

YEARS
26



DMMET GROUP®

PU-PIR Sandwich Panel Production Line

Discontinuous Panel Production Line

Polyurethane Foam Machine

Trapezoidal Sheet Roof Forming Machine

Metal Tile Roof Forming Machine

Cut to Length Line / Slitting Line

Flexible U-C Purlin Machine


DMMET
engineering

FORMING INNOVATION BY TECHNOLOG

www.dmmetgroup.com

Turkey
Discover
the potential

FORMING INNOVATION BY TECHNOLOGY

FACTORY
Area: 4600 m² | Year : 2014

HEAD OFFICE
Area: 3200 m² | Year : 2002



ABOUT THE COMPANY

Superior Experience of 26 Years.

DONEM MAKINA was established in Kartepe –Kocaeli TURKIYE in 1996. As being stated 2 factories one with 4.600 m² closed and another 3.200 m² area .

With our full guarantee we offer:

- PU-PIR Sandwich Panel Production Line
- Discontinuous Panel Production Line
- Polyurethane Foam Machine
- Trapezoidal Sheet Rool Forming Machine
- Metal Tile Roof Rool Forming Machine
- Cut to Length Line / Slitting Line
- Flexible U-C Purlin Machine

DONEM MAKINA , has long years' experience in designing, manufacturing, and installing complete systems for the production of PU-PIR SANDWICH PANELS ,corrugated sheets and metal roof tiles with more than100 employees, is the middle east –western European leader with sales and after sales services.

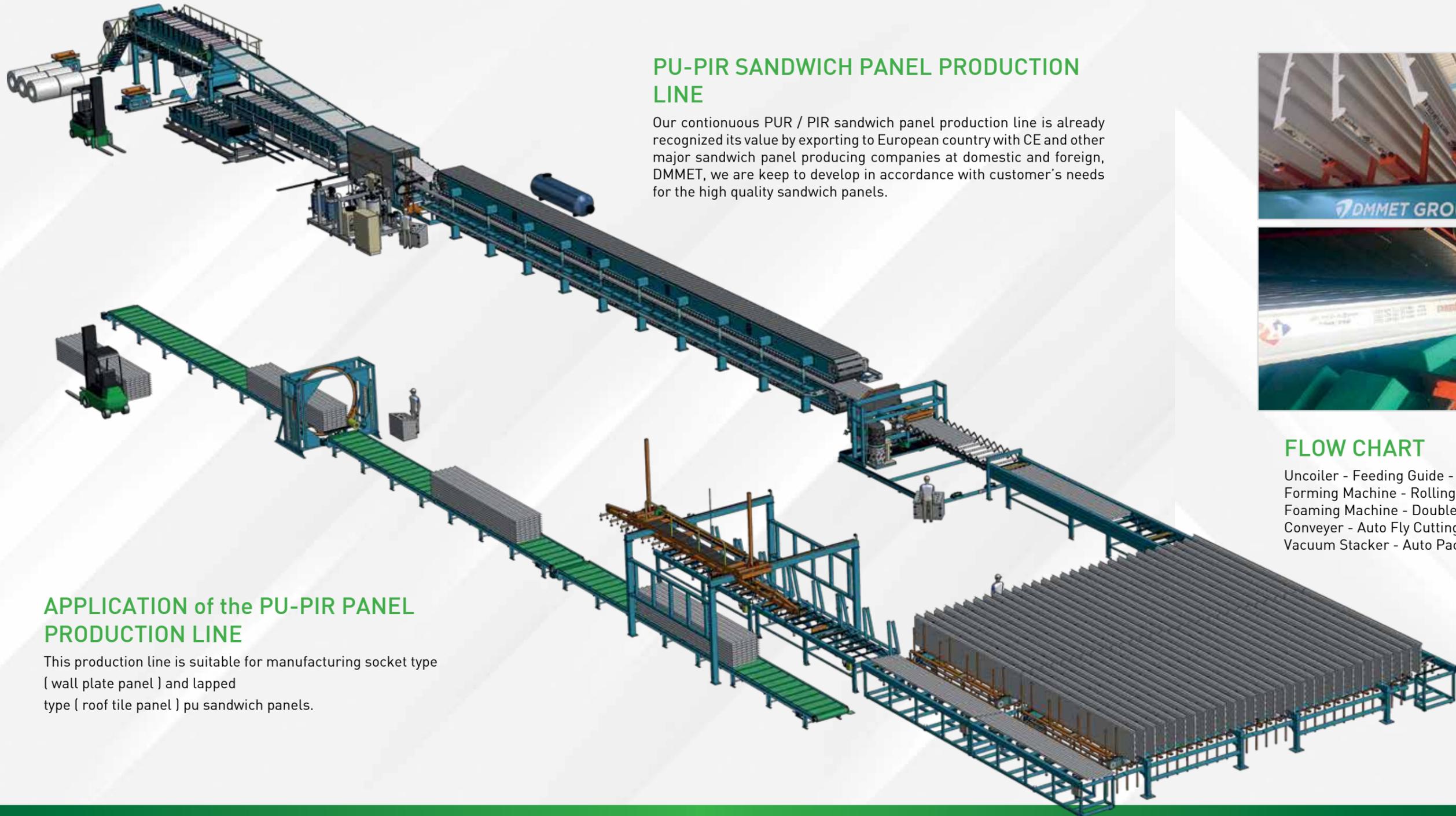
Being creative and up to date with latest technology in our designs – products' quality . Moving forward with our unique designs, constant development and creativity in our industry is what made us one the most competitive in this field to gain the honor of being model to manufactures . Choosing DMMET means obtaining immediate access, anywhere in the world, to highly trained technical personnel and top level facilities, reliable information, and unparalleled services, all of which are available at a quality/price ratio that is extremely competitive in the international market.

