

VIRO



EPS-SYSTEMS



ABOUT US

With over 60 years of experience, VIRO EPS SYSTEMS has established itself as a leading supplier and trusted partner for Expandable Polystyrene (EPS) converters worldwide. Our core philosophy is defined by progress and tradition; we work closely with processors across the globe to drive the continuous development of machinery that enhances production efficiency and profitability. We specialize in the design and manufacturing of a complete range of fully automated solutions for the EPS, XPS, PUR/PIR, and Mineral Wool industries. By combining innovative technology with a sharp focus on sustainable production, we deliver high-quality machinery and tools that enable our customers to optimize output while meeting specific budget targets and project requirements.

Our expertise is built on a rich and distinguished legacy. Drawing on the history of **WIESER**, an industry benchmark since 1958, and **VIRO**, founded in 1964, our companies have successfully combined their expertise under the **VIRO EPS SYSTEMS** brand since 2004. Our expertise rests on a strong legacy. VIRO's journey began 1964 here in Slovenia, in a Ljubljana workshop founded by Vili Rotter, where the company evolved from producing packaging technology. This spirit of innovation accelerated under the leadership of Damjan Rotter, who guided the development of our first automatic EPS processing line and our diversification into the XPS and stone wool markets. Today, from our headquarters here in Logatec, that deep tradition fuels our powerful commitment to quality and sustainable development, as we blend our history with a clear vision for the future of your production.

EPS AND THE ENVIRONMENT

EPS consists of 98% air, making it one of the most efficient and resource-friendly insulation materials available today. Its outstanding thermal performance reduces energy consumption in buildings and helps lower CO₂ emissions. EPS is also 100% recyclable and completely free from CFCs and HCFCs.

VIRO EPS-SYSTEMS contributes to sustainability by providing advanced recycling solutions that enable converters to efficiently process EPS waste back into valuable raw material.

Excellent Processing Solutions



EPS: PEARL OF PLASTICS

EPS (Expandable Polystyrene) is a lightweight, rigid, plastic foam insulation, produced from solid polystyrene beads. Expansion is achieved by incorporating small amounts of pentane gas, dissolved into the polystyrene beads as a blowing agent during production. When exposed to heat, in the form of steam, the gas expands to create perfectly closed EPS cells, which can reach up to 40 times the volume of the original polystyrene bead. Once expanded, the EPS beads are molded into forms suited to their specific applications.

EPS APPLICATIONS

- Exterior Insulation boards (EIFS)
- Insulated Concrete Forms (ICFs)
- Structural Insulation Panels (SIPS)
- Sandwich Panels
- Pipe insulation shells
- Fillers for concrete (void foam)
- Geofoam
- Floatation devices
- Architectural profiles (cornices, columns, pillars)
- Packaging solutions
- Seedling trays
- Containers, cups and trays

EPS MANUFACTURING

The production of Expandable Polystyrene (EPS) allows five essential stages that transform raw granules into high-quality insulation boards, packaging solutions, and customized EPS products.

1) PRE-EXPANSION

Polystyrene granules are expanded by direct exposure to steam, forming larger beads made up of non-interconnecting cells.

2) CONDITIONING

After expansion, the beads still contain small amounts of condensed steam and pentane gas. As they cool in the silos, air gradually diffuses into the pores, partially replacing these components.

3) MOULDING

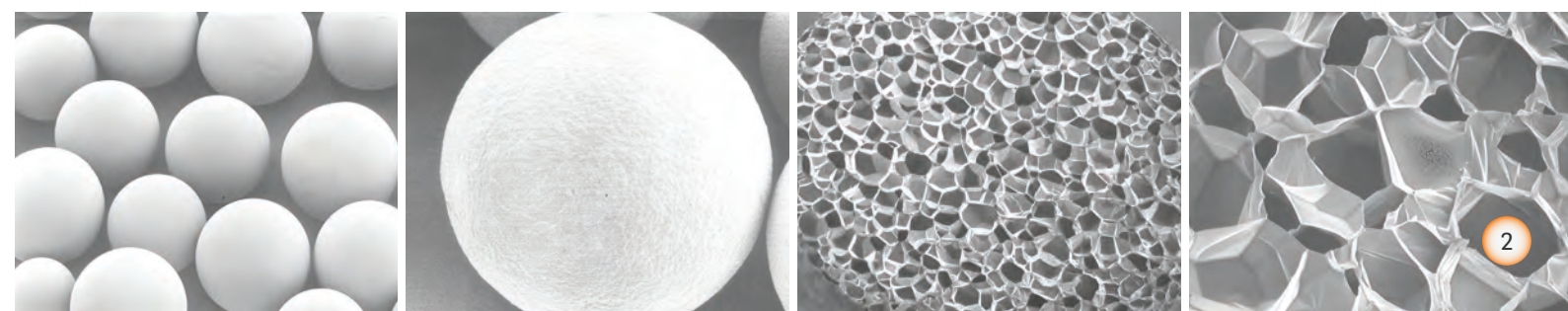
The beads are molded into blocks, boards, or customized products. The mold shapes and holds the pre-foam while steam is applied once again to promote expansion. During this process, the steam fuses each bead to its neighbors, creating a homogeneous final product.

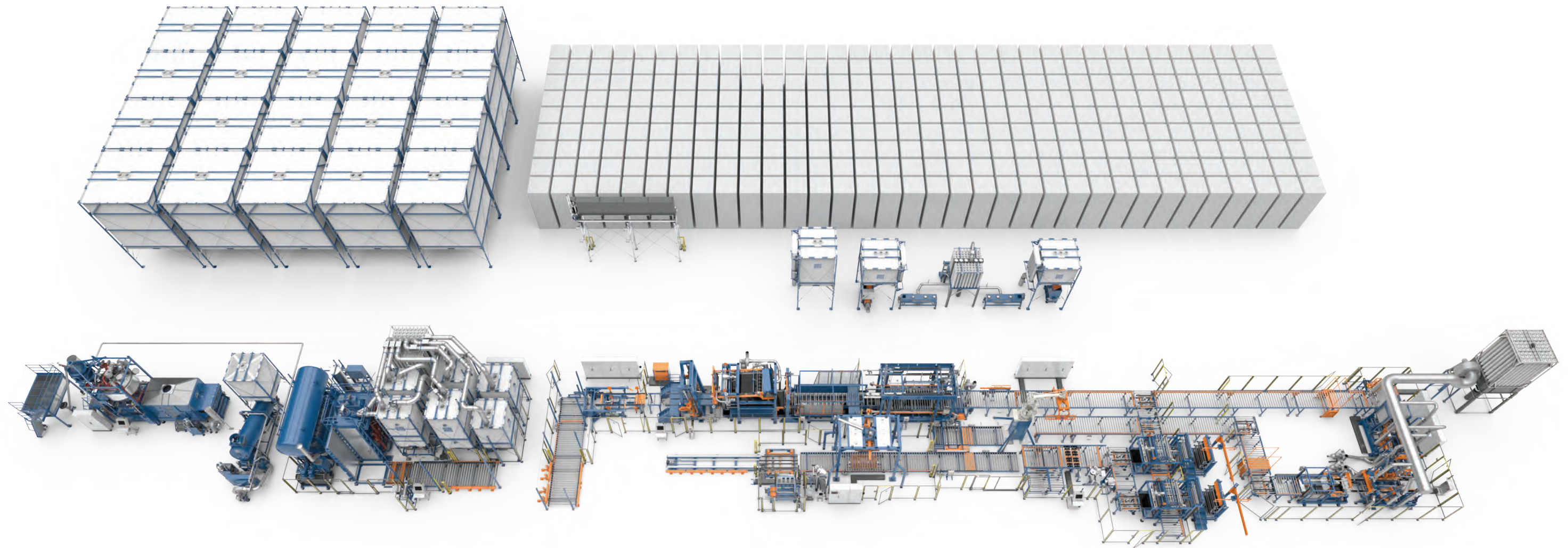
4) SHAPING

After a short cooling period, the molded block is removed from the machine. Following additional conditioning, it can be cut or shaped as required using hot-wire elements or other suitable techniques.

5) POST PRODUCTION PROCESSING

The finished product can be laminated with foils, plastics, roofing felt, fiberboard, or other facings such as roof and wall cladding materials, as well as cement- or polyurea-based coatings.





TYPICAL EPS PRODUCTION

- Steam plant, accumulator, air compressor
- Preexpander VPX
- Silo plant
- Mixing systems
- Vacuum Blockmould TNG
- Automatic block storage system
- Cutting line FOAMLINE HVQ
- Automatic scrap removal system
- Recycling plant
- Packaging machine
- Handling system VIRO-BOT
- Bale wrapping system

ADVANTAGES

- High productivity through optimized plant logistics and design
- Low production and life-cycle costs with high-quality equipment and utilities
- Fast return on investment achieved through efficient project execution
- Fully automated systems with all required peripherals included for seamless operation
- On-site commissioning and operator training
- Equipment with the required peripherals
- End-to-end plant solutions from a single supplier

SILO PLANT

PREEXPANDER

BLOCK MOULD

RECYCLING

CUTTING LINE

PACKING LINE



PREEXPANSION SYSTEM

Preexpander VPX



COMPONENTS

- Raw material auger feed screw
- Raw material loading and storage station
- Conical foaming vessel design
- Bottom discharge system for fast material flow
- Frequency-controlled agitator
- Vibrating sensors for detecting grey material
- Fluid-bed dryer with large access door for easy maintenance
- Lump crusher to prevent material blockages in the pipes
- Automatic density control unit

FEATURES

- Electronic weighing system
- Conical foaming vessel with wedge-wire base
- Fast material discharge through bottom butterfly door
- Enlarged discharge opening compared to conventional systems
- Easy maintenance access
- Frequency-controlled agitator speed
- Fluidized bed with Z-segment drying floor
- Digitally controlled steam and air regulation valves

ADVANTAGES

- High-quality bead expansion
- Tolerance within $\pm 1\%$ through continuous monitoring
- Wedge-wire screens for uniform steam distribution
- Consistent density distribution across each batch
- Precise target density repeatability
- Shorter cycle times compared to traditional systems
- Optimized raw material utilization
- Reduced energy consumption with unique steam and vapor recuperation

PREEXPANDER TYPE: VPX - 1500

Useable volume
Steam plate

1,5 m³
800 mm

VPX - 3500

3,5 m³
1.200 mm

VPX - 5500

5,5 m³
1.200 mm

VPX - 7500

7,5 m³
1.200 mm

CAPACITY AT DENSITY:

12,0 - 12,5 g/l
14,0 - 16,0 g/l
18,0 - 21,0 g/l
22,0 - 25,0 g/l

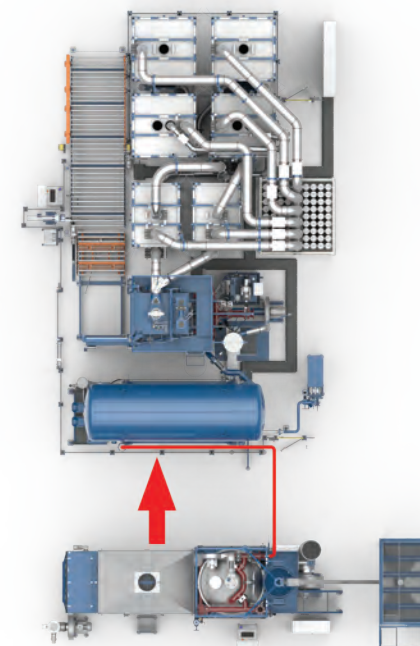
650 - 775 kg/h
825 - 1.000 kg/h
1.000 - 1.150 kg/h
1.375 - 1.600 kg/h

