



AVRASYA

POLYURETHANE FOAM
PRODUCTION LINE
SOLUTIONS

www.avrasyaexport.com

CUSTOMER CARE



TECHNICAL SUPPORT

In case of any malfunction or error that may occur in the machine that requires intervention, our technical team intervenes as soon as possible. User manuals containing sufficient information about the use of our machines or lines are supplied to the customer.



REMOTE ACCESS

Thanks to Remote Access, our experienced personnel can access the equipment remotely and troubleshoot or diagnose problems. In case of any malfunction or error in the machines, technical support is provided as soon as possible by our equipped personnel via remote access.



INSTALLATION MACHINERY AND PLANT

The installation, commissioning and preparation of our machines and plants, which are completely our own production, are completed at the customer's production facilities by our well-equipped personnel. Necessary trainings on the use of these machines and plants are also provided.



SUPPLY OF SPARE PARTS

Depending on the use of the machine, the equipment that has completed its useful life over time is always provided by our company as spare parts.

APPLICATION AREAS

CONSTRUCTION



It can be used as roof and wall materials especially in buildings. It can provide insulation very successfully in terms of heat, sound and water. These materials, which also have a certain amount of load-lifting resistance, are highly resistant to impacts.

REFRIGERATION



These are polyurethane systems consisting of polyol and isocyanate used for heat insulation in refrigerators. Commercial type deep freezer, mini bar and soft drink cabinets etc. products are polyurethane systems used for insulation purposes.

FURNISHING



Sponge systems can be used with all kinds of molds thanks to their high fluidity during application. They are polyurethane systems, which are generally used in the furniture and wood industry, which provide the advantage of using decoratively.

PIPE INSULATION



They are polyurethane systems used in the insulation of pipes in the transfer of district heating-cooling, underground and aboveground steam transfers, geothermal energy, liquefied gases (LNG, LPG, etc.), fire lines, crude oil and all chemical flows.

AUTOMOTIVE



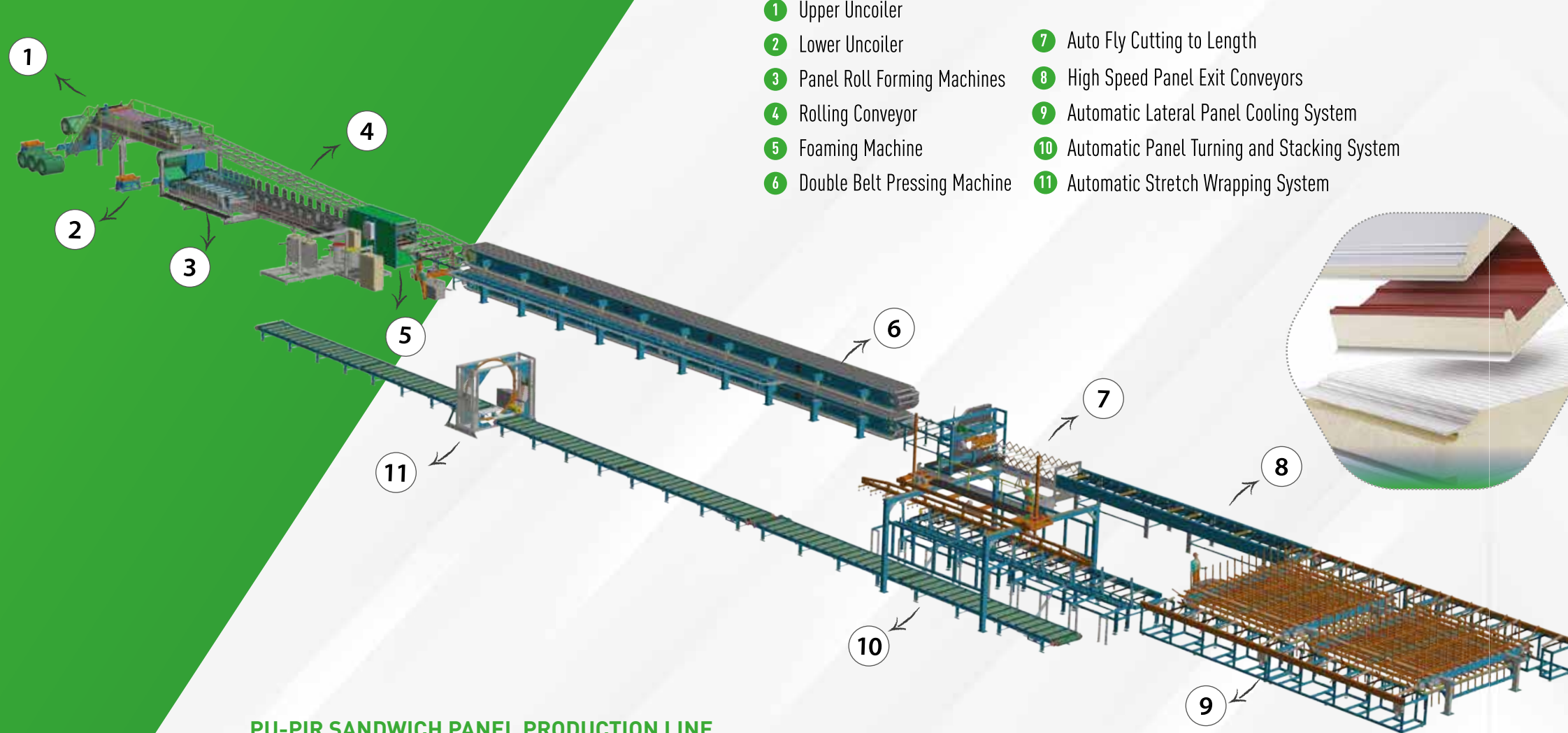
It has high tear strength and soft cell structure; It can be applied in different densities and hardness in automotive, office furniture and medical sectors. Its usage areas are in the production of office chair armrests, automobile steering wheel, door handles, seating groups in the automotive and construction machinery sector and similar applications. It can be applied on vacuum leather as well as with polyester or aluminum molds.

TECHNICAL ITEMS



These types of polyurethane used in the production of technical items are a type of polymer that is famous for its high elongation and tensile strength, resistance to oils, solvents, chemicals and abrasions. Thanks to these characteristic features, it has a wide market and application area.

PU - PIR SANDWICH PANEL PRODUCTION LINE



FLOW CHART

- 1 Upper Uncoiler
- 2 Lower Uncoiler
- 3 Panel Roll Forming Machines
- 4 Rolling Conveyor
- 5 Foaming Machine
- 6 Double Belt Pressing Machine
- 7 Auto Fly Cutting to Length
- 8 High Speed Panel Exit Conveyors
- 9 Automatic Lateral Panel Cooling System
- 10 Automatic Panel Turning and Stacking System
- 11 Automatic Stretch Wrapping System

PU-PIR SANDWICH PANEL PRODUCTION LINE

Our continuous PUR / PIR sandwich panel production line is already recognized its value by exporting to European country with CE and other major sandwich panel producing companies at domestic and foreign, DMMET, we are keep to develop in accordance with customer's needs for the high quality sandwich panels.

APPLICATION of the PU-PIR PANEL PRODUCTION LINE

This production line is suitable for manufacturing socket type (wall plate panel) and lapped type (roof tile panel) pu sandwich panels.