Dmmet has recently become one of the best sellers around the world with our keen to manufacture the best product in terms of quality / price / services .

Above all our high performance , standards . which is eventually rated by our powerful presence in the international market which is marked by exporting more than 500 line until today to more than 22 countries .

Welcome to visit the east European and the middle east 's leading manufacturer





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.



FLOW CHART

Uncoiler - Feeding Guide - Protective Film Coating - Roll Forming Machine - Rolling Conveyer - Steel Pre-Heating - Foaming Machine - Double Belt Pressing Machine - Rolling Conveyer - Auto Fly Cutting To Length - Runout Table - Auto Vacuum Stacker - Auto Packing Machine.

MAIN TECHNICAL DATAS

Production Type	: Continuous and automatic production
Specification of Material	: 0.3 - 0.8 mm
Width of Material	: 1250 mm Max
Main Power	: 240 kW
Total Power	: 300 kW
Structure of Roll Forming Machine	: Upper and lower pressing group producing with the pu complex mainframe
Forming System	: Continuous and automatic foaming, foaming capacity can be stepless adjustable.
Foaming Thickness	: 20 - 300 mm
Speed	: 0 - 16 m / min
Way of the Controlling	: Siemens PLC Computerized controlling
Total Weight	: about 160 Ton
Total Length	: about 85 meter

PU-PIR SANDWICH PANEL PRODUCTION LINE



CONTINUOUS PRESS

The continuous press is the main stage of the sandwich panel production process.

The two belts are made by a grade steel slats characterized by its high strength and surface hardness. Due to special mechanical machining the finest surface finish is achieved and ensures perfect heat transfer, absolute flatness and a long lifetime.

