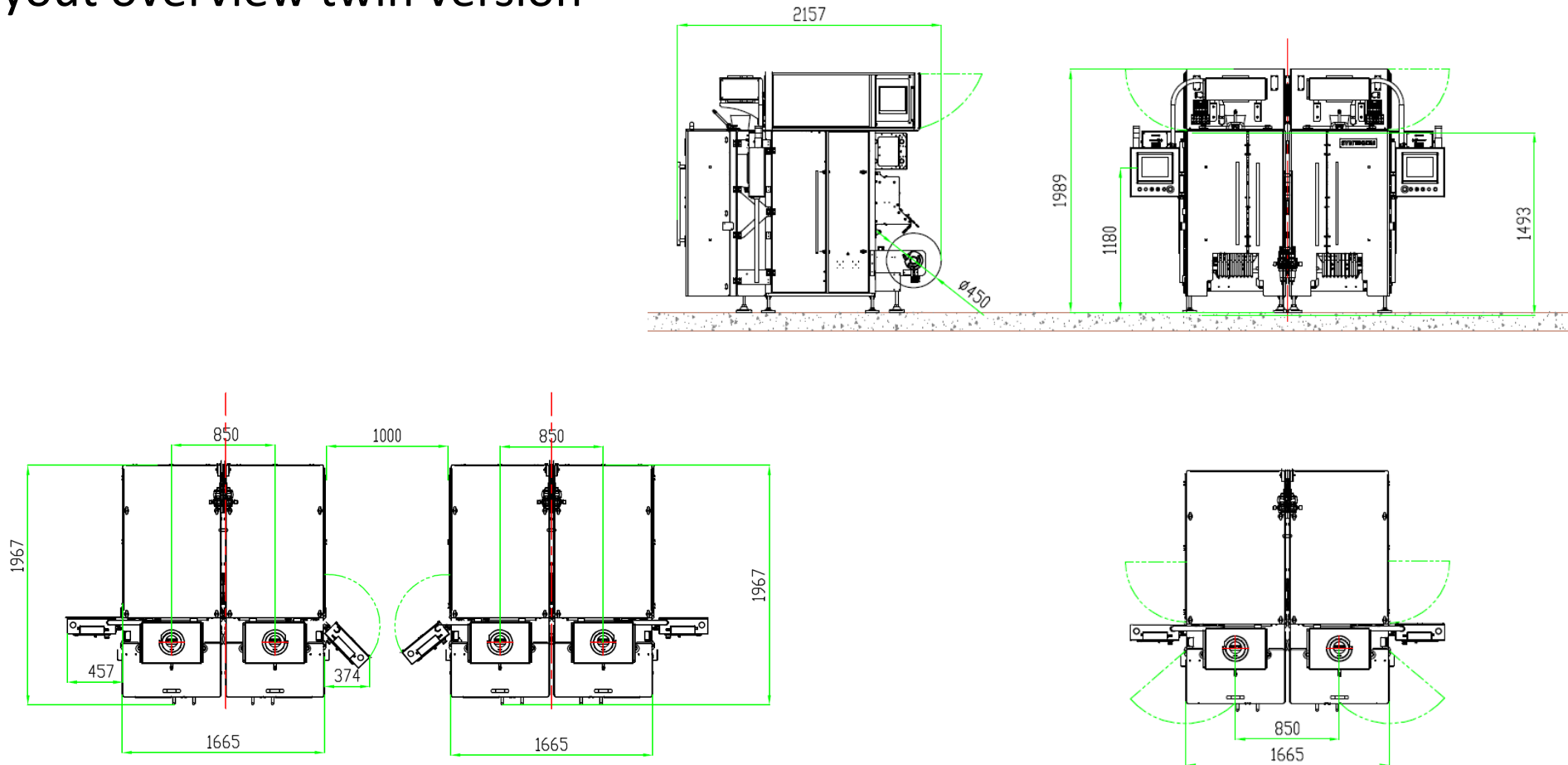




## □ Layout overview single version



## Layout overview twin version



## Line layout overview twin version

Machine	Syntegon-SVL-Twin
Speed	210 BPM (2x105)
Increase in total production capacity per machine (Compared to another supplier)	23.5%
Total no. of twin machines that can fit in a 35M line space	14
Total production capacity of the line (Per hour)	149,400 Bags
Increase in total production capacity for the same floor area	57%