Type of Production	Sandwich panels insulated with PU and PIR foam		
Type of Instutaion	Polyurethane		
	Rigid PUR blend - class B2/B3	Foam density	38 ÷ 45 kg/m³
RIGID Facing Materials	Metarial		Thickness (mm)
	Pre-painted and galvanized steel, pre-coated steel with PVC		0,35 ÷ 0,80



MODEL	Press Lenght	Min-Max Wall Panel Thickness	Min-Max Roof Panel Thickness	Max Production Speed
DMMET 18	18 meter	40 mm - 150 mm	40 mm - 120 mm	8 m / min
DMMET 24	24 meter	40 mm - 180 mm	40 mm - 150 mm	10 m / min
DMMET 30	30 meter	40 mm - 200 mm	40 mm - 200 mm	12 m / min

**** ESTIMATED PRODUCTION CAPACITY**
(Efficiency 80% - Panel width 1.000 mm)

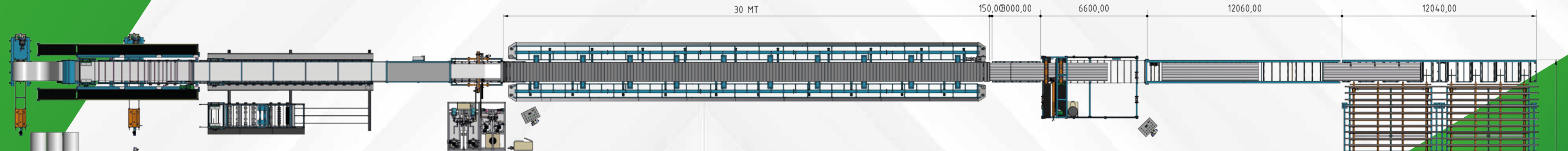
Panel Thickness	Line Speed (m/min)	Production (m/shift)
40	12,0	4,320
60	8,0	2.880
80	7,0	2.520
100	6,0	1.800

****Standard components**
PLC and Operator Panels : SIEMENS
3-phase electric motors : ABB - GAMAK
Inverter : ABB - SIEMENS
Contactors, relays : SIEMENS, Allen Bradley
Selector switches, Lamps, push-buttons : SIEMENS
Pneumatic components : Festo - Winman

The above listed Production capacities refers to ideal working constructions with theoretical standard chemicals and can be subject to modification according to the raw material overall quality, the chosen chemical system, the foam density, the dosing machine pumps flow rate and the maintenance status of the plant. Production capacity calculated considering 7.5 h/shift

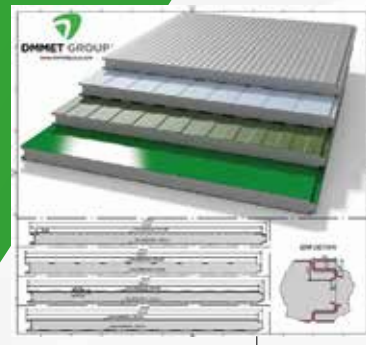


PU - PIR SANDWICH PANEL PRODUCTION LINE

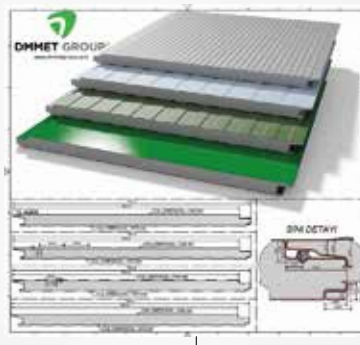


PRODUCTS

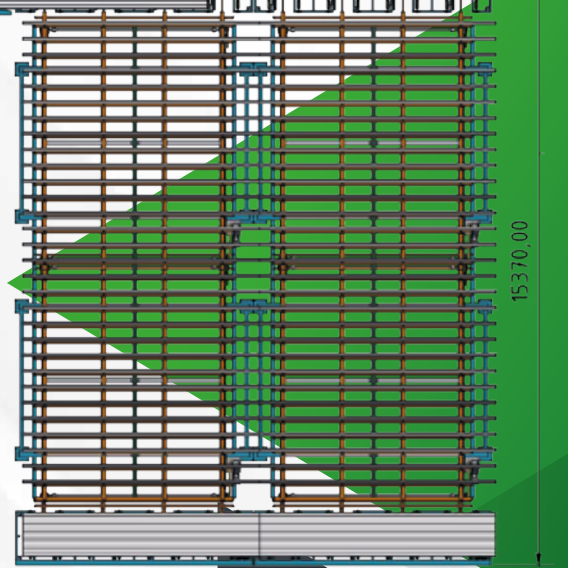
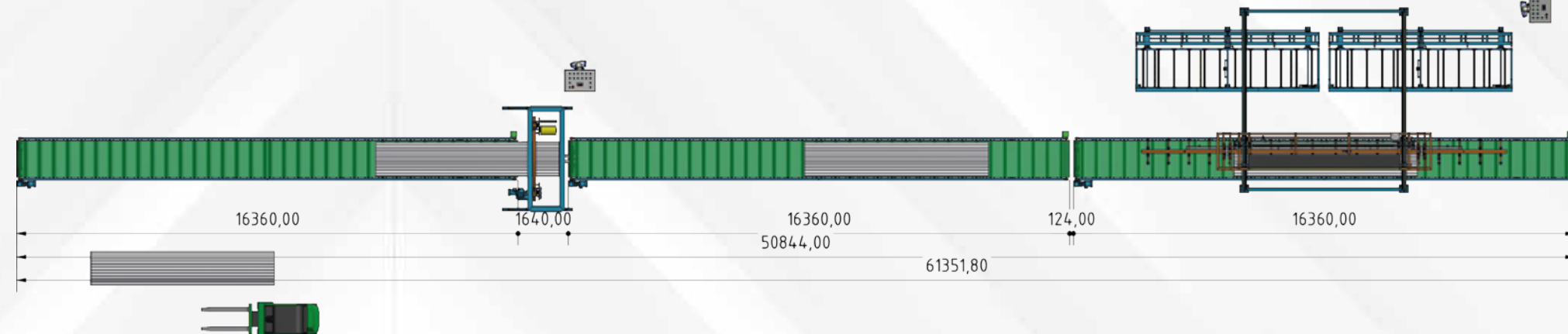
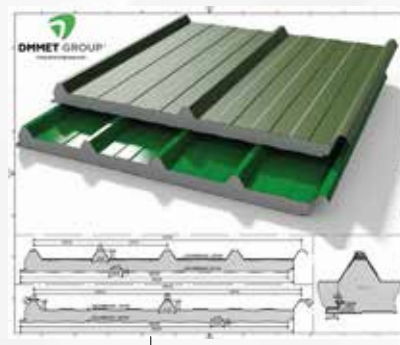
Wall Panel Forms