The two conveyors are separately heated and thermally insulated resulting in a homogeneous temperature distribution, highly efficient transfer of heat and low consumption values for electricity, thermal energy and lubricants

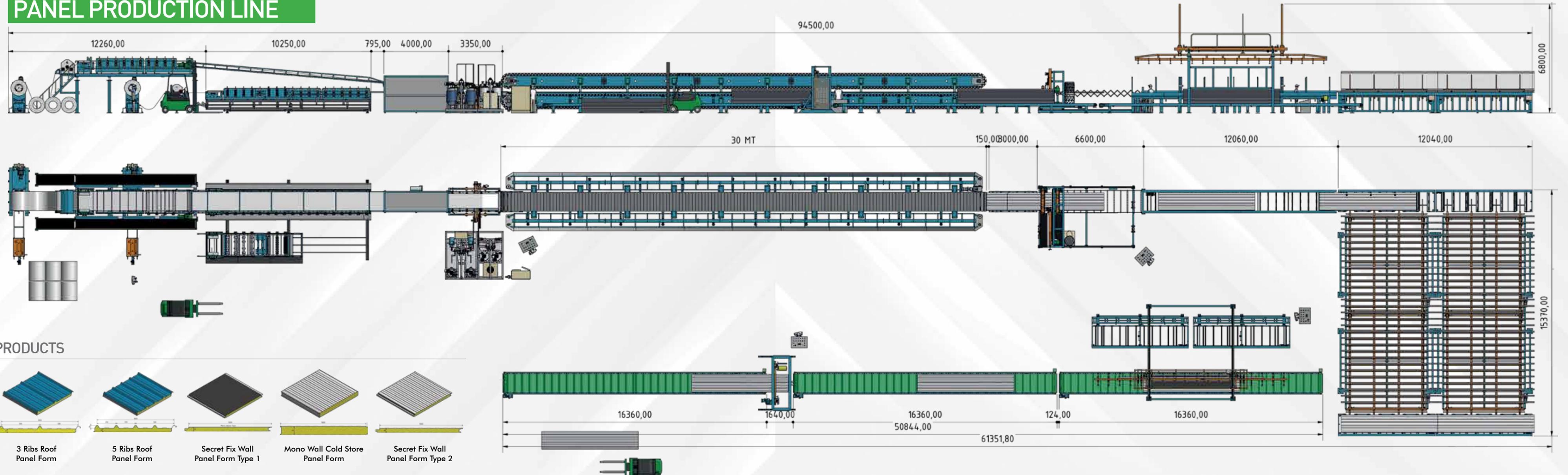


PU-PIR SANDWICH PANEL PRODUCTION LINE

MODEL	Press Length	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



PU-PIR SANDWICH PANEL PRODUCTION LINE



PU-PIR SANDWICH PANEL PRODUCTION LINE



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/m ³
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