1.300 - 1.550 kg/h
1.650 - 2.000 kg/h
2.000 - 2.300 kg/h
2.750 - 3.200 kg/h

2.210 - 2.635 kg/h
2.805 - 3.400 kg/h
3.400 - 3.910 kg/h
4.675 - 5.440 kg/h

2.990 - 3.565 kg/h
3.795 - 4.600 kg/h
4.600 - 5.290 kg/h
6.325 - 7.360 kg/h

ENERGY SAVING CONNECTION TO VACUUM SYSTEM



OPTIONS

- Multi-Pass Unit VMP
- Conti Preexpander for second pass
- High Density Unit VHD
- Energy Recuperation System



LEVEL CONTROL

MULTI PASS CONTI PREEXPANDER

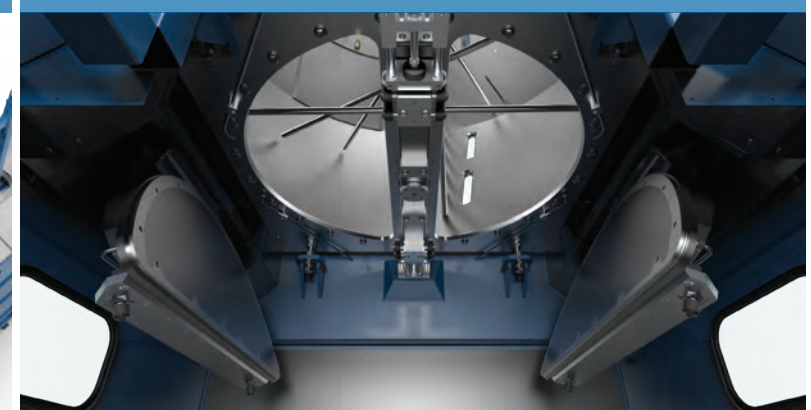
SECOND EXPANSION

DENSITY CONTROL SYSTEM

FILLING SYSTEM

UNIQUE MATERIAL DISCHARGE SYSTEM

OCTABIN LOADING STATION



BLOCK MOULDING SYSTEM

Blockmould TNG



HIGHLIGHTS

- Excellent density gradient
- Low residual moisture content
- Perfect fusion
- High-capacity output
- Energy-efficient and ECO-friendly operation
- Unique screen assembly system
- PID and temperature controlled steam flow
- Machine body rated according to P.E.D. 2014/68/EU
- SIEMENS Scada PLC S7
- HMI touch screen

FEATURES

- Fully adjustable block size
- Compression for elastification
- Block weight monitoring and control
- Graphic user interface
- Recipe management
- Steam consumption measurement
- Steam temperature control

AVERAGE CAPACITY

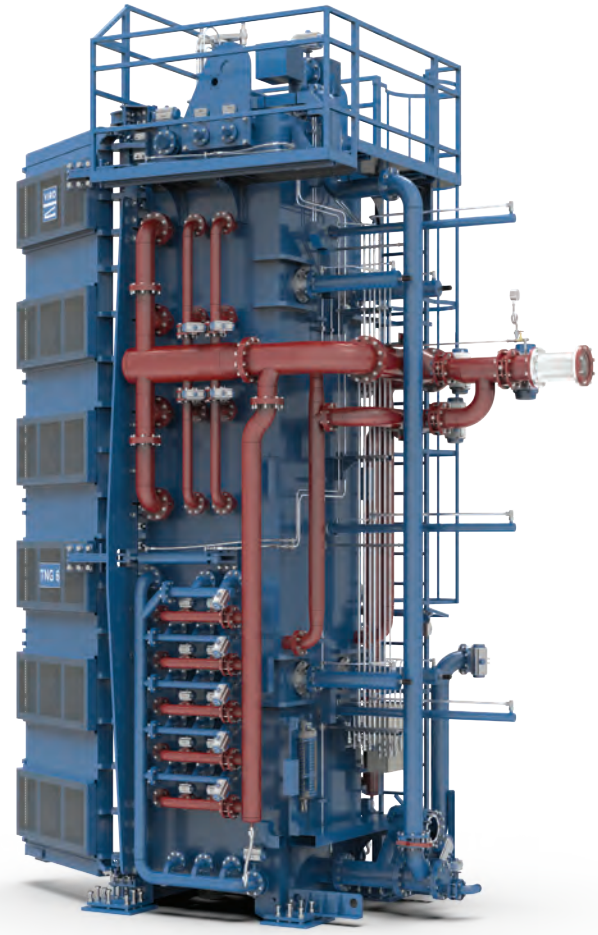
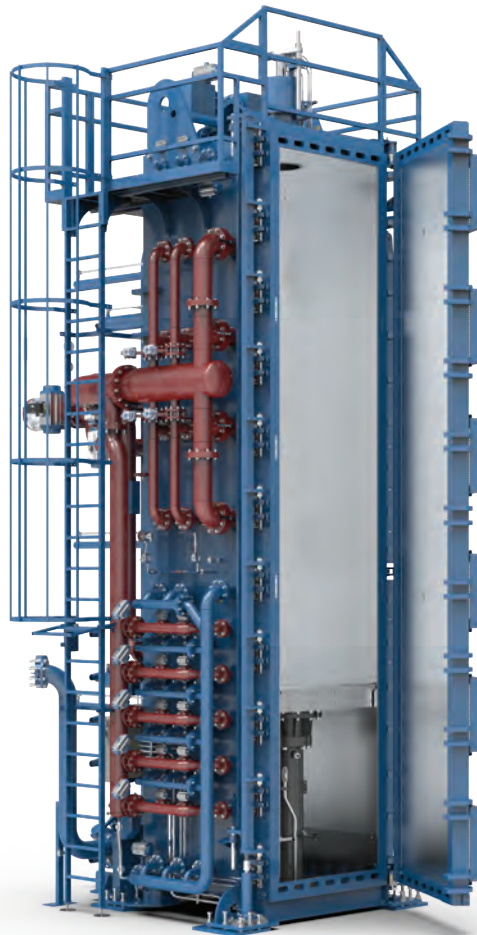
16 g/h up to 18 blocks/hr
20 g/h up to 16 blocks/hr
24 g/h up to 15 blocks/hr
32 g/h up to 13 blocks/hr
Based on average block size of 4 x 1.2 m, depending on raw material quality

ADVANTAGES

- No cooling water consumption
- Eliminates the need for hot and cold-water tanks
- Eliminates costs for chemical additives
- Minimizes water oxygenation compared to traditional open chillers
- No risk of water freezing in the cooling tower
- No water evaporation
- No steam released into the environment
- No roof emissions and noise
- Narrow density gradient
- Reduced downtime for screen cleaning
- Fewer cleaning cycles
- Preheats boiler feed water (water/water heat exchanger)
- Provides plant heating during winter (water/air heat exchanger)
- Heats and ventilates the silo room (water/air heat exchanger)
- Exhaust air cleaning cyclone

OPTIONS

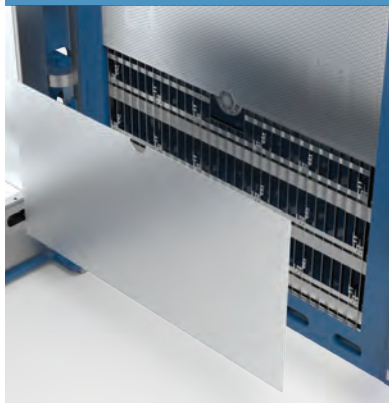
- Closed-loop vacuum system
- Rear wall adjustment
- Density correction system
- Hydraulic elastification system
- Bottom plate adjustment
- Block weighing system
- Inkjet printing system
- Production reporting package



SCREENS



FAST SCREEN ASSEMBLY



DEEP STEAM CHAMBERS



VACUUM SYSTEM



COOLING SYSTEM



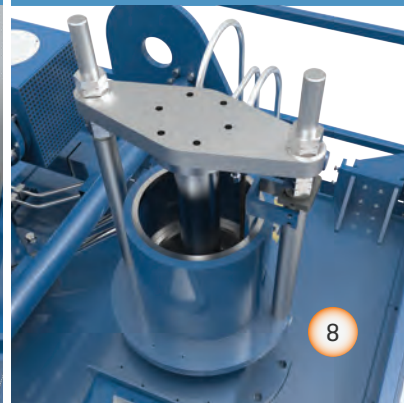
ADJUSTABLE WALL



ADJUSTABLE BOTTOM



FILL GUN



CLASSIC CUTTING LINE

Foamline HVQ

CUTTING SPEEDS

12 kg/m ³	up to 2,0 m/min
15 kg/m ³	up to 1,8 m/min
20 kg/m ³	up to 1,6 m/min
25 kg/m ³	up to 1,0 m/min
30 kg/m ³	up to 0,8 m/min
Depending on the quality of EPS foam blocks	

A fully automatic cutting line for the high-speed production of insulation sheets, delivering excellent surface quality.

TYPICAL CONFIGURATION

- Block magazine with motorized tilter and center alignment
- Sheet cutting frame "H.OSC" with 81 wires
- Automatic top and bottom scrap removal system
- Trimming station "V" with 2 side trimming wires and optional center wire
- Fast forward conveyor
- Length cutting station "Q"
- Material discharge conveyor

HIGHLIGHTS

- HMI touchscreen interface
- Block detection sensors
- Air cooling of exposed wire ends
- High production capacity
- Cooling of exposed wire end
- Block motion detectors

ADVANTAGES

- Optional customizable modular and compact design
- Accurate and high-speed cutting using high-temperature titanium alloy wires and strong spring-tensioning system

OPTIONS

- Automatic wire setting
- High-speed single-frame oscillation
- Wire break detection and control
- Automatic scrap removal system for top, bottom, and side sections
- Autopilot
- Suction hoods

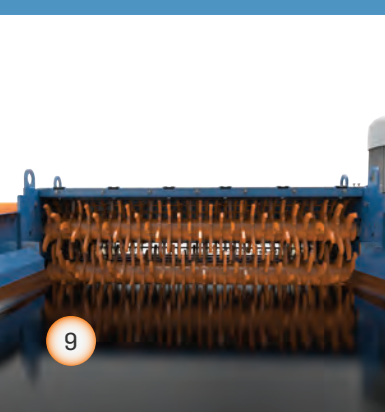
Cutting frame H.OSC

Single frame oscillation

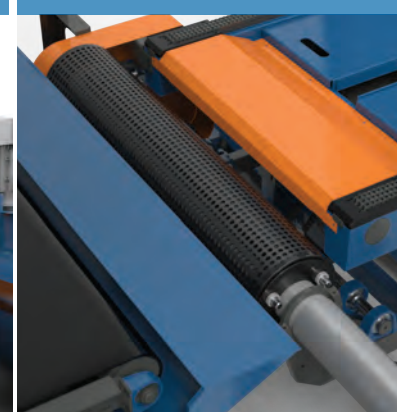
FEATURES

- Built in well welded heavy duty steel frame
- Linear bearings with inflatable seals for accurate wire positioning
- Antifriction chain conveyor for material transport
- Optical sensors for recognition of white and black material
- Stairs on both sides for easy maintenance
- Cutting wire type R41 for extra strong wire tension
- Stroke 10 mm
- Up to 400 strokes/min
- Automatic wire setting