Secret Fix Panel Forms



3/5 Ribs Roof Panel Form



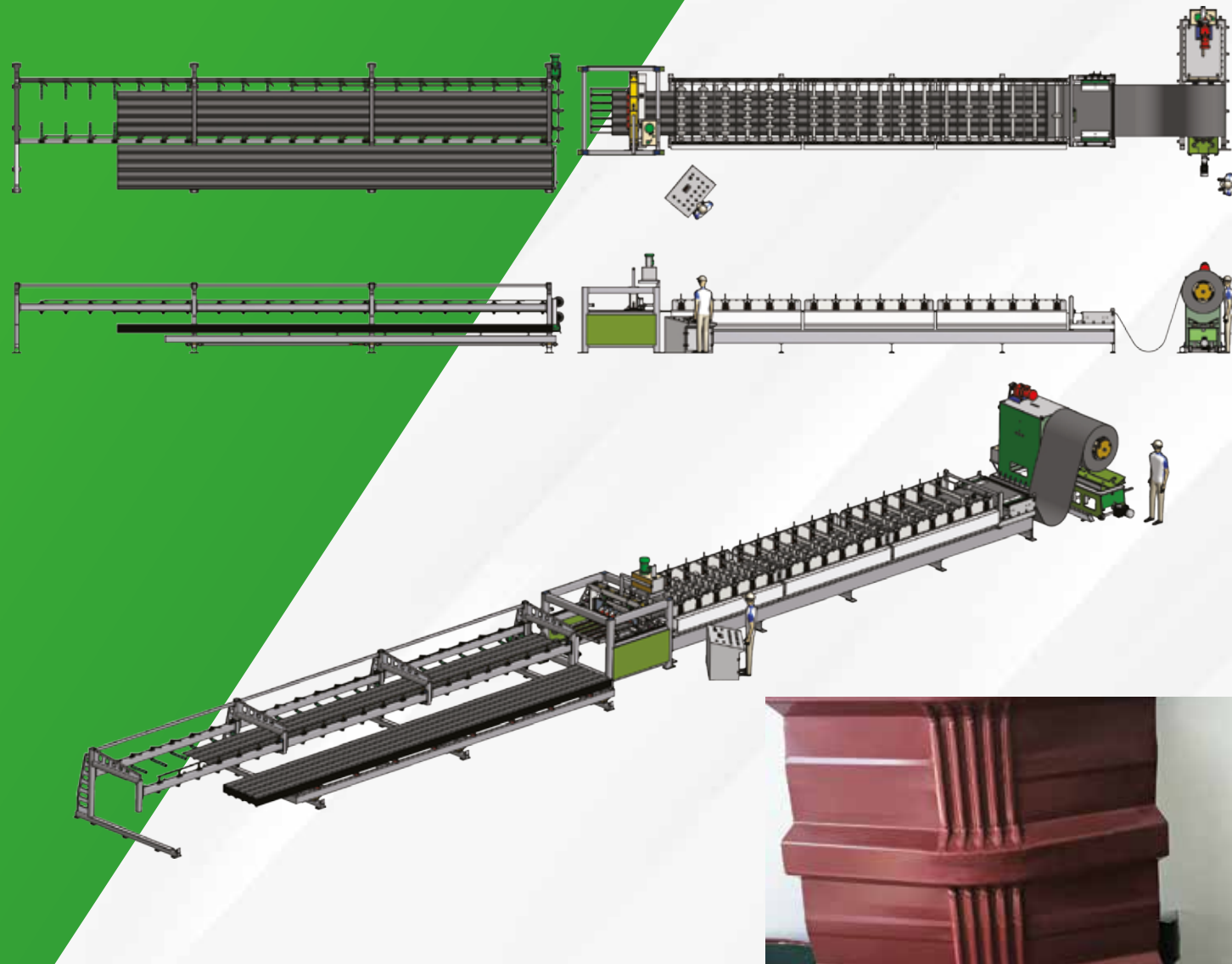
PU - PIR SANDWICH PANEL PRODUCTION LINE



DONEM MAKINA, a member of Dmmet Group, has more than 10 years' experience in designing, manufacturing, and installing complete automatic systems for the production of Pu-Pir Sandwich Panels, with more than 130 employees, is the East European and Middle East Leader with sales and after sales services. We always have the latest technology and also we move it forward with our new designs and products and also have the proud of being a model for other manufacturers.



Produces efficient and flexible production lines for trapezoidal and corrugated profiles. We offer these solutions as multi-deck lines and as quick-change cassette lines. Roll forming machines for single profile production are also available from us.



TRAPEZOIDAL SHEET ROLL FORMING MACHINE PROPERTIES

Coil Metarial	Coil	Color Steel, Galvanised
	Coil Thickless	0,3 - 0,8 mm
	Coil Width	1000 - 1200 - 1250 mm, Customized
	Yield Strenth	250 - 350 Mpa
Decoiler and Coil Car	Decoiller Type	Manual or hydraulic or automatic type
	Weight Capacity	10T,
Main Roll Forming	Forming Station	18 forming stations, depend on profiles
	Roller Material	High grade 45# steel, surface with hard chrome 0.05 mm
	Shaft Diameter	86 mm
	Drive Type	Chain Drive
	Forming Speed	0-25 m/min
	Main Power	7.5 KW
FLY Cutting Device	Cutting Type	Hydraulic cutting
	Cutting Die Material	SW 2375 steel, HRC58-62
	Cutting Tolerance	+/- 1mm (10m)
Electrical System	PLC Brand	Siemens S7 brand
	Inverter Brand	ABB
	Encoder	Omron
	Touch Screen	Siemens
Hydraulic System	Hydraulic Station	Turkish Brand
	Hydraulic Power	4KW
Auto Stacker Max 12000 mm	Table Type	Pnomatik System
	Function of Table	To support the profile sheets after cutting

METAL TILE ROOF ROLL FORMING MACHINE

Our corrugated sheet (trapeze), sinusoidal, metal roof tile production lines, are manufactured with the worlds number 1 equipments such as SIEMENS-ABB-SKF-OMRON and many others. We design and manufacture the machines according to the customers requirements ,so,To get a quotation ,sending the drawing or photo of the required profile will be enough.



METAL TILE ROOF ROLL FORMING MACHINE PROPERTIES

Material Thickness	0.3 - 0.7 mm
Material Width	Depend on Profie
Decoiler	Manuel Passive Uncoiler (Customer can choose hydraulic decoiler)
Weight Capacity of Uncoiler	10 Ton
Forming Station	1.2' chain transmission
Drive of Metal Roof Tile Roll Frm. Mac.	1.2' Stations (Depend on Profile)
Main Forming Power	5.5 KW
Hydraulic Power	4 KW
Roller Material	45# Forge Steel, Polished And Coated with 0.05 mm Hard Chrome
Principal Axis Diameter	86mm (Dpend on Profile)
PYC of Metal Tile Roll Forming Mac.	Siemens
Cutting Blade Material	12 Stations (Depend on Profile)
Auto Stacker Unit Phomatic System	1,2' chain Transmission

METAL STEEL FLOOR DECK ROLLFORM MACHINE

The normal machinable thickness range of our steel deck roll forming machine is 0.8-1.2mm, the standard or more used in international market is Gauge 22, 20, 18, 16 (0.75-1.5mm), working raw material is PPGL, Galvanized steel etc. We confirm machine's configuration according to your drawing, specially the pitch and height of each wave. Group is always your best choice of metal deck roll forming machine.