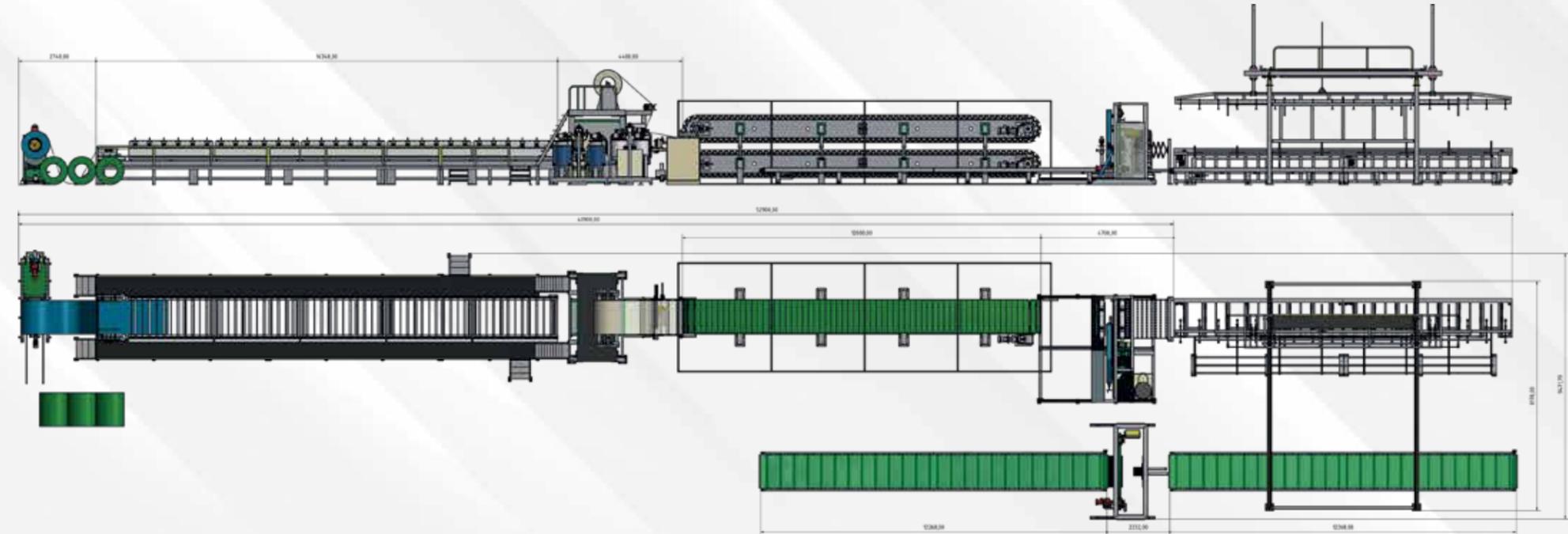
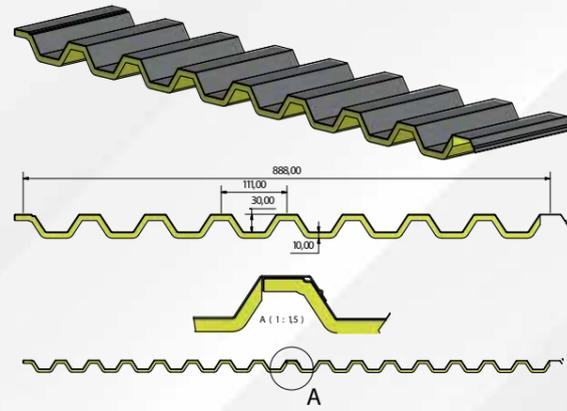
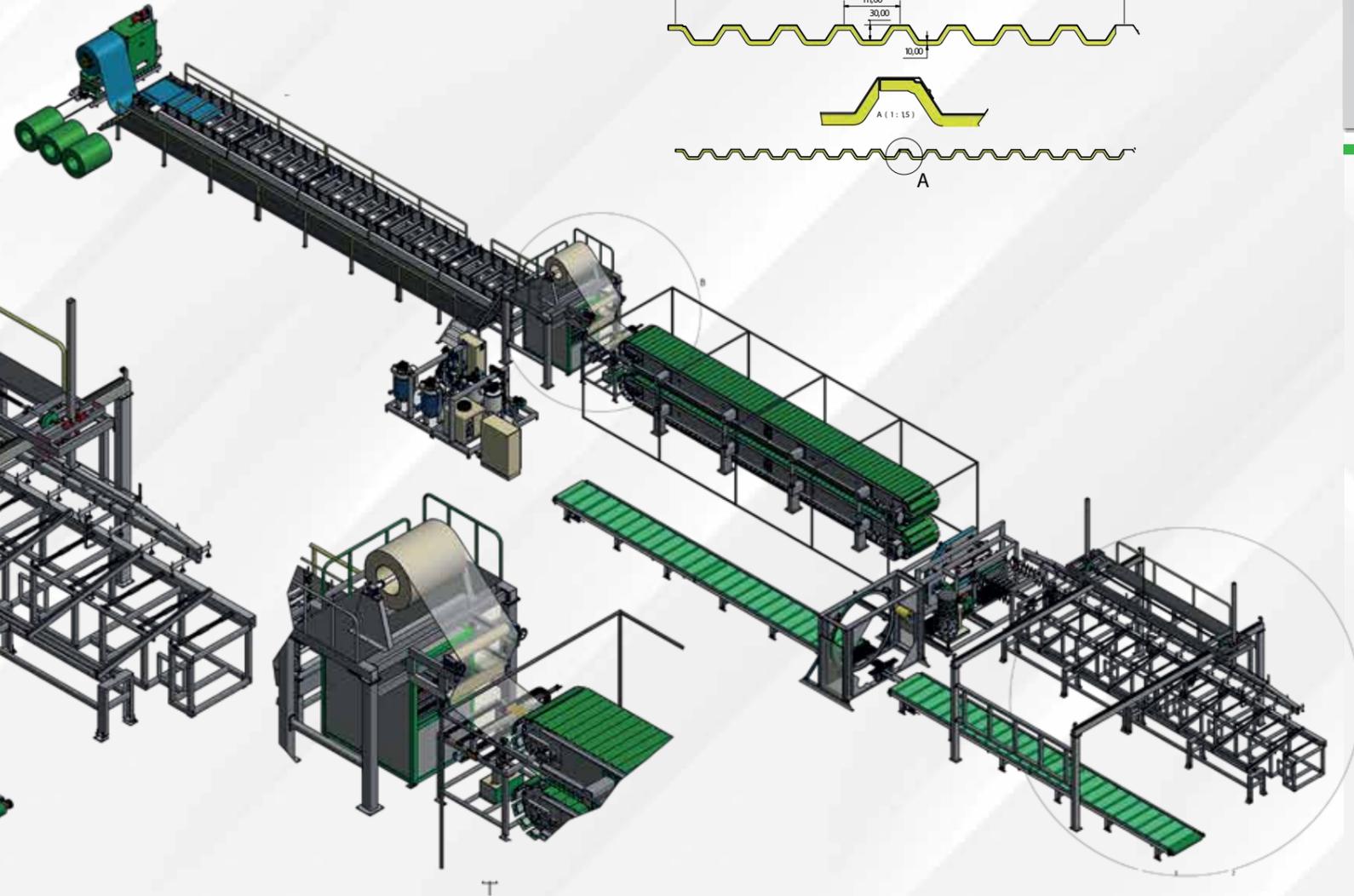
The above listed Production capacities refers to ideal working constructions with theoretical standard chemicals and can be subject to modification according to the raw material overal quality, the chosen chemical system, the foam density, the dosing machine pumps flow rate and the maintenance status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



