ENVELOPING & STACKING MACHINE E-170

High Speed, Precision, and Flexibility in a Compact Design. Suitable for Both SLI and Start&Stop Applications.
E-170 is the result of Sovema's experience in designing advanced enveloping and stacking machines. It works at high speed and with accurate plate handling and quality control. Its flexibility allows the use of PE, AGM, and Leaf Type separators.

**PLATE STACK FEEDER AND VACUUM BELT**
Plates are loaded horizontally with the lug in a fixed position, then picked up one by one and transported by a vacuum belt conveyor operated by a servomotor. Optical barriers ensure the safety of the operator in the loading area.

**SEPARATOR UNCOILING AND TRANSPORTATION SYSTEM**
The motorized uncoiling device has an interchangeable spindle for PE or AGM separator rolls (a DOUBLE UNCOILING DEVICE is available as an option).

**FEEDING ARM**
The double structure of the arm, composed of one fixed and one tilting part, ensures reduced mechanical stress on the arm itself. Missing and double plates are detected by a contactless detection system. An adjustable and bypassable ROTARY LUG BRUSHING SYSTEM is installed.

**SEPARATOR PRE-FOLDING SHUTTLE AND ROTARY CRIMPING UNIT**
The pre-folding shuttle guides the plates into the rotary crimping unit where two disks perform the mechanical sealing of the envelope. The plate is enveloped thanks to the synchronization between the plate moving forward and the separator moving downward.

**GROUP FORMATION AND STACKING WHEEL**
The plates are first stacked in a 2-plate group (one enveloped and one non-enveloped), then the stacking wheel allows the creation of the final group according to the recipe settings, overlapping the small stacks previously created.

**HORIZONTAL OR VERTICAL ELEMENT CONVEYOR**
The groups are conveyed out of the machine either in horizontal or vertical position, according to the equipment configuration. The vertical conveyor can be equipped with optional features such as element & lug alignment, lug counting, and lug bending.

**OPTIONAL FEATURES**
- DOUBLE UNCOILING DEVICE for PE and AGM separator rolls
- THIRD FEEDER to handle odd plates
- FEEDER FOR LEAF TYPE SEPARATOR
- ELEMENT WEIGHING SYSTEM
- ELEMENT & LUG ALIGNMENT STATION
- LUG COUNTING STATION
- LUG BENDING STATION
KEY FEATURES AND BENEFITS

- High speed and automation: **UP TO 170 ENVELOPED PLATES/MIN**
- High precision: **ACCURATE PLATE HANDLING AND PRODUCT QUALITY CONTROL**
- Product flexibility: **SUITEABLE FOR PE, AGM AND LEAF TYPE SEPARATORS**
- Integrated solution: **THE ENVELOPER CAN BE PUT IN LINE WITH SOVEMA CAST-ON STRAP MACHINE AND ASSEMBLY LINE AND CAN BE PAIRED WITH LOADING ROBOTS FOR AUTOMATIC PLATE FEEDING**

TECHNICAL DATA

OVERALL DIMENSIONS:
- Width: approx. 2,500 mm
- Length: approx. 2,560 mm
- Height: approx. 7,600 mm

PRODUCTION SPECIFICATIONS:
- Throughput:
  - PE separator: up to 170 enveloped plates/min or 30 groups/min
  - AGM separator: up to 140 wrapped plates/min (single layer)

COMPONENT SIZE:
- Plate Width: 102-153 mm
- Plate Height: 95-152 mm
- Plate Thickness: 0.8-2.5 mm
- Element thickness: 20-115 mm

STANDARD ELECTRICAL REQUIREMENTS:
- Voltage: 400 V, three phases + N (standard)
- Frequency: 50 Hz (standard)
- Installed Power: 45 kW

COMPRESSED AIR:
- Pressure: 6 bar
- Installed: 2,000 NI/min
- Average Consumption: 1,000 NI/min

EXHAUST REQUIREMENTS:
- Suction Flow Rate: 12,000 m³/h (6,000 m³/h for each flange).

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