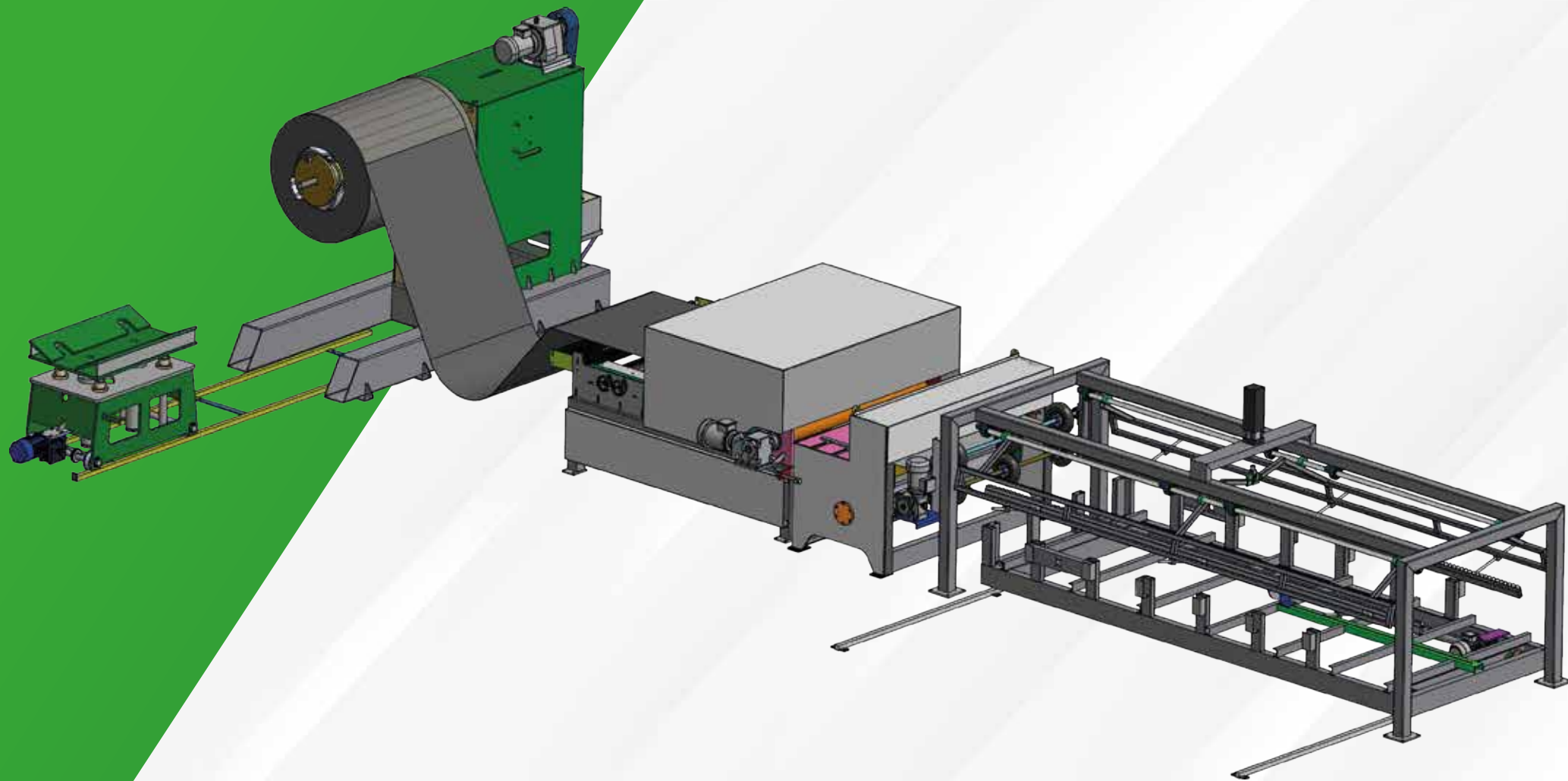


FLEXIBLE U-C SIGMA PROFILE PURLIN MACHINE

Pre-Punching and Pre-Cutting Purline Roll Forming Machine

Flexible production line for prefabricated C and U members for wall, truss and floor framing.Wall, trust and floor frames for prefabricated buildings like: residential houses and villas, office buildings, social premises, module containers, façade elements, etc. Members produced with all the needed perforations (sheet working) like joint details, screw holes, through holes, openings ...





CONSISTS OF THE FOLLOWING UNITS

1	Coil Car
2	Coil Opener
3	Down Spade
4	Up Spade
5	Pinch Rolls
6	Leveller Unit
7	Movable Shear
8	Conveyor
9	Pneumatic Stovage Table
10	Operator Desk
11	Hydrualic Unit
12	Automation Pannel (MMC)
13	Leveller Driver Unit
14	Conveyor Driver Unit
15	Free Installation