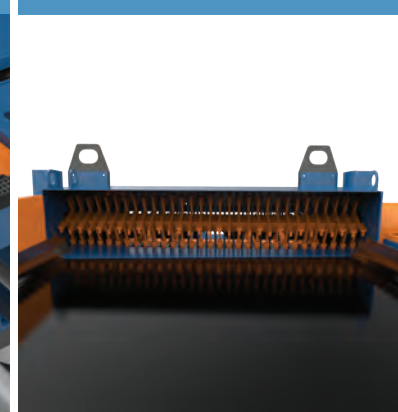
DOUBLE SHAFT
BOTTOM PREBREAKER



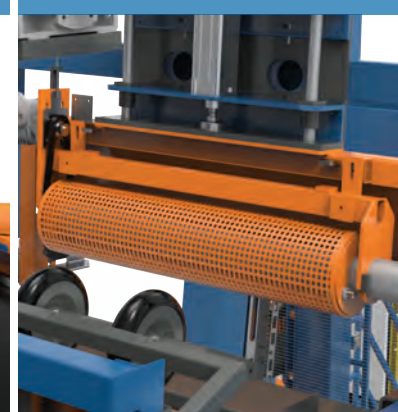
BOTTOM SCRAP
REMOVAL



TOP SCRAP PREBREAKER



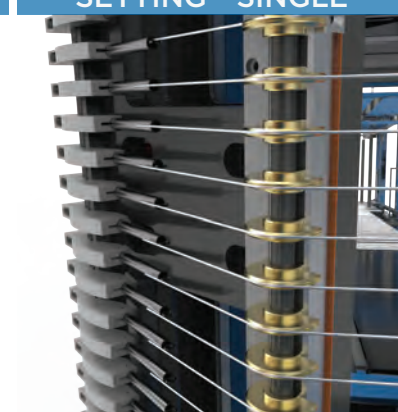
TOP SCRAP REMOVAL



HEAT CONTROL UNIT



AUTOMATIC WIRE
SETTING - SINGLE



HIGH END CUTTING LINE

Foamline HVQ PRO

CUTTING SPEEDS

12 kg/m ³	up to 2,5 m/min
17 kg/m ³	up to 1,8 m/min
20 kg/m ³	up to 1,6 m/min
25 kg/m ³	up to 1,0 m/min
30 kg/m ³	up to 0,7 m/min
Depending on the quality of EPS foam blocks	

Fully automatic cutting line designed for the high-speed production of insulation sheets, delivering outstanding surface quality.

TYPICAL CONFIGURATION

- Block magazine with motorized tilter and center alignment
- Sheet cutting frame "H.OSC-2" with up to 100 wires with counter frame oscillation
- Automatic top, bottom and side scrap removal system
- Trimming station "V" with 2 side trimming wires and an optional center wire
- Fast forward conveyor
- Length cutting station "Q"
- Material discharge conveyor

HIGHLIGHTS

- HMI touchscreen interface
- Motion detectors
- Air cooling of exposed wire ends
- High production capacity
- Cooling of exposed wire end
- Block motion detectors
- Automatic wire setting

OPTIONS

- Exchangeable prebreaker system for white and gray EPS
- Autopilot
- Wire break detection and control
- Suction hoods

ADVANTAGES

- Ultimate performance and high-capacity operation
- Excellent quality of the final product
- Highest level of automation available
- Advanced software for material and production management
- SIEMENS Simatic PLC S7

Cutting frame H.OSC-2 Counter oscillation frame

FEATURES

- Number of wires per frame: 50 pcs.
- Wire diameter: 0,3 or 0,4 mm
- Fixed frame inclination: 10 degrees
- Minimum sheet thickness: 10 mm
- Automatic wire setting
- Springs, wire holders, and contactors
- Selective wire cooling system
- Independent heat and speed adjustment
- System for inclined wire setting
- Oscillation system "H.OSC-2"

AUTOMATIC WIRE SETTING - DOUBLE

TOUCH SCREEN

SIDE SCRAP

DOWNCUTTER AWS AND OSCILATION

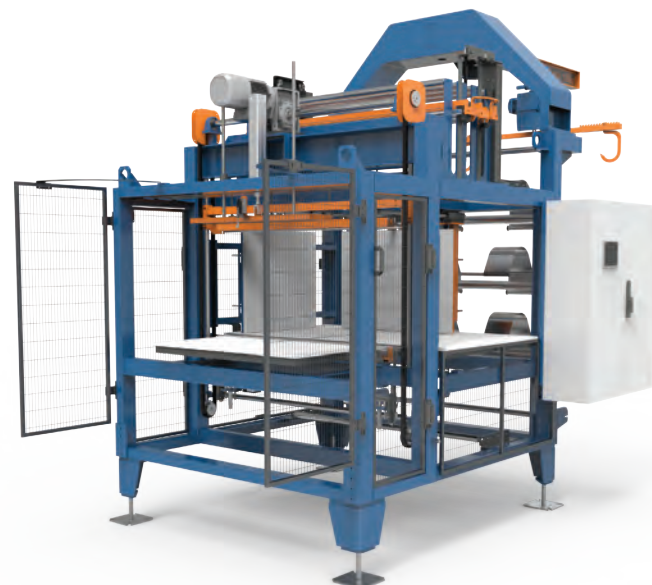
EXCHANGABLE TOP PREBREAKER SYSTEM

EXCHANGABLE BOTTOM PREBREAKER SYSTEM

4 SIDE PACKING MACHINES

PPZ 1300

- Semi-automatic operation
- EPS sheet stacks are loaded manually.
- Packing capacity: up to 5 bundles (0.25 m³) per minute depending on operator
- Loading from left or right
- Drive system for pushing bundles through the film
- Welding system for PE film (top and bottom)
- Integrated conveyor belt for bundle discharge
- PLC-controlled cabinet



PPZA 1300



- Fully automatic operation: EPS sheet stacks are automatically fed from the cutting line
- Packing capacity: 8–10 bundles (0.25 m³) per minute
- Integrated roller conveyor
- Top and bottom film holder for 3 PE film coils
- Motorized unwinding system for the top film coil
- Drive system for pushing bundles through the film
- Pre-stretching system for PE film
- Welding system for PE film (top and bottom)
- Integrated discharge conveyor belt
- PLC-controlled cabinet

PPZA Inline

- Fully automatic in-line operation: stacks of EPS sheets are loaded directly from the cutting line
- Packing capacity: 8–10 bundles (0.25 m³) per minute

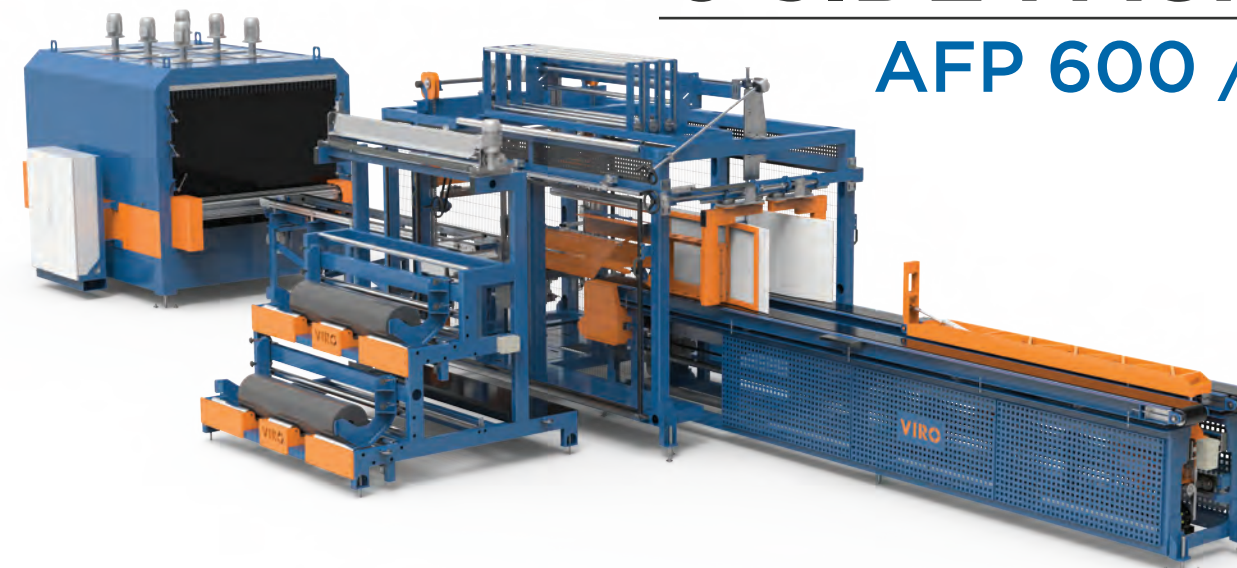
OPTIONS FOR AUTOMATIC MACHINES

- Fast film changing system
- Film end detector
- Labeling unit
- Ink-jet marking
- Bundle flipping station
- Bundle rotating station with a discharge conveyor



6 SIDE PACKING

AFP 600 / 1200



MAIN COMPONENTS

- Bag former
- Welding system for PE film with automatic-folding unit
- Loading conveyor with an automatic feeder
- System for perforating film before wrapping
- Film magazine for AFP-1200
- Film coil magazine
- Heat shrink tunnel
- Suitable for XPS/EPS bundle dimensions (manually adjustable):
 - Length: 1.000 - 3.000 mm
 - Width: 500 - 1.250 mm
 - Height: 350 - 500 mm

WRAPPING MATERIAL

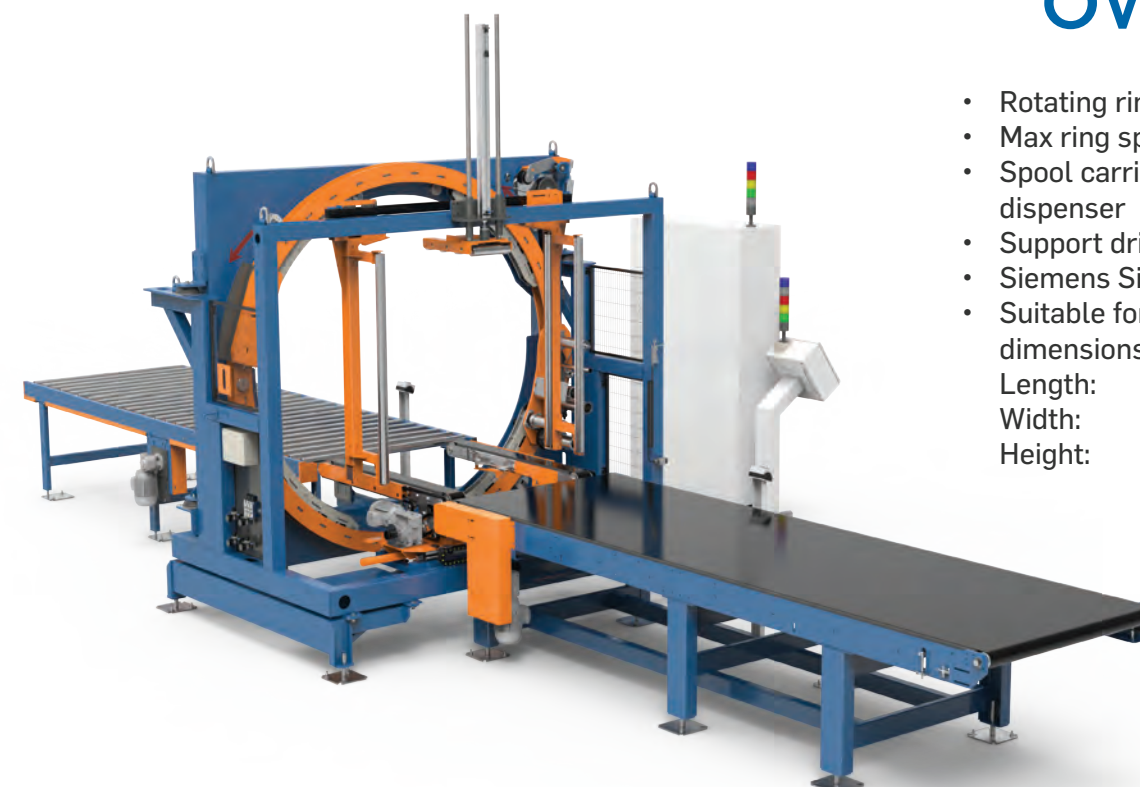
- PE film without regrind, with slip additive
- Thickness: 40 – 60 µm (±5%)
- Film shrinkage by width: 40%
- Film shrinkage by length: 70%