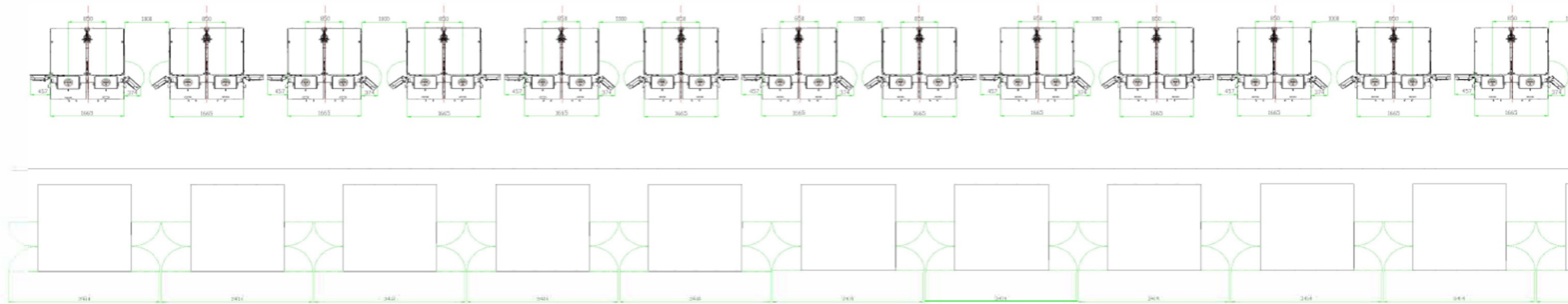
Comparison of VFFS packaging line: SVL twin VS other supplier

CD between two twins in a packaging line (With cabinet/guard door opening) :

SVL twin machine : 2680 mm

SVL machine will occupy at least 25% less footprint along the packaging/distribution line-Thanks to it's top mounted electrical cabinet !

SYNTEGON- LDS LINE - 14 TWIN MACHINES



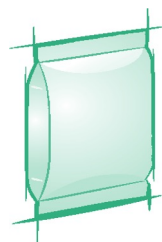
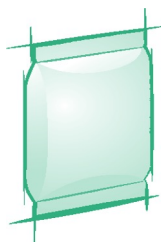
ISHIDA-ASTRO LINE- 11 TWIN MACHINES



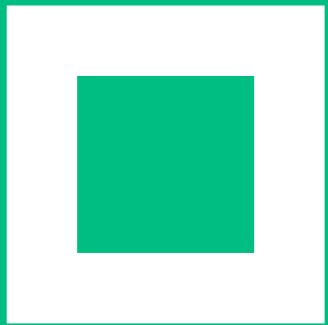
## □ Technical specification of bagger

Technical details	SVL machine- Single configuration	SVL machine- Twin configuration
Speed (With product)	105 Bags per minute For Format : 130, BL: 165 Fill weight: 12 Grams	210 Bags per minute For Format : 130, BL: 165 Fill weight: 12 Grams
Max-Min Bag width	Min. 60 mm – max. 230 mm	Min. 60 mm – max. 230 mm
Max. bag length	400 mm	400 mm
Pouch types	Pillow bags, Chain pouches	Pillow bags, Chain pouches
Longitudinal seal width:	8mm/ 10mm / 12mm	8mm/ 10mm / 12mm
Cross seal width:	4.5mm/6mm/ 10mm	4.5mm/6mm/ 10mm
Forming tube-C-to-C	-	850 mm

### Bag styles



\* Depending on product characteristics



THANK YOU!