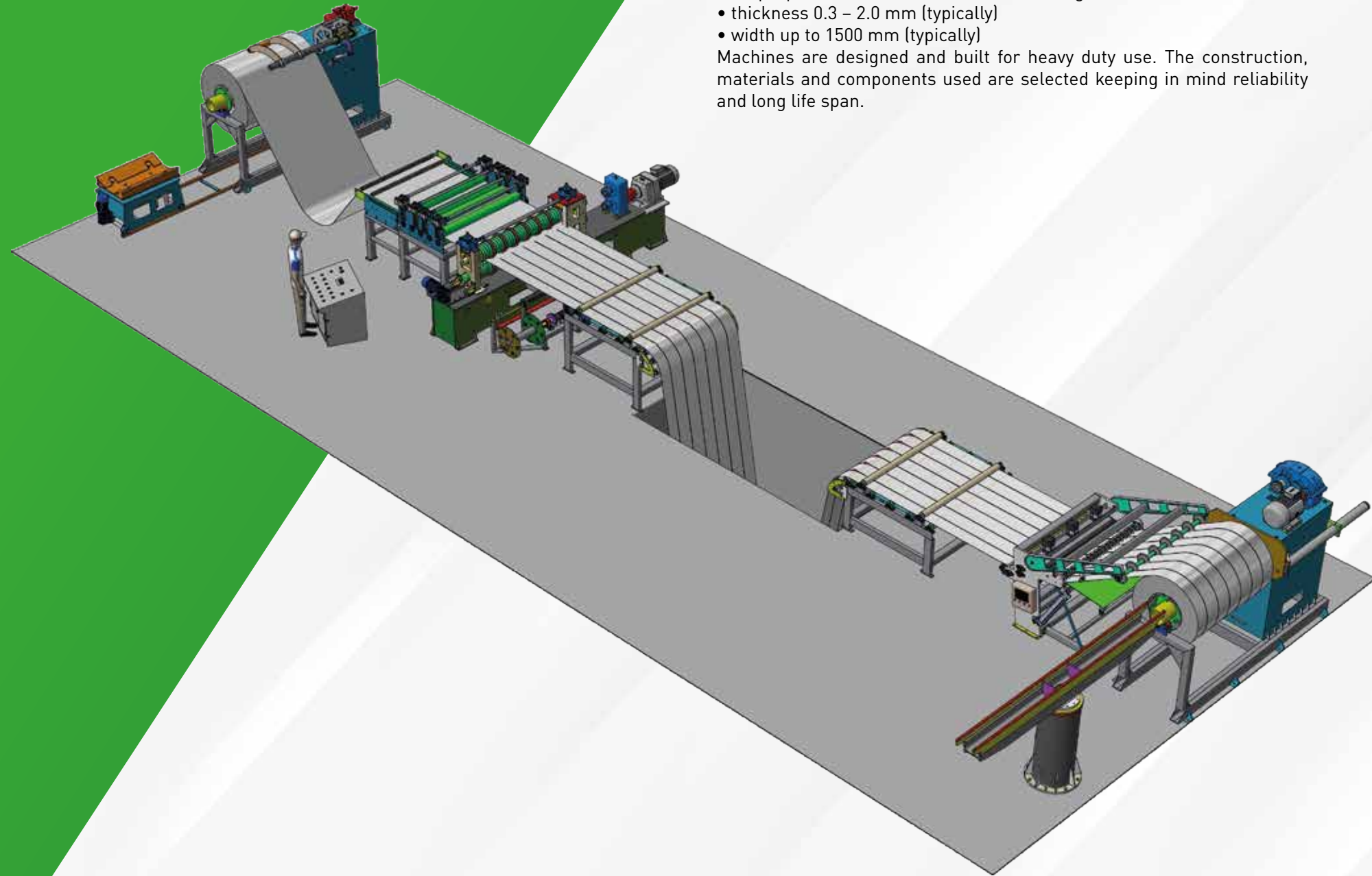


SLITTING LINE

Produces Slitting Lines and
Multipurpose Lines for sheet material in range:

- thickness 0.3 – 2.0 mm (typically)
- width up to 1500 mm (typically)

Machines are designed and built for heavy duty use. The construction, materials and components used are selected keeping in mind reliability and long life span.



HIGH PRESSURE DOSING
MACHINE

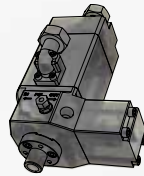


We produce high pressure dosing machines used for all polyurethane foam applicatons. We also produce hydraulic presses for sandwich panel production, complete lines for pentane used applications and flexible foam lines.

DPM series high-pressure dosing machines are designed and developed to process all of polyurethane foam applications. With all in one frame, they are ideal for newcomers and long time users. DPM machines are available in a wide range of models with an output from 120 g/sec to 2500 g/sec at ratio 1:1.

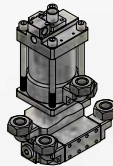
TECHNICAL DATA					
DPM	500	1000	1500	2000	2500
Total Flow Rate at MV 1:1	100 g/sec - 500 g/sec	200 g/sec - 1000 g/sec	300 g/sec - 1500 g/sec	400 g/sec - 2000 g/sec	500 g/sec - 2500 g/sec
Raw Material Tank	2 x 250 l	2 x 250 l	2 x 250 l	2 x 250 l	2 x 250 l
Installed Capacity	20 kW	30 kW	40 kW	55 kW	70 kW
Processable Viscosities of the Components	20 - 2.000 mPas	20 - 2.000 mPas	20 - 2.000 mPas	20 - 2.000 mPas	20 - 2.000 mPas
Base Frame Dimensions	2.160 x 1.850 mm	2.160 x 1.850 mm	2.160 x 1.850 mm	2.160 x 1.850 mm	2.160 x 1.850 mm
Total Weight (without liquids)	1.250 kg	1.400 kg	1.550 kg	1.700 kg	2.110 kg
Cable	5x6 mm TTR	5x10 mm TTR	5x16 mm TTR	5x25 mm TTR	5x35 mm TTR
Air (l/min)	8 bar - 500 l	8 bar - 500 l	8 bar - 500 l	8 bar - 500 l	8 bar - 500 l
Oil (Hydraulic Oil 46)	50 l	50 l	50 l	50 l	50 l

MIXING HEADS



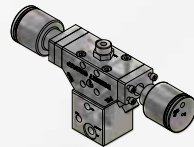
L TYPE MIXING HEAD

DPM technology produced to provide laminated flow in open molds, refrigerator or automotive industries.



I TYPE MIXING HEAD

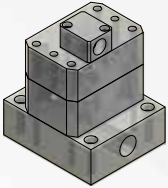
DPM technology that helps the polyurethane to reach all points of the panel, thanks to the I-type head used in discontinuous panel manufacturing.



CONTINUOUS TYPE MIXING HEAD

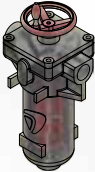
High-pressure mixing heads for continuous sandwich panel applications

DPM EQUIPMENTS



DPM FLOWMETER

DPM technology with high precision and high pulse feature manufactured for the polyurethane sector.



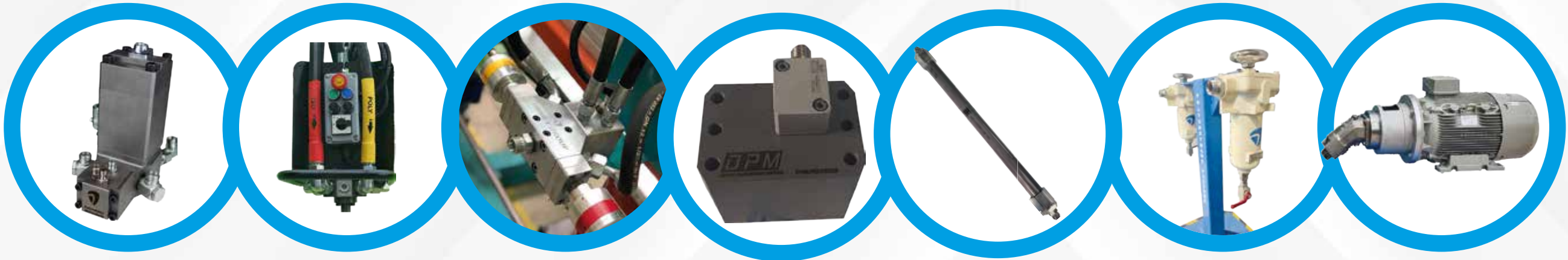
DPM EDGE FILTER (SELF CLEANING)

DPM technology that has a self-cleaning feature, has a handle and motor binding plate on it, and easily cleans the Isocyanate crystals and Polyol threads formed on the surface.



DPM STATIC MIXER

Auxiliary component used in continuous and discontinuous lines. Static mixer is the DPM technology used to obtain full-mixed Polyol by perfecting the mixture.