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.



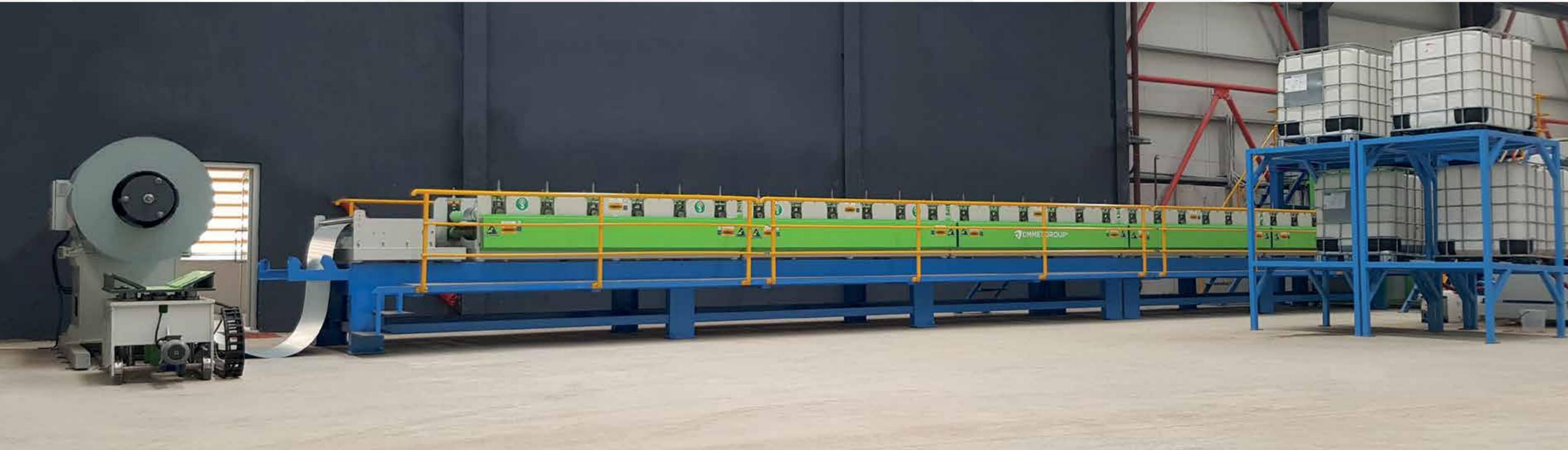
SINGLE PANEL PRODUCTION LINE



SINGLE PANEL PRODUCTION LINE

Single panel has a rigid polyurethane foam core. CFC-free and weighs approximately 40kg / m³. Due to its high efficiency profile geometry and a 10 mm or more thick polyurethane (or PIR) foam layer adhered to the top shell, our product has an extremely high stability. Scope of application; for photovoltaic roofs, new buildings, renovation works and all kinds of agricultural or industrial buildings.

Model	Press length	Panel thickness	Max production speed
SNGL 12	12 meter	10 mm	10 m/min
SNGL 18	18 meter	10 mm	14 m/min



ADVANCED POLYURETHANE MACHINES

DPM Series dosing machines for highly diverse polyurethane applications

DPM series machines covers a wide range of options for manufacturing polyurethane components. DPM series features an attractive price/performance ratio and ideal delivery times. DPM machines are equipped with high quality components to guarantee reliable process control and high component quality. Solvents and other substitutes are no longer required.

Application areas

Construction, Technical items, Automotive, White goods



A-Side (Polyol)	Axial piston pump, pump drive with frequency converter, 250 lt raw material tank, level monitoring, heat exchanger, pneumatic diaphragm barrel pump, agitator, flow measurement (optional), edge filter in suction lines
B-Side (Iso)	Axial piston pump, pump drive with frequency converter, 250 lt raw material tank, level monitoring, heat exchanger, pneumatic diaphragm barrel pump, agitator (optional) flow measurement (optional), edge filter in suction lines
Output range	From 120 g/s to 5000 g/s total flow rate
Mixing Head	DMH "L" type Mixing Head (self cleaning)
Control Panel	PLC control, Siemens S7 1200 with HMI touch screen operator panel

Mixing Head Rotating Boom

Integrated on the base frame
(Radius 2.2 m)

Mixing Head

DMH mixing heads are small in size, light and extremely manageable. They can be quickly mounted on robots or manipulators for different foaming processes.

Control Panel

Siemens HMI operator panel with touch-screen integrated into an ergonomic console

Mixing Head Hydraulics

hydraulic tank with feed pump, pressure accumulator, return flow filter, minimum fill-level monitoring, mixing head control valves.