OPTIONS

- Fast film changing system
- Film end detector
- Labeling unit
- Ink-jet marking

ORBITAL WRAPPER

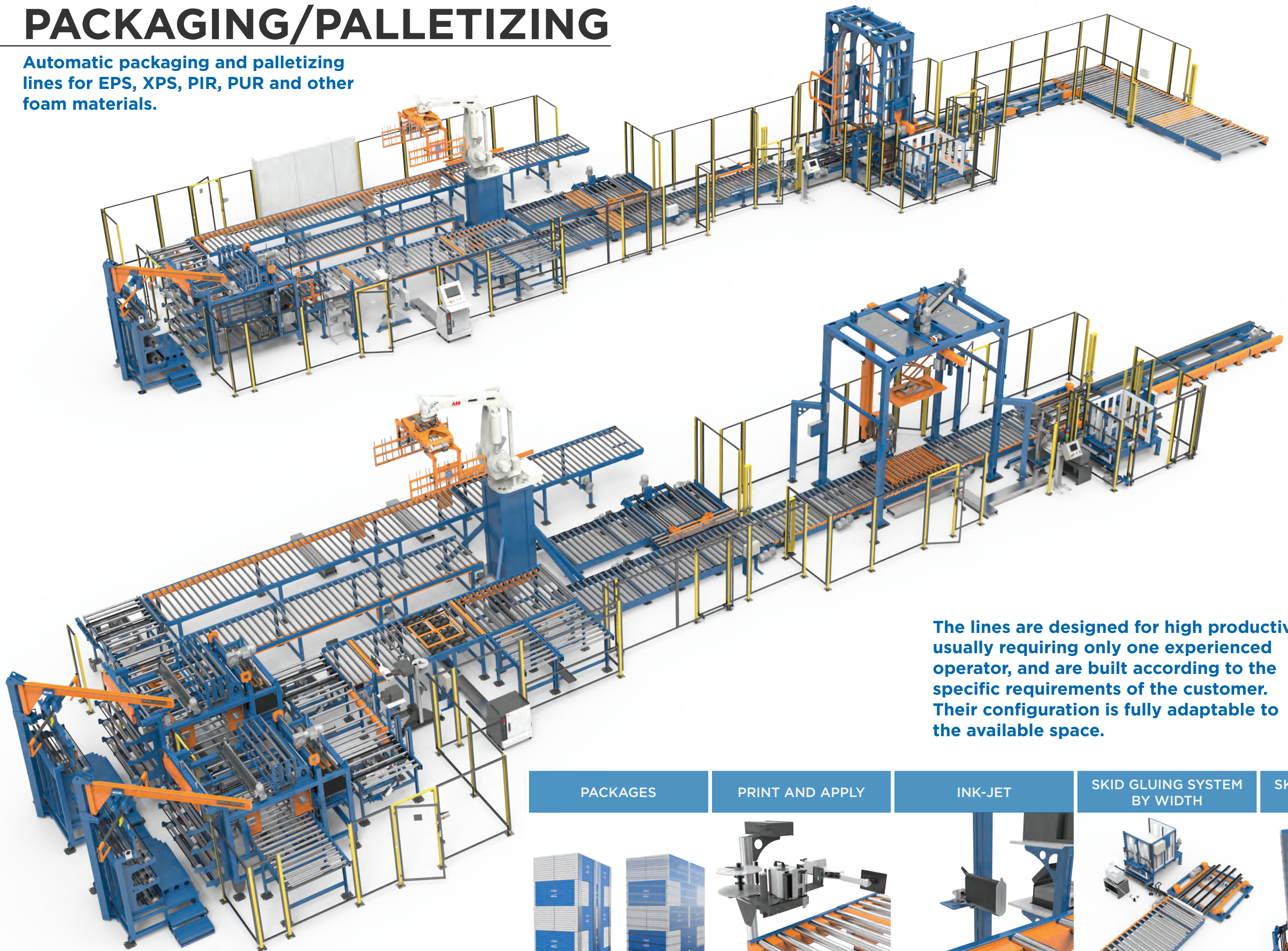
OW - 1500



- Rotating ring diameter: 1.500 mm
- Max ring speed: 50 rpm
- Spool carriage and stretch film dispenser
- Support driven conveyor
- Siemens Simatic PLC S7
- Suitable for EPS bundle dimensions:
 - Length: min 500 mm
 - Width: 450 - 1.200 mm
 - Height: 1.250 mm

PACKAGING/PALLETIZING

Automatic packaging and palletizing lines for EPS, XPS, PIR, PUR and other foam materials.



The lines are designed for high productivity, usually requiring only one experienced operator, and are built according to the specific requirements of the customer. Their configuration is fully adaptable to the available space.

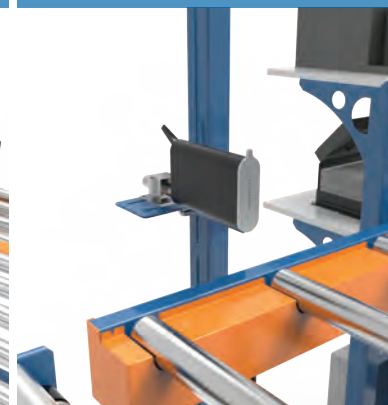
PACKAGES

PRINT AND APPLY

INK-JET

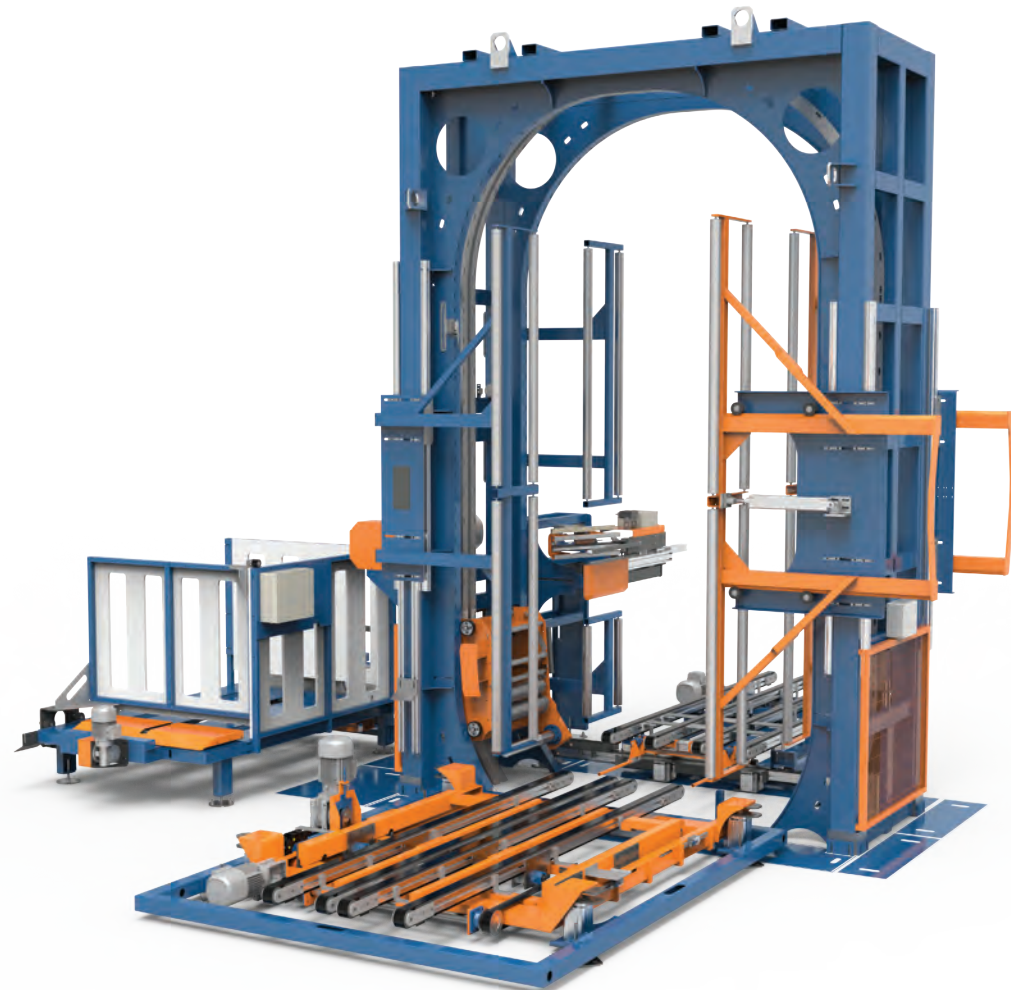
SKID GLUING SYSTEM
BY WIDTH

SKID GLUING SYSTEM
BY LENGTH



VERTICAL BALE WRAPPER

Stargate



COMPONENTS

- Solid steel frame construction
- Rotating film carriage with mechanical brake
- Welding system to seal film ends to the pallet
- Automatic film clamping and cutting system
- Control panel with integrated PLC

OPTIONS

- Automatic skid cutting and feeding unit
- Automatic labeling unit
- Wooden pallet magazine and dispenser

PRODUCT SPECIFICATIONS

Length: 1.000 / 1.500 / 2.000 / 2.500 mm
Width: 1.000 - 1.300 / 2.500 mm
Height: 2.000 / 2.500 / 3.000 mm
Capacity: up to 40 bales per hour with 2 skids per pallet

HIGHLIGHTS

- De-stacking of sheets before packaging
- Removal of scrap and rim sheets
- Bundle stacking into bales for palletizing
- Matches the throughput of high-speed cutting lines
- Enables retrofitting into existing production lines
- Reduces labor costs and optimizes floor space
- Guarantees precise sheet counts every cycle

VIRO-BOT



HORIZONTAL BALE WRAPPER

Atlantis



OPTIONS

- Automatic skid cutting and feeding unit with hot melt gluing
- Automatic labeling unit
- Automatic pallet height detection with photocell sensor
- Wooden pallet magazine with automatic dispensing

COMPONENTS

- Solid steel frame construction
- Powered rotating arm
- Stepless rotation speed adjustment (rpm)
- Automatic film clamping and cutting system
- Welding system for sealing film ends to the pallet
- Powered film pre-stretching
- Bale lifting station to wrap bottom edges
- Motorized down holder from the top
- Safety-limit switch on access door
- Touchscreen control panel with integrated PLC

PRODUCT SPECIFICATIONS

Length: 1000 / 1500 / 2000 / 2500 mm
Width: 1000 - 1300 / 2500 mm
Height: 2000 / 2500 / 3000 mm
Capacity: up to 40 bales per hour with 2 skids per pallet

CONTOUR CUTTING LINE

CUTTING SPEEDS

10 kg/m ³	2,0 m/min
15 kg/m ³	1,6 m/min
20 kg/m ³	1,2 m/min
25 kg/m ³	0,8 m/min
30 kg/m ³	0,5 m/min

TYPICAL CONFIGURATION

- Block magazine motorized tilter
- Length cutting station "G" guillotine
- Horizontal cutting frame "H" 1.300 x 1.350 mm
41 horizontal wires for contour cutting
41 stationary, temperature controlled wires
- Bottom and top scrap removal
- Trimming station "V" with 21 vertical wires
- Fast forward conveyor
- Cross cutting station "X" with 41 vertical wires

HIGHLIGHTS

- HMI with a touch screen interface
- Cooling of exposed wires
- Automatic wire setting
- Wire break detection and control

BASIC



HV



GHVX



SHEETS, PADS AND SHAPES

StyroDesign XL

Foam-cutters, combi cutters and complete lines.