SERIES

DPM 500

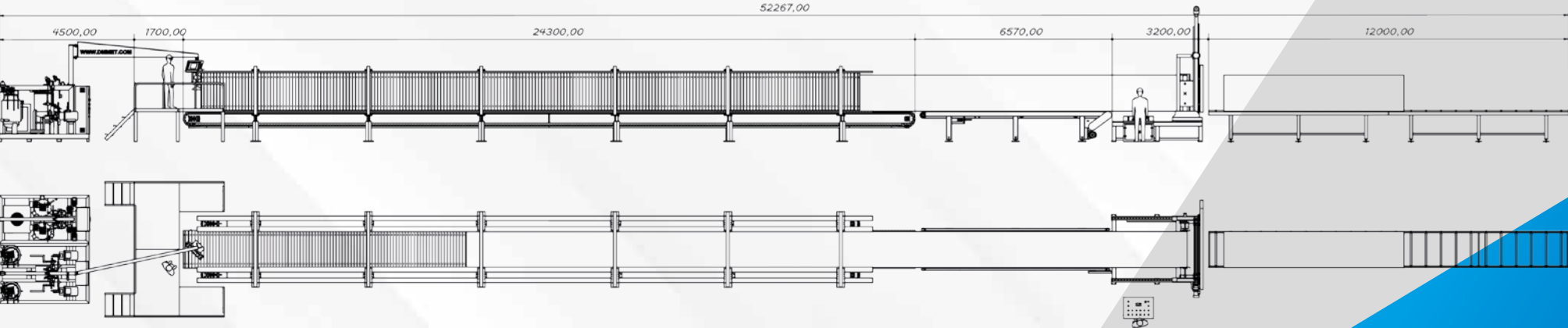
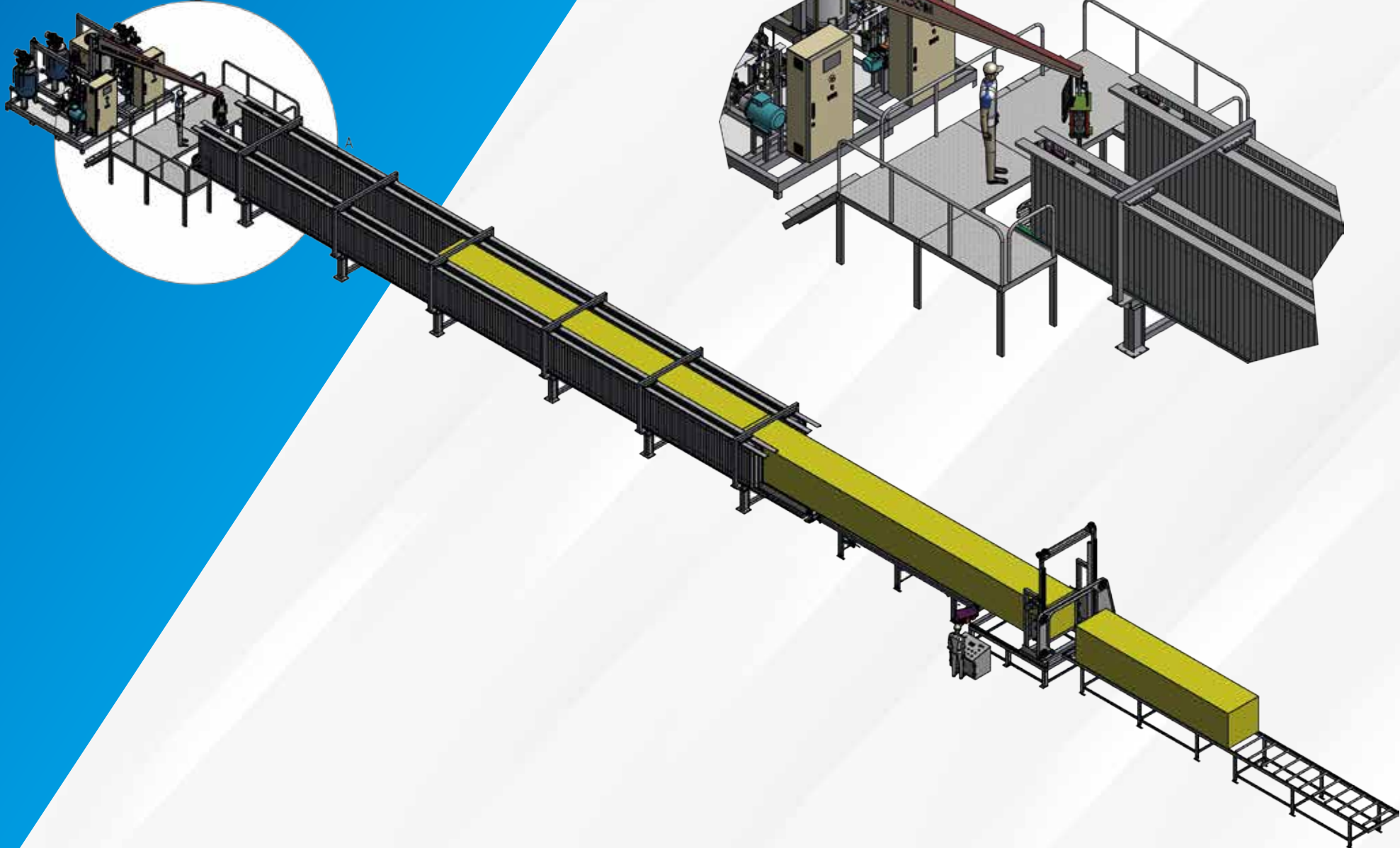
DPM 1000