Edge Filter

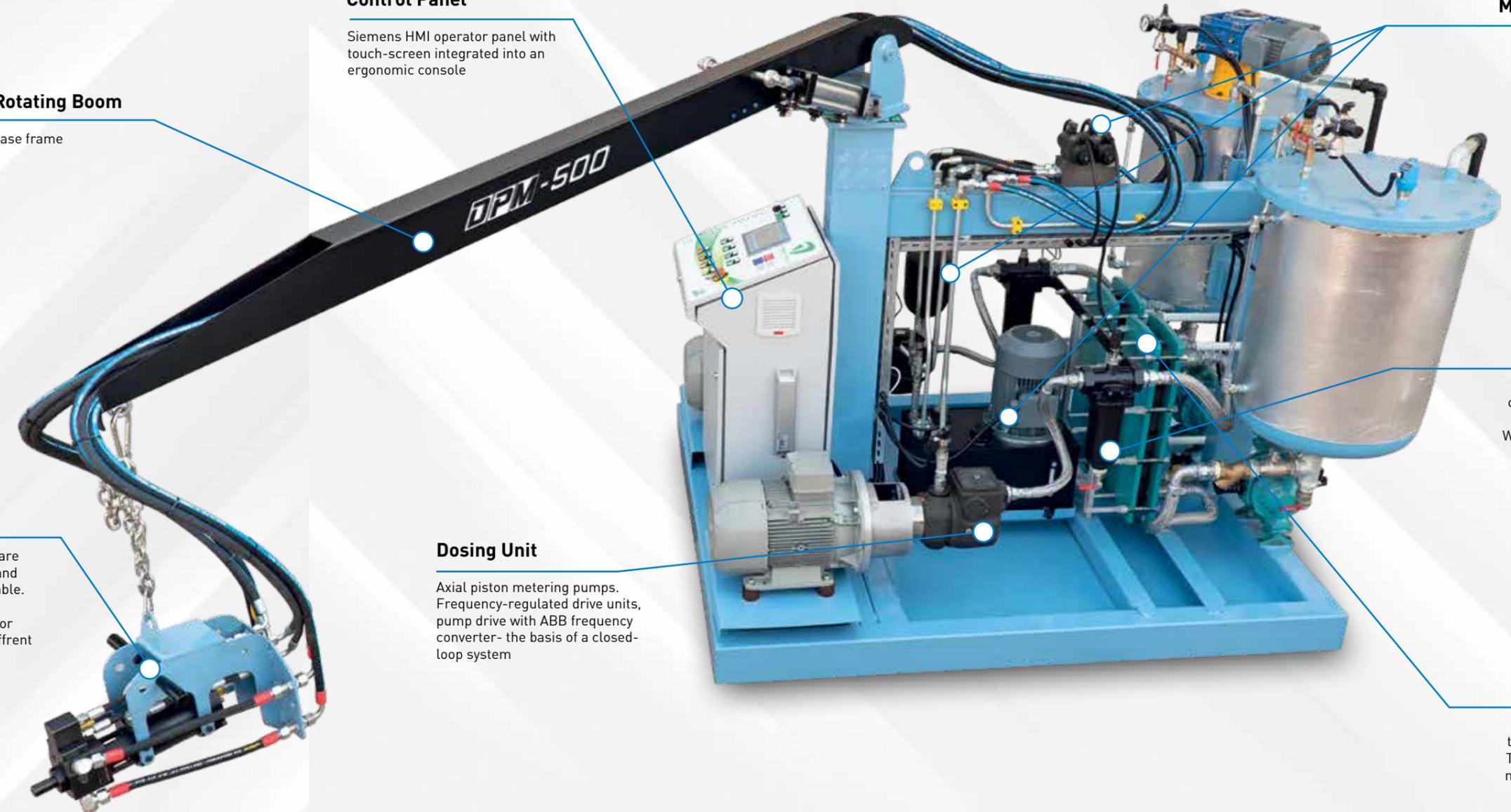
For a trouble-free processing of different PU systems, we use edge filters in the suction side. We also offer motor-driven filter systems.

Temperature - Control System

Perfect temperature control thanks plate heat - exchangers. The plate heat - exchangers are mounted on the machine frame.

Dosing Unit

Axial piston metering pumps. Frequency-regulated drive units, pump drive with ABB frequency converter- the basis of a closed-loop system



ADVANCED POLYURETHANE MACHINES

TECHNICAL DATA

DPM	500	1500	2500	*5000
Total flow rate at MV 1:1	120 g/s - 540 g/s	350 g/s - 1350 g/s	740 g/s - 2520 g/s	1350 g/s - 5000 g/s
Raw material tank	2 x 250 lt			
Installed capacity	20 kW	40 kW	60 kW	90 kW
Processable viscosities of the components	20 - 2,000 mPas			
Base frame dimensions	2160 x 1850 mm			
Total weight (without liquids)	1,250 kg	1,400 kg	1,550 kg	1,700 kg

* Not available as a standard.