- Modular system design
- Cutting width: 1.300 / 2.600 / 3.100 mm
- Stationary cutting wires
- Independent axis control
- Automatic scrap removal



GUILLOTINE



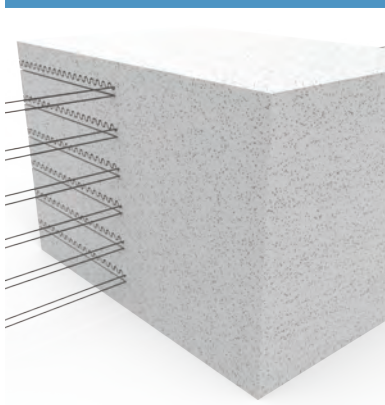
INK-JET PRINTER: DAL-I



BLOCK SPLITTER



STATIONERY LEADING WIRES



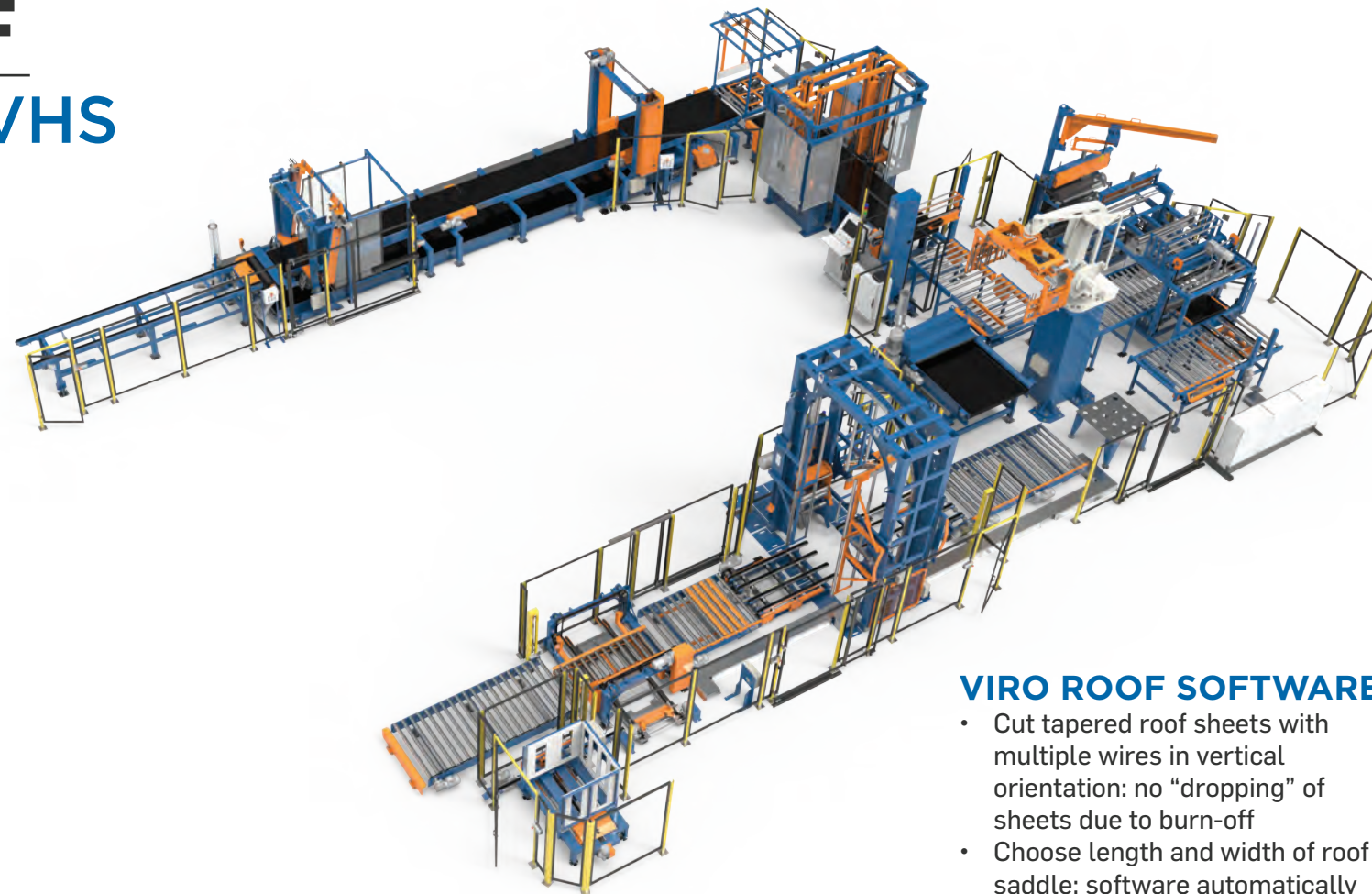
FLAT ROOF

StyroDesign BVHS

Fully automatic cutting line production of tapered roof sheets.

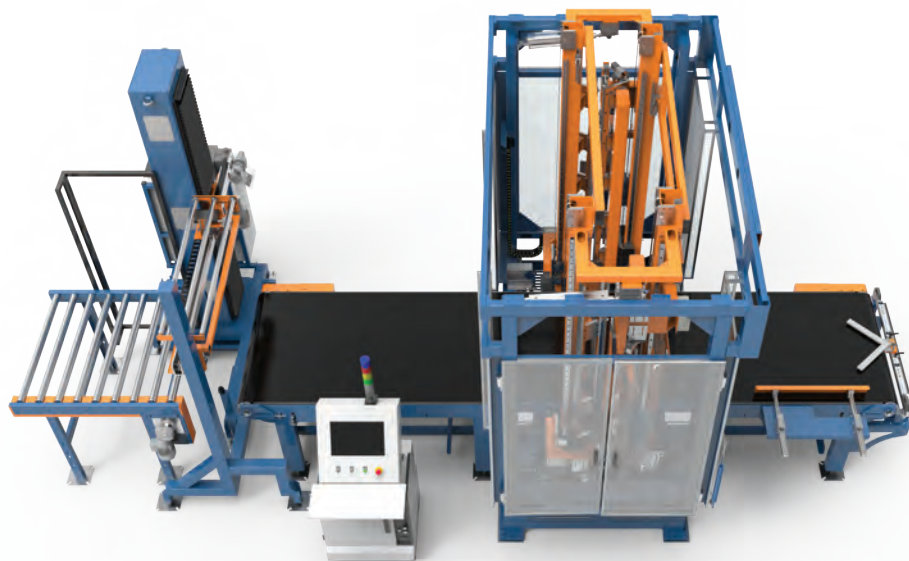
TYPICAL CONFIGURATION

- Block loading and alignment
- Pilling-trimming unit
- Bottom scraps sheet removal
- Guillotine
- Cross conveyor
- StyroDesign with inclination ON/OFF (vertical or inclined)
- Ink-jet marking system
- VIRO-BOT destacking unit
- Packaging machine
- Stargate - horizontal orbital wrapper
- Automatic skid cutting and feeding unit
- Discharge conveyor



StyroDesign HS

Foam cutters, combi cutters and complete lines for precise EPS/XPS shaping.



STYRODESIGN SOFTWARE

- User-friendly design interface
- Nesting function for material optimization
- Integrated cost calculation tools
- DXF file import

FEATURES

- Tapered roof sheet cutting station
- Automatic wire setting system
- Straight and inclined wire cutting capability
- Integrated inkjet marking system

OPTIONS

- Ink-jet printer DAL-I
- Automatic wire setting unit
- Guillotine block splitter
- Vertical trimming station
- Banding packaging machine
- Cross cutter system

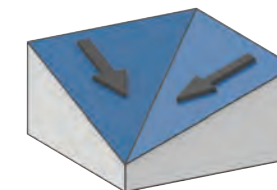
VIRO ROOF SOFTWARE

- Cut tapered roof sheets with multiple wires in vertical orientation: no "dropping" of sheets due to burn-off
- Choose length and width of roof saddle: software automatically generates the cutting path for one wire to cut the complete set of sheets