DPM 1500

DPM 2000

DPM 2500

POLYURETHANE FOAM CONTINUOUS SLABSTOCK LINES



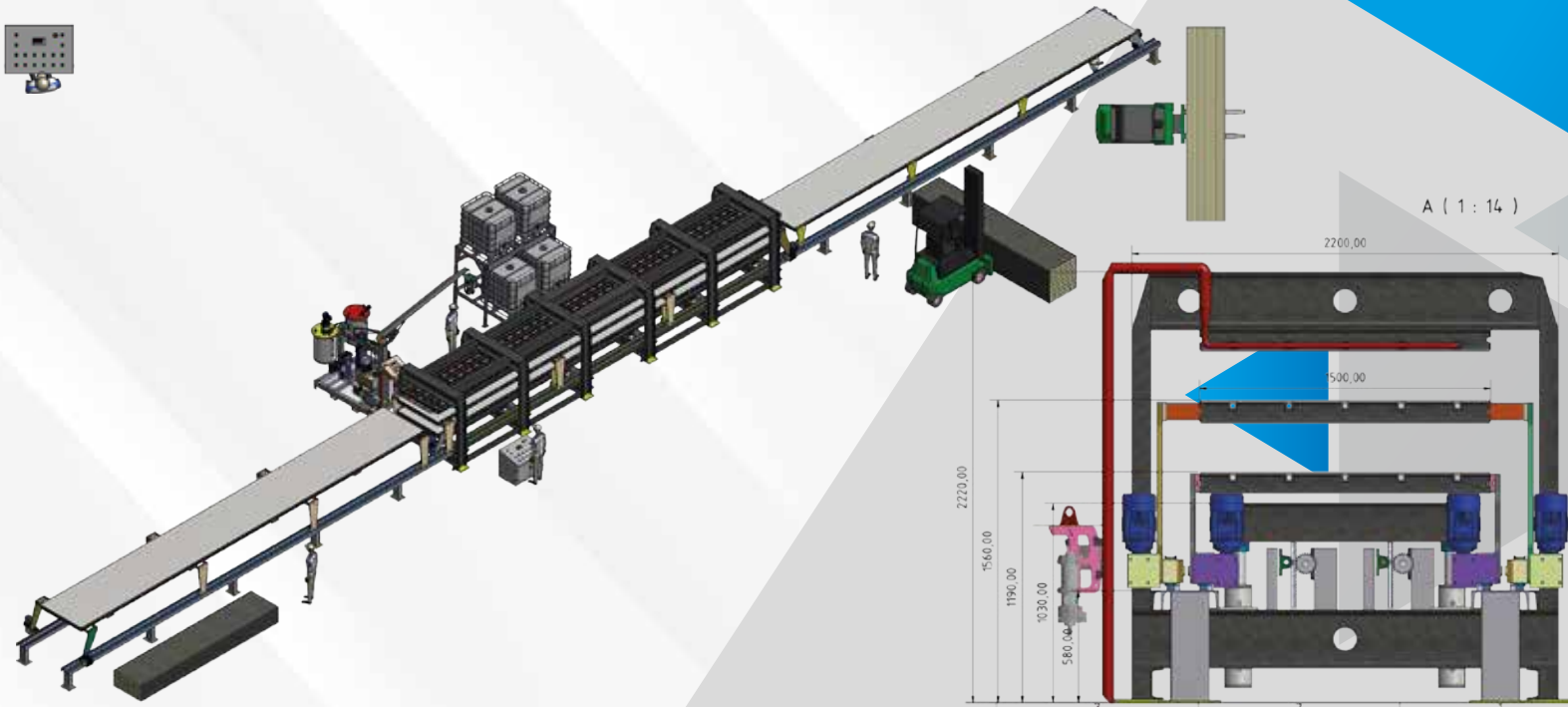
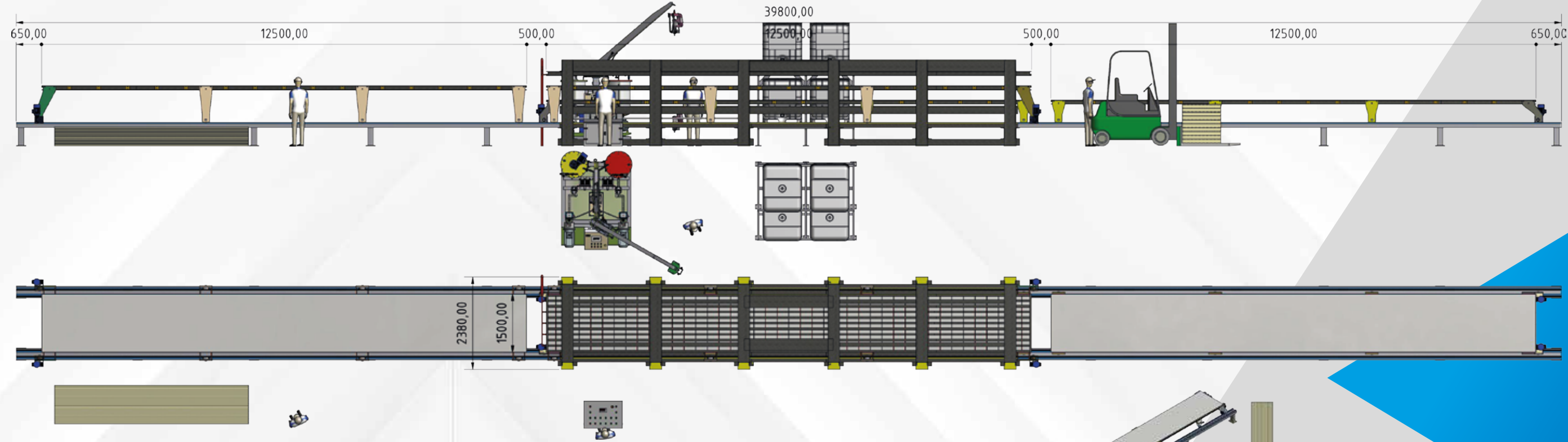
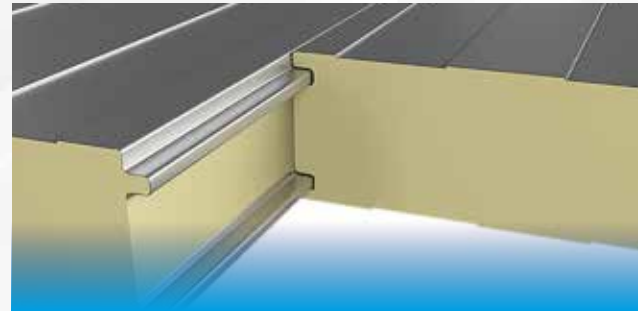
The combination of perfect high-pressure dosing and a efficient stirrer mixer makeGroup continuous slabstock lines are the perfect solution in the efficient processing of all commercial materials in almost all density ranges. Group continuous slabstock lines are opening up a variety of prospects for the cost-effective manufacture of high-quality foams of any length, up to 2000 mm in width and, depending on the foam type and specific density, with a height of up 1500 mm.