MIXING HEAD



DOSING UNIT
EDGE FILTER



LEVEL MONITORING



FLOW MEASUREMENT



RAW MATERIAL TANK

POLYURETHANE FOAM

MOULDED FOAM PRODUCTION



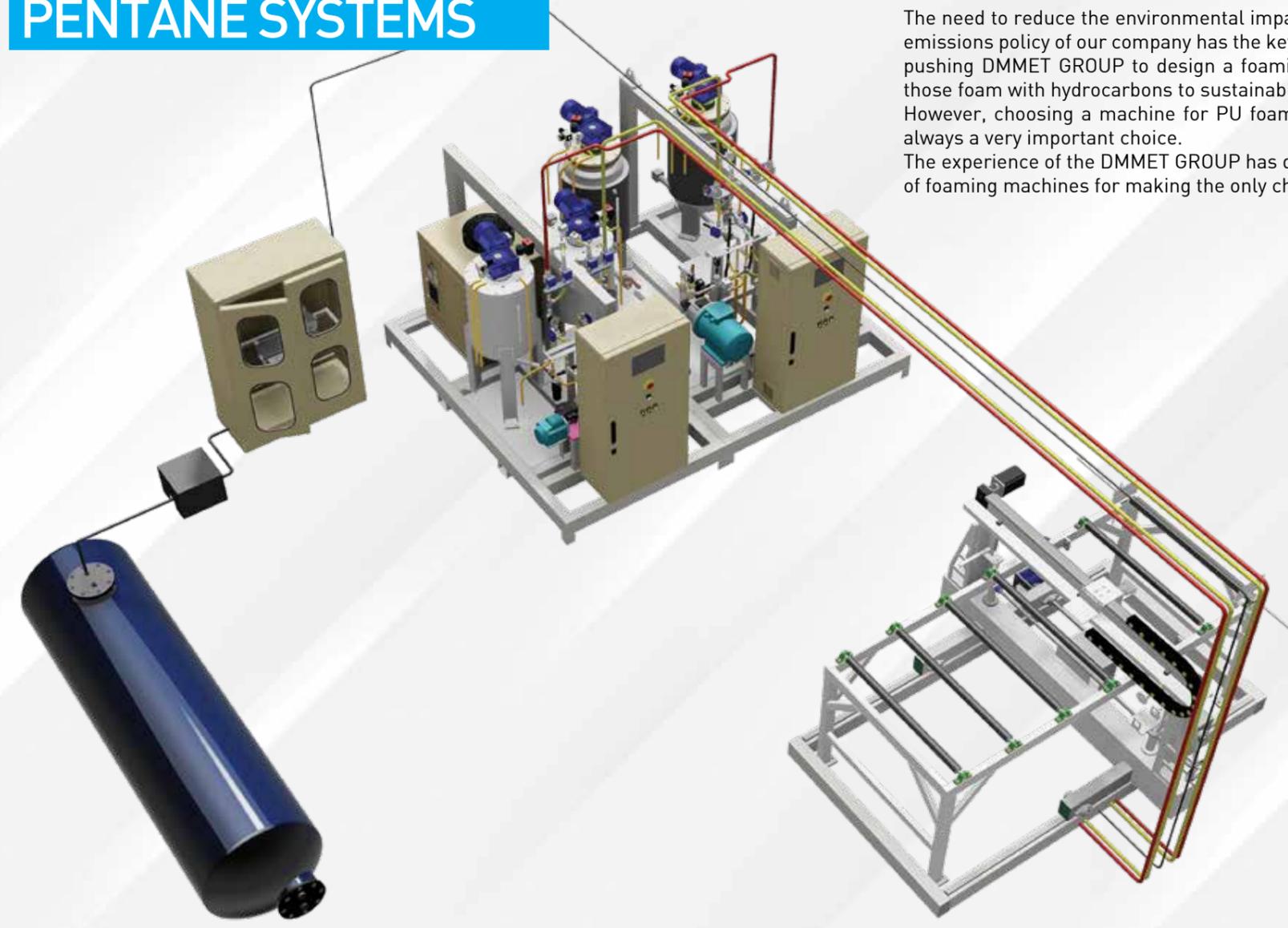
Application areas Automotive industry, White goods, Defense industry, Agricultural industry, Construction, Furniture, Textile

POLYURETHANE FOAM