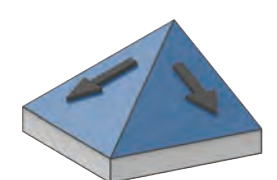
TAPERED ROOF SHEET



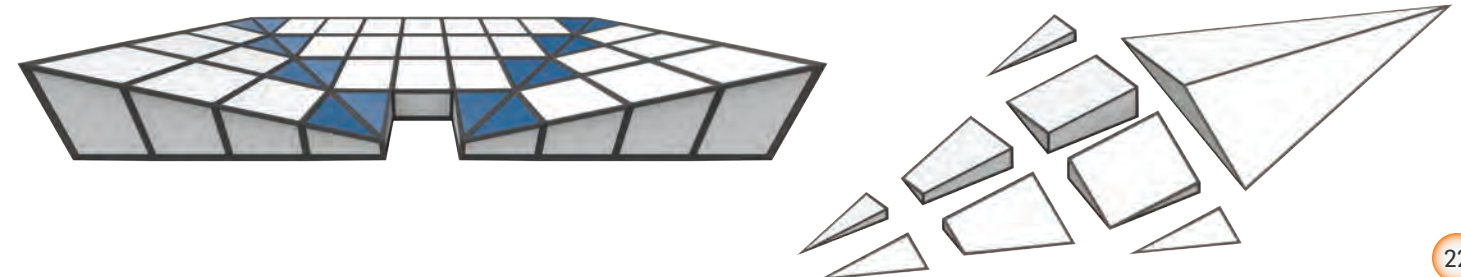
CORNER SHEET VALLEY



CORNER SHEET HIP



ROOF SADDLE



StyroPlot

Turntable for 3D shape cutting with software for sequential 3D cutting

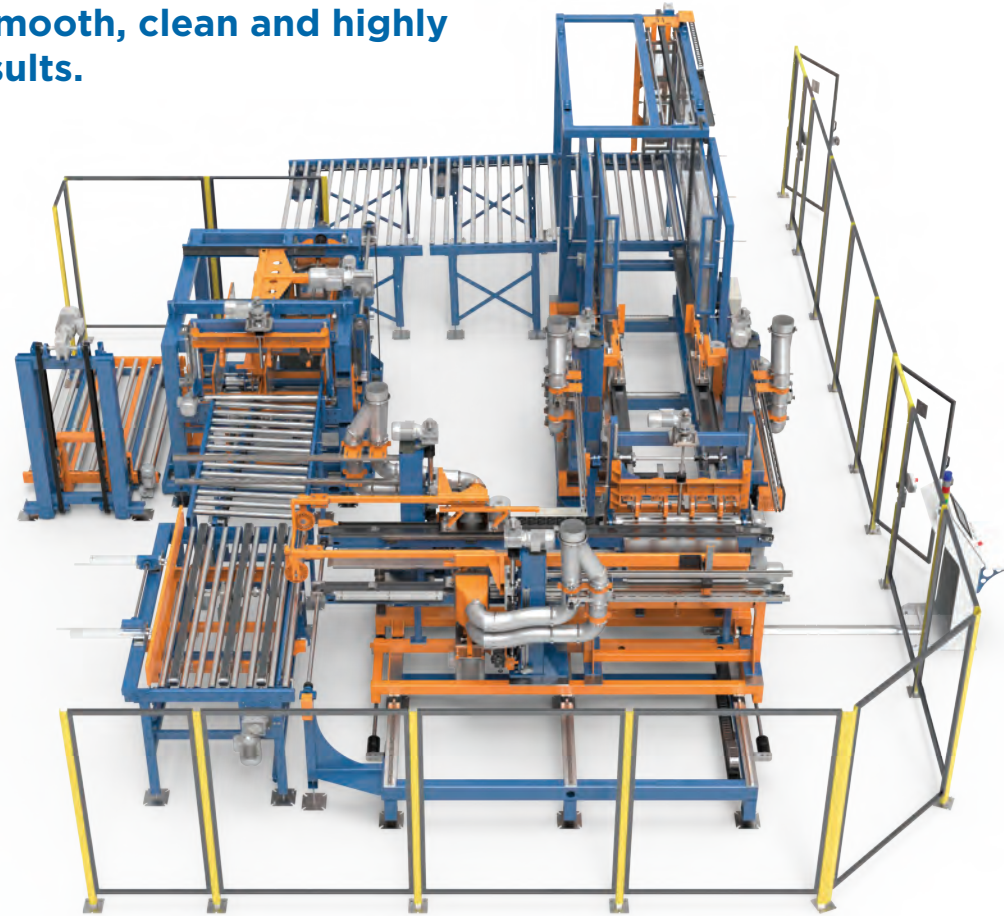


FEATURES

- Material loading table for EPS blocks dimensions: L 1,0 / 2,0 × B 1,0 / 2,0 × H 1,5
- VIRO ROOFER program for flat roof products: tapered boards, roof saddles, hip and valley sheets
- Tiltable frame for horizontal or vertical cutting
- Option: turntable for automatic production of roof saddles
- Cutting frame with 10 wires
- Industrial steel frame construction
- Independent X/Y axis control
- Adjustable alignment for angled cuts
- Control panel with industrial PC (Windows OS)
- StyroDesign software package included

EDGE TRIMMING

Automatic edge-trimming system for shiplap cutting on all four sides, ensuring smooth, clean and highly precise results.



CAPACITY

- Up to 30 sheets/min (50 - 80 mm thickness)
- Up to 20 sheets/min (100 - 180 mm thickness)
- Up to 10 sheets/min (200 - 300 mm thickness)

Capacity is based on a board dimensions of 500 x 1.000 mm

PRODUCT SPECIFICATIONS

Length: 1.000 / 1.200 / 2.000 / 2.500 mm
Width: 500 / 1.000 / 1.200 mm
Thickness: 50 - 400 mm
Overlap max: 10 / 15 / 20 mm

TYPICAL CONFIGURATION

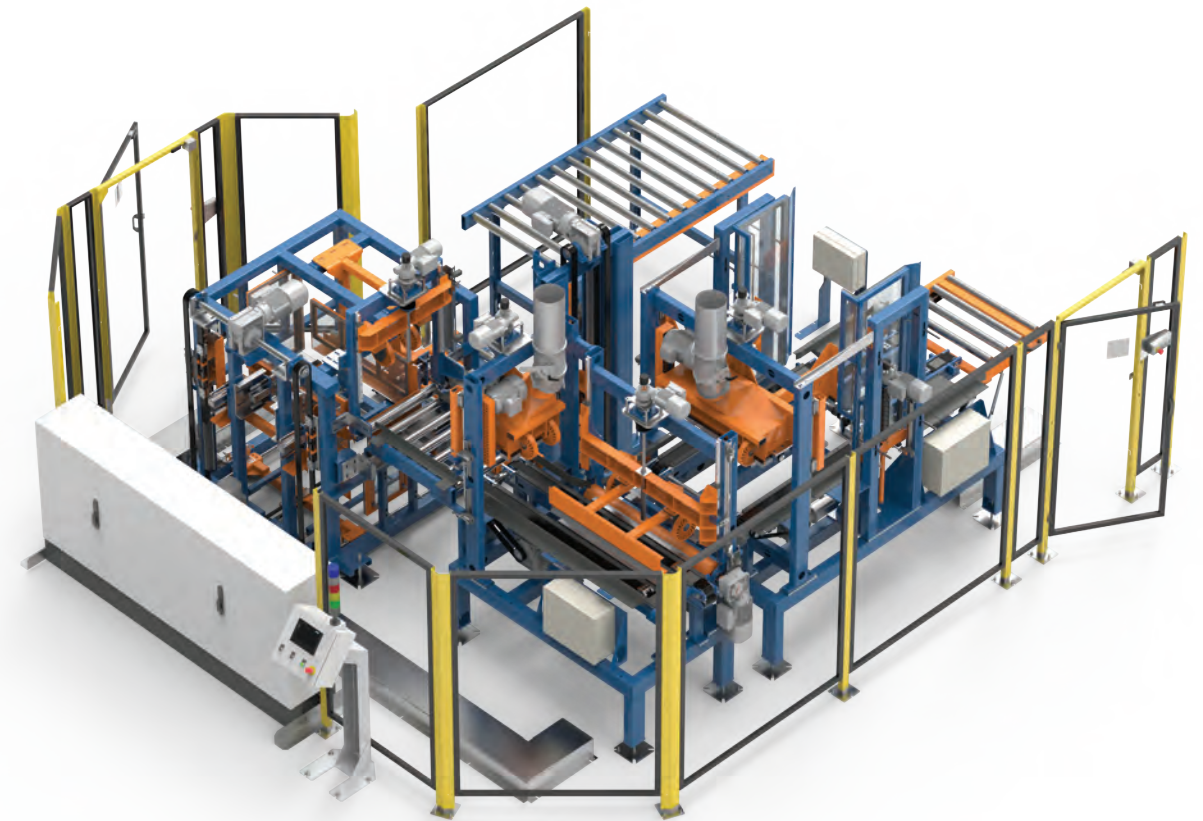
- Infeed conveyor with destacking station
- Length trimming station
- Width trimming station
- Stacking and discharge station

OPTIONS

- Dust extraction system
- Dust silo ATEX rated

BOARDS GROOVING STATION

Automatic board grooving system with rotating slitting blades for insulation boards.

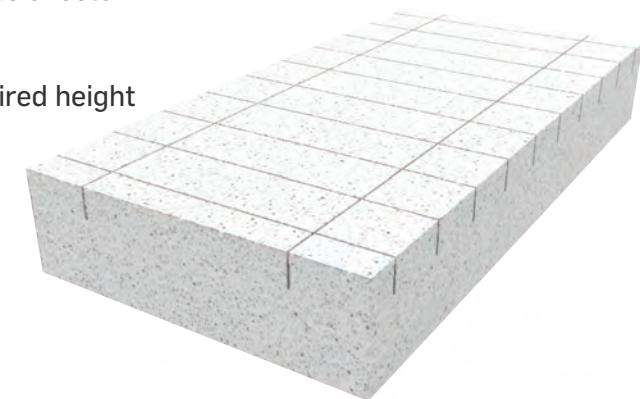


TYPICAL CONFIGURATION

- Destacking station for separating EPS sheet stacks into single sheets
- Alignment and cross-cut slitting with multiple saw blades
- Transport and lengthwise slitting with multiple saw blades
- Automatic stacking unit for forming EPS bundles to the required height

OPTIONS

- Dust extraction system
- Dust silo ATEX rated



DESTACKER



TRIM RUNNER



BLADE RUNNER



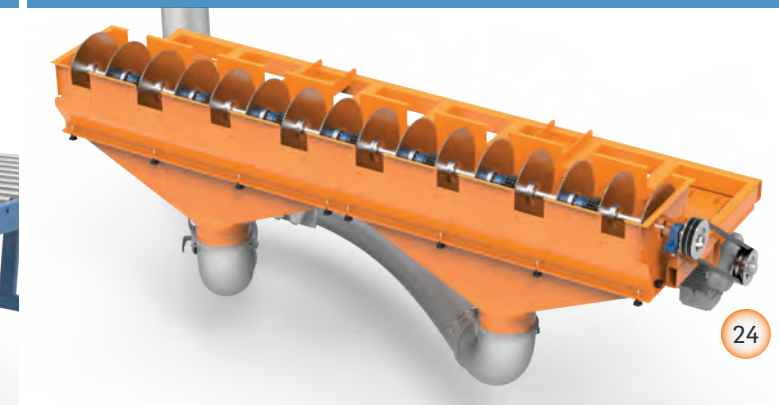
STACKER



DIMPLE ROLLER



GROOVER STATION



LAMINATING LINE

For EPS insulation products for floor heating panels.



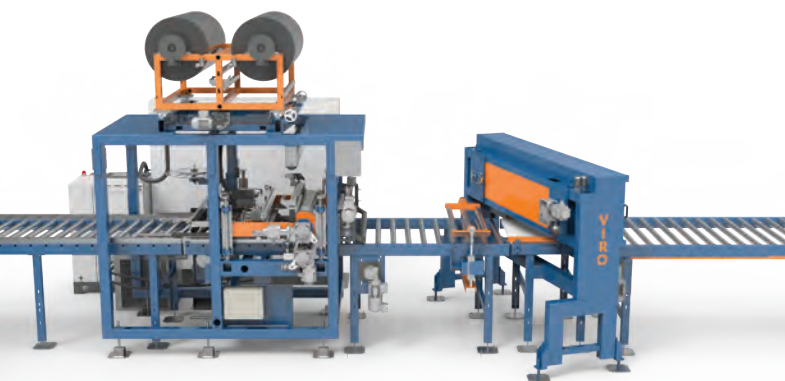
PRODUCTS SPECIFICATION

- Hot-melt glue application
- Hot roller laminating system
- Roll length (depending on factory layout)
- Standard boards: up to 2.500 mm
2 x 1.000 mm
- Production speed: up to 15 m/min for hot-melt system
- Production speed: up to 30 m/min for pre-coated film

TYPICAL CONFIGURATION

- Loading conveyor for EPS stacks
- Magazine and sheet de-stacking
- Laminating station:
 - A. Laminator for film without adhesive, using hot-melt glue application
 - B. Laminator for pre-coated laminating film, activated with hot rollers
- Slitting-cutting station
- Roll product winding station
- Boards stacking and folding system
- Transfer conveyor for rolls
- Automatic packaging system
- VIRO-BOT handling system
- Atlantis pallet wrapper
- Skid application unit

HOT MELT LAMINATOR

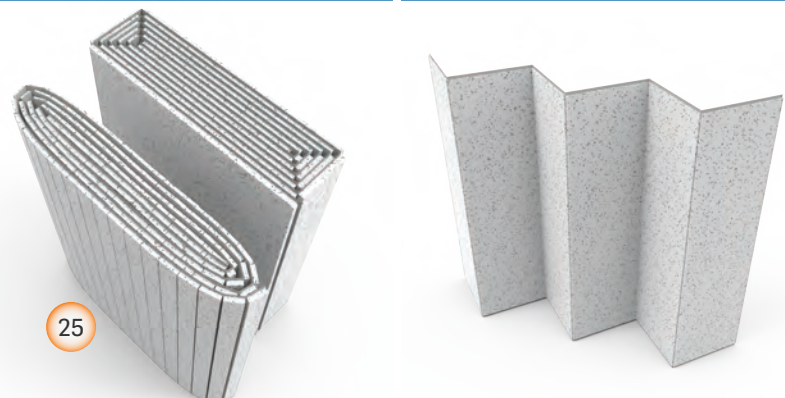


EPS WINDING ROLL/SQUARE

EPS FAN FOLD

SLITTING-CUTTING STATION

WINDING STATION



ELASTIFICATION Block Press

Vertical orientation for compression or elastification of EPS blocks.