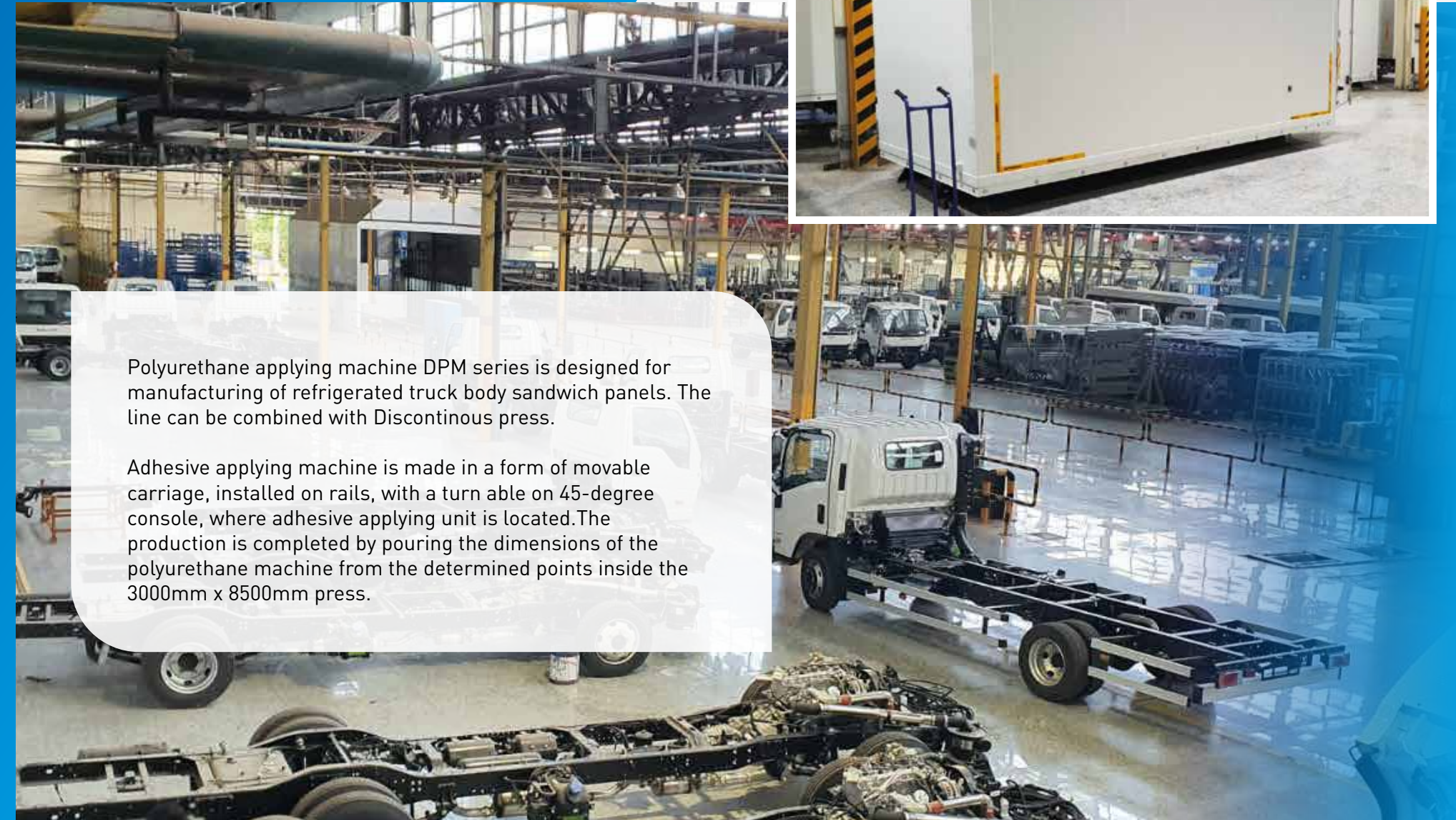
DISCONTINUOUS PANEL PRODUCTION LINE

DDP systems for the manufacturing of discontinuous sandwich elements offer a wide range of dimensions, facings and foam systems. The combination of high quality and reliable hydraulic presses for nearly all applications together with high pressure dosing systems guarantees efficient manufacture of products with an excellent range of properties.

Dmmet Group offers its customers 1+1 and 2+2 shuttle systems.



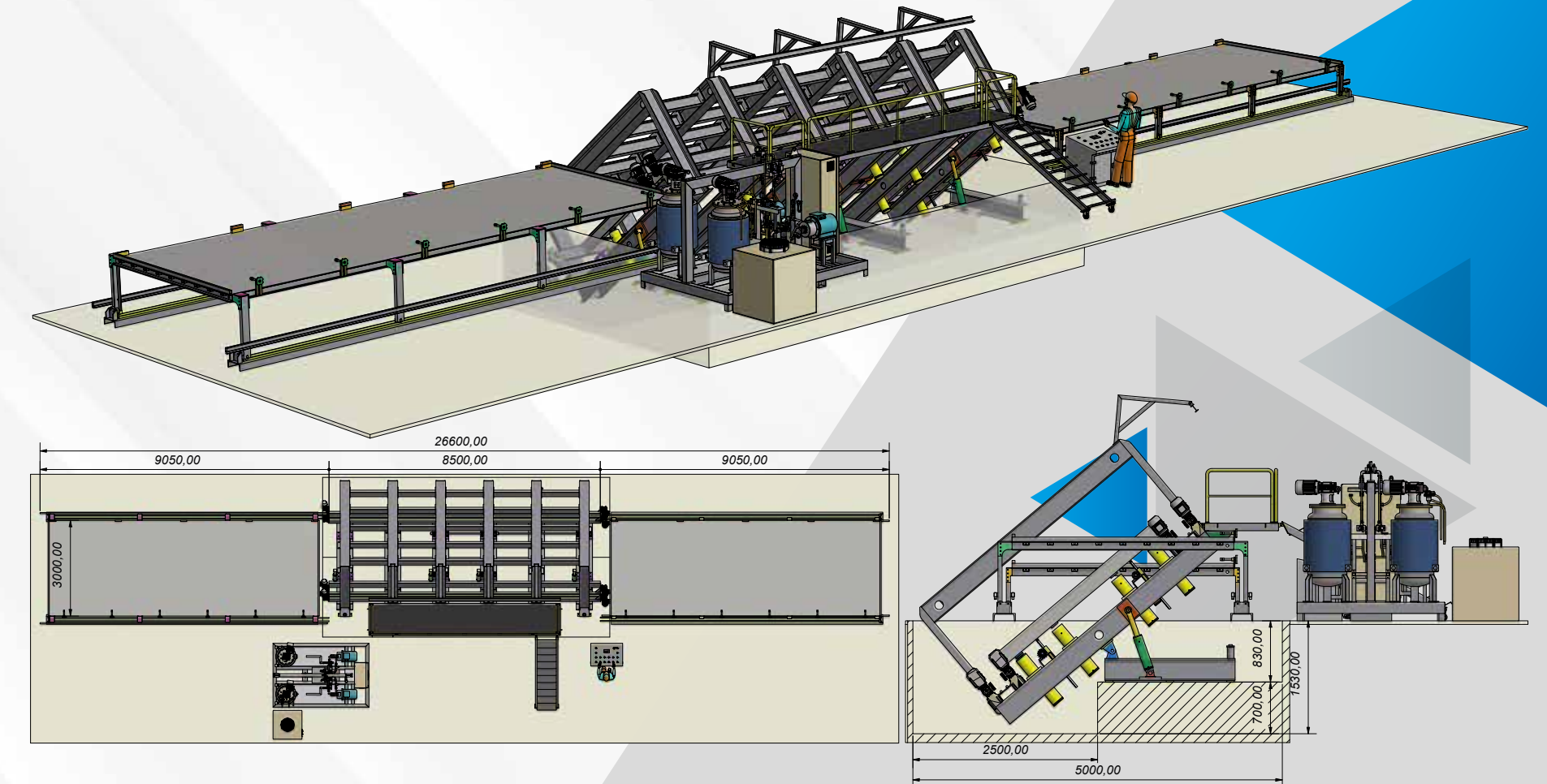
REFRIGERATED TRUCK BODY PANELS PRODUCTION LINE



Polyurethane applying machine DPM series is designed for manufacturing of refrigerated truck body sandwich panels. The line can be combined with Discontinuous press.

Adhesive applying machine is made in a form of movable carriage, installed on rails, with a turn able on 45-degree console, where adhesive applying unit is located. The production is completed by pouring the dimensions of the polyurethane machine from the determined points inside the 3000mm x 8500mm press.

www.polyurethanefoammachine.com



POLYURETHANE INTEGRAL FOAM MACHINE (AUTOMOTIVE - DEFENCE INDUSTRY)

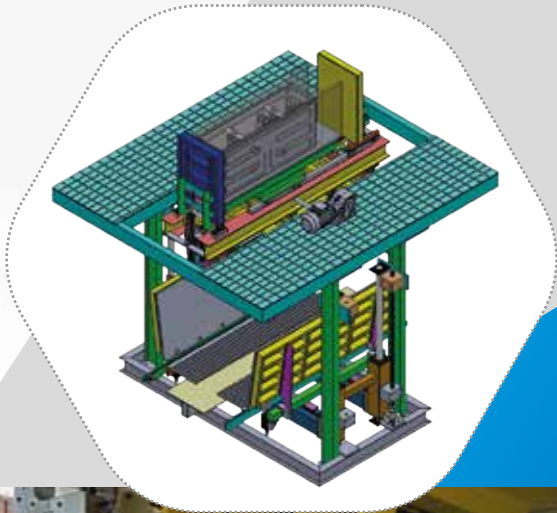
Polyurethane injection machines
Producing flexible sponges and integral systems
used in areas such as seats, steering wheels, front
consoles and sound insulation, Europa produces
polyurethane foams that provide protection against
engine heat and noise, as well as its strong,
durable and light structure. and offers products
that maintain their flexibility to the sector.



REFRIGERATOR PRODUCTION LINE



We provide our customers high quality production system and process technology for many other applications in the area of technical insulation with rigid polyurethane foam



FURNITURE MOLDING SYSTEMS



We provide production solutions in the furniture sector where polyurethane is used, mold systems and polyurethane machines according to the production requests of the customers.