It complies with DES SM and DES SG according to DIN 4108-10 and EN 13163

FOOTFALL SOUND INSULATION

- Pressing stroke: 0 - 70%
- Pressure: up to 65 tons/m² (depending on EPS density)
- Capacity: 12 - 20 blocks/hour

ELASTIFICATION

- Pressing stroke: 0 - 10 %
- Pressure: up to 20 tons/m² (depending on EPS density)
- Capacity: 22 - 30 blocks/hour

TECHNICAL SPECIFICATIONS

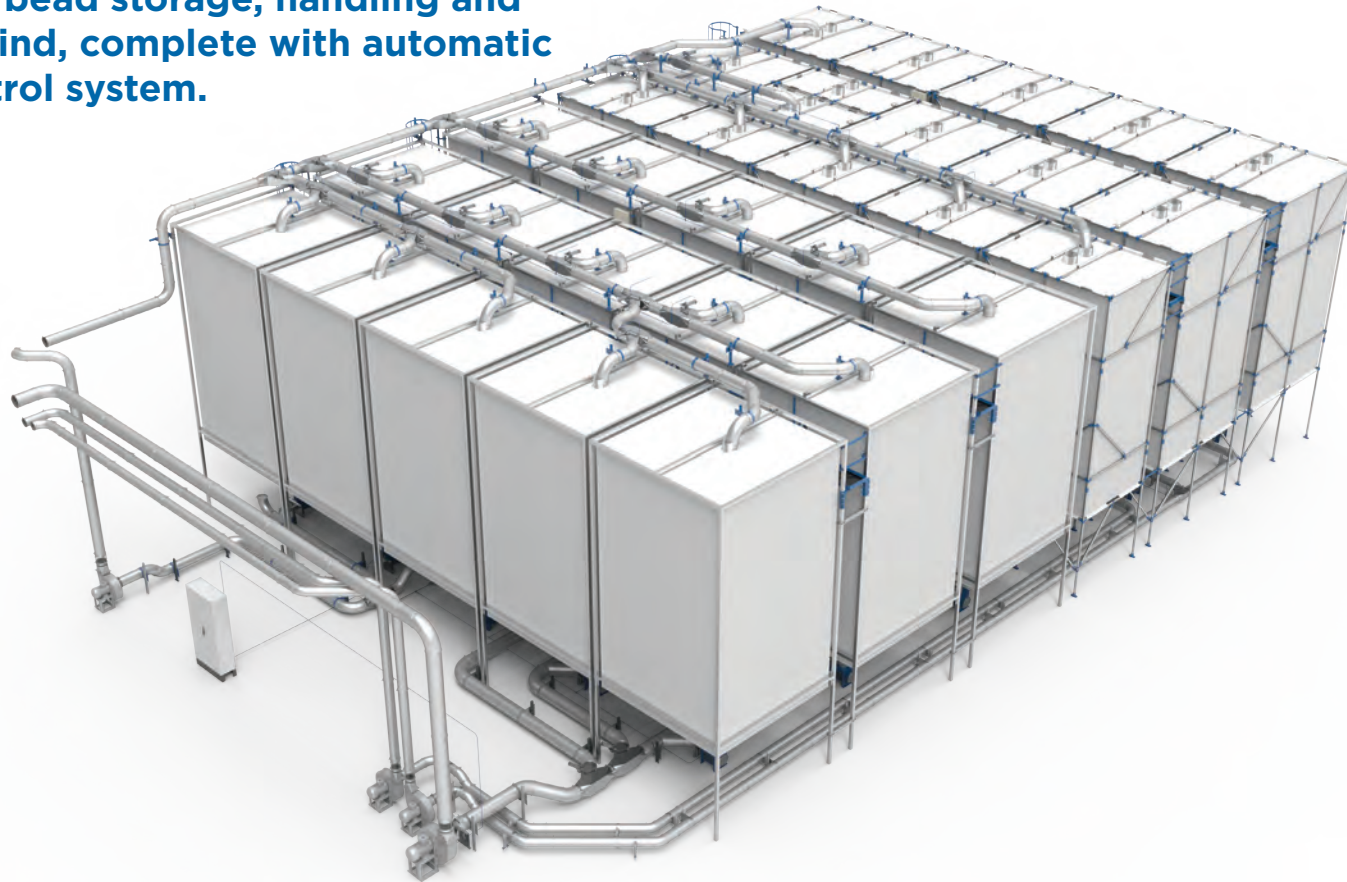
- Variable pressing and releasing speed
- Adjustable pressing time
- Maximum stroke up to 70 % of the EPS block height
- Multiple press cycles
- Process data stored as recipes



MATERIAL MANAGEMENT

Silo Plant

Silo plants for safe and efficient EPS bead storage, handling and regrind, complete with automatic control system.



FEATURES

- EPS storage silos made from antistatic, breathable fabric for optimal air circulation
- Welded and painted steel frame with carbon steel tube and flanges, easy to assemble
- Access platform with handrails and ladders
- Passive dedusting ventilation for regrind silos
- Shutters, pneumatic actuators, and switches
- Level control sensors
- Silo discharge units
- Junction box and accessory kit for automated or remote silo operation
- Silo control system with touchscreen operation
- Connection via bus network with other VIRO equipment

MIXING UNITS

Screw Mix



- Mixing of EPS regrind with virgin EPS beads
- Mixing ratio controlled by blockmould operator
- Accurate dosing of white, grey, or mixed material
- Fully adjustable scrap refeed rate optionally 0 - 100%

Screw Mix:

- Two silos for virgin and regrind
- Highly accurate dosing by screws
- Regrind mixing ratio from 0 - 50 %

Star Mix:

- Up to six silos
- For virgin material W/G
- Regrind W/G with different densities

Paddle Mix:

- Two silos for virgin and regrind
- Rotary airlocks for mixing 0 - 50 %
- Highly accurate dosing by paddles

Star Mix



Paddle Mix



DIVERTER

SLIDING DAMPERS

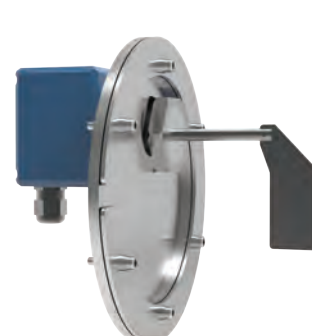
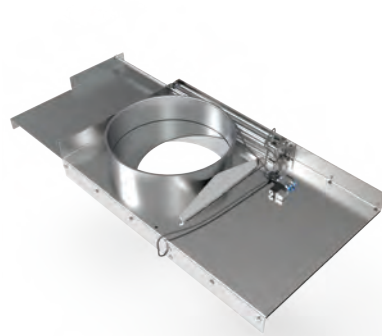
SILO PIPING

LEVEL CONTROL SENSOR

VIRO AUTOMATIC SILO SYSTEM

SCREW MIX OPTION WITH OR WITHOUT DE-DUSTING

PADDLE MIX



RECYCLING SYSTEMS



TYPICAL CONFIGURATION

- Collecting silo for coarse regrind
- Metering airlock with cell wheel
- VBM 1350 granulator
- Fine regrind transport blower
- Integrated dedusting system
- Transport blower for clean regrind to silo
- Vacuum suction blower for dust transport
- Collecting silo for dust and contaminants
- Dust compactor



Prebreaker VBM 1500

TECHNICAL SPECIFICATIONS

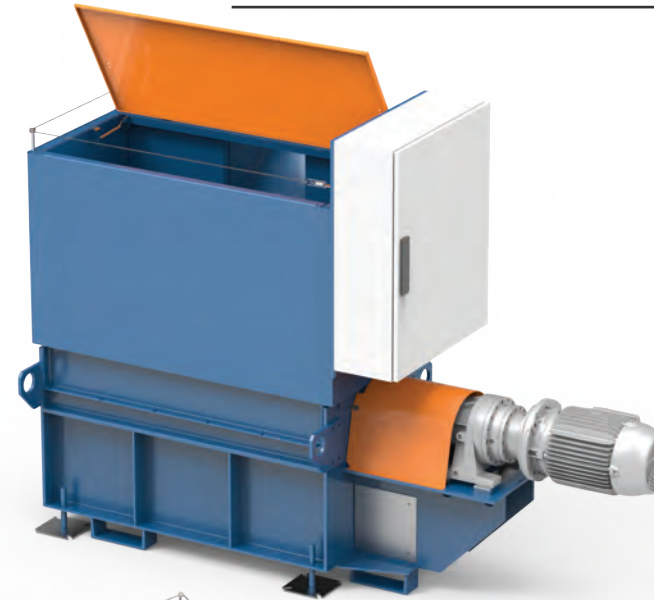
- Capacity: up to 30 m³/hr (depending on the density and feed rate)
- Slow-moving granulating unit with hooks
- 30 kW motor with gearbox
- Screen mesh: 40 x 40 mm

OPTIONS

- Heavy particle separator
- Breaker blower
- Sound absorption box
- De-duster

PREBREAKER / GRINDER

VBM 1350



Granulation of EPS scrap sheets and parts to reusable bead size.

TECHNICAL SPECIFICATIONS

- Capacity: up to 10 m³/h (depending on density)
- Slow-moving granulating unit with breaker arms for gentle processing
- 15 kW motor with gearbox
- Screen mesh: 20 x 20 mm
- Dosing screw for controlled discharge

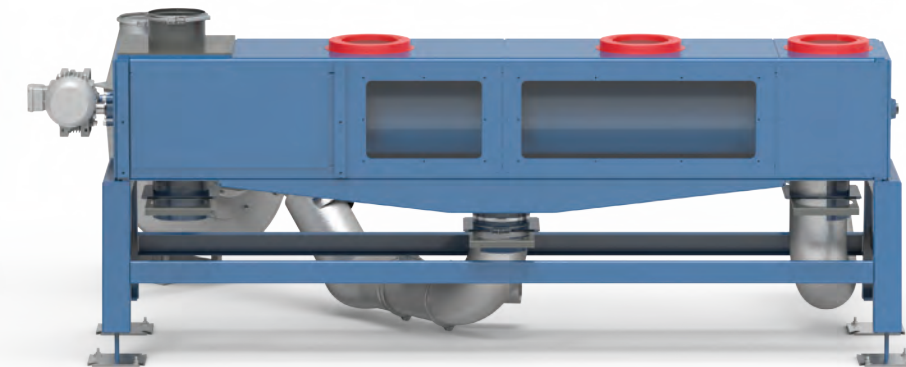
OPTIONS

- Cell wheel for coarse regrind dosing
- Exchangeable screen system

ADVANTAGES

- Less celaning, less downtime
- Less dust, better quality of final product

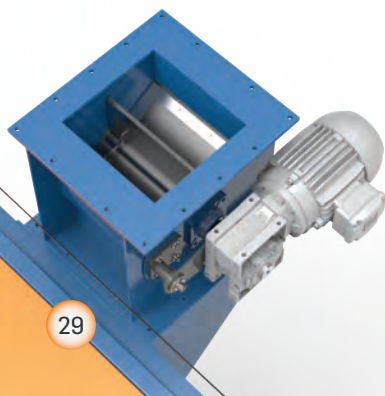
DEDUSTING SYSTEM



ADVANTAGES

- EPS production generates dust and fines, that quickly accumulate without proper precautions
- Slow-speed granulators, such as the VBM 1350, produce minimal dust
- In combination with the VDD 1300 dust extraction system, overall dust load can be reduced to a minimum
- Lower dust levels minimize machine downtime for cleaning
- Clean operation optimizes process stability and efficiency

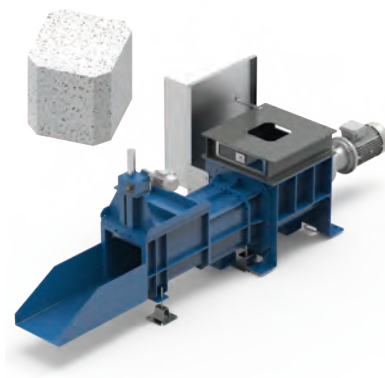
CELL WHEEL



BAG CLOSING WELDING MACHINE



DUST COMPACTOR HDC 400



DUST COMPACTOR HDC 120



EXCHANGABLE SCREEN ON VBM 1350



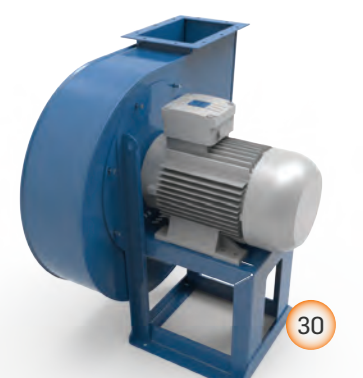
SLOW MOVING BREAKER ARMS ON VBM1350



BREAKER BLOWER



TRANSPORT BLOWER



XPS PACKING LINE

Complete downstream solutions for XPS production.

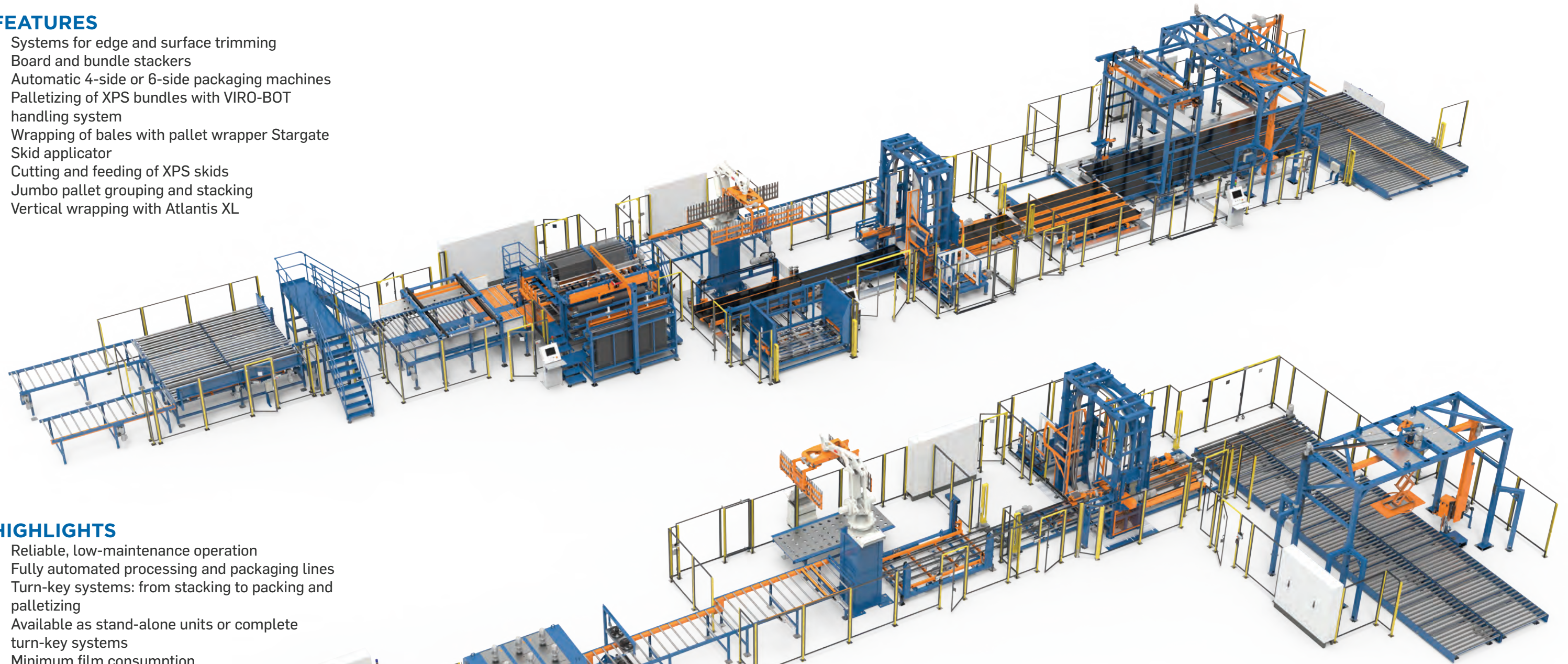
FEATURES

- Systems for edge and surface trimming
- Board and bundle stackers
- Automatic 4-side or 6-side packaging machines
- Palletizing of XPS bundles with VIRO-BOT handling system
- Wrapping of bales with pallet wrapper Stargate
- Skid applicator
- Cutting and feeding of XPS skids
- Jumbo pallet grouping and stacking
- Vertical wrapping with Atlantis XL

HIGHLIGHTS

- Reliable, low-maintenance operation
- Fully automated processing and packaging lines
- Turn-key systems: from stacking to packing and palletizing
- Available as stand-alone units or complete turn-key systems
- Minimum film consumption

XPS automatic packaging and palletizing line with 4 side packaging machine - upper line



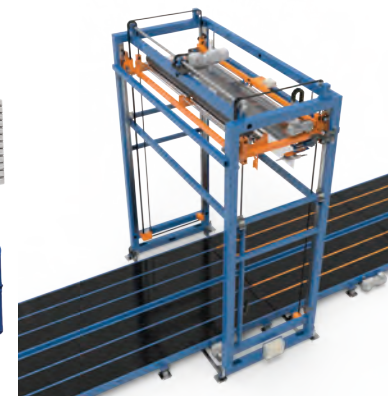
XPS automatic packaging and palletizing line with 6 side bagging packaging machine - lower line

4 AND 6 SIDE FOIL PACKING

TOP FILM COVER STATION

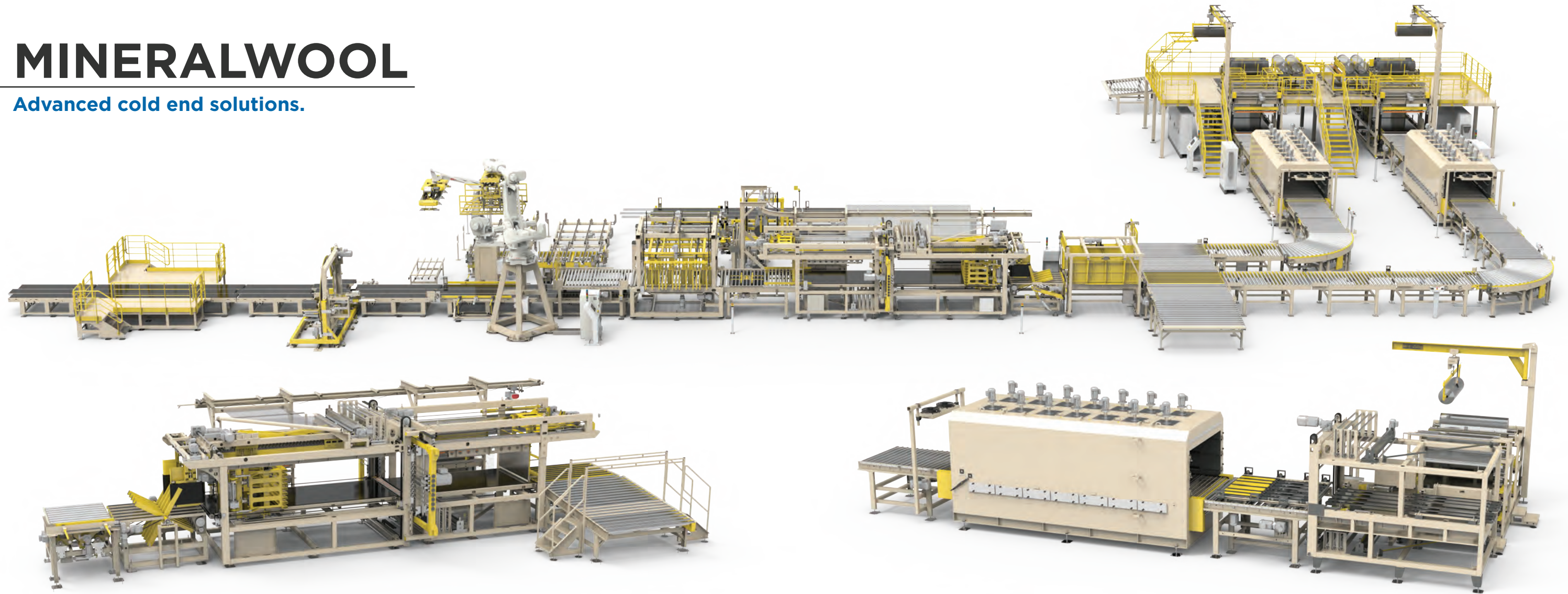
PPZA TANDEM

ROBOT WITH A GRIPPER



MINERALWOOL

Advanced cold end solutions.



RANGE OF EQUIPMENT

- High-performance stackers for boards and panels
- Automatic and semi-automatic shrink film packaging machines
- 6-side packaging systems ensuring complete product protection
- Compression packaging machines (up to 70%) for optimized logistics
- Group Packing Machines for Multipack Packaging
- Robotic palletizing systems for fast and reliable handling
- Robotic kicker application systems
- Advanced lamination lines for lamellas and pipes
- Hydroponics production lines tailored to modern agriculture
- Production lines for wood wool boards
- Fully automated lines for all types of insulation materials



ADVANTAGES

- Efficiency, cost savings, and long-term reliability
- Optimized performance, reduced costs, and sustainable value
- Productivity, reliability, and long-term security of your investment
- Smart technology for efficiency, savings, and future-proof production
- Innovation, efficiency, and lasting value for your business.

RING WRAPPER

VIRO-BOT FOR KICKERS

VIRO-BOT FOR PACKS AND PANELS

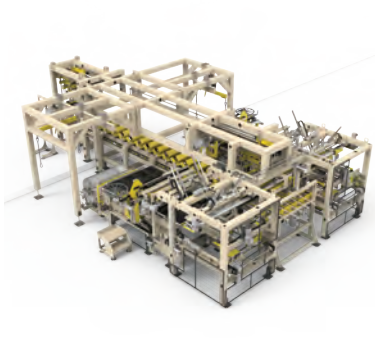
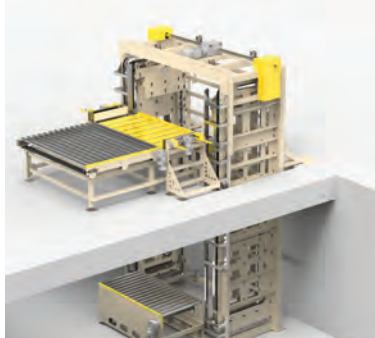
BOARDS STACKER

BOARDS STACKER

FACING/LAMINATION LINE

PIPE INSULATION

70% COMPRESSED PACK





VIRO



www.eps-systems.com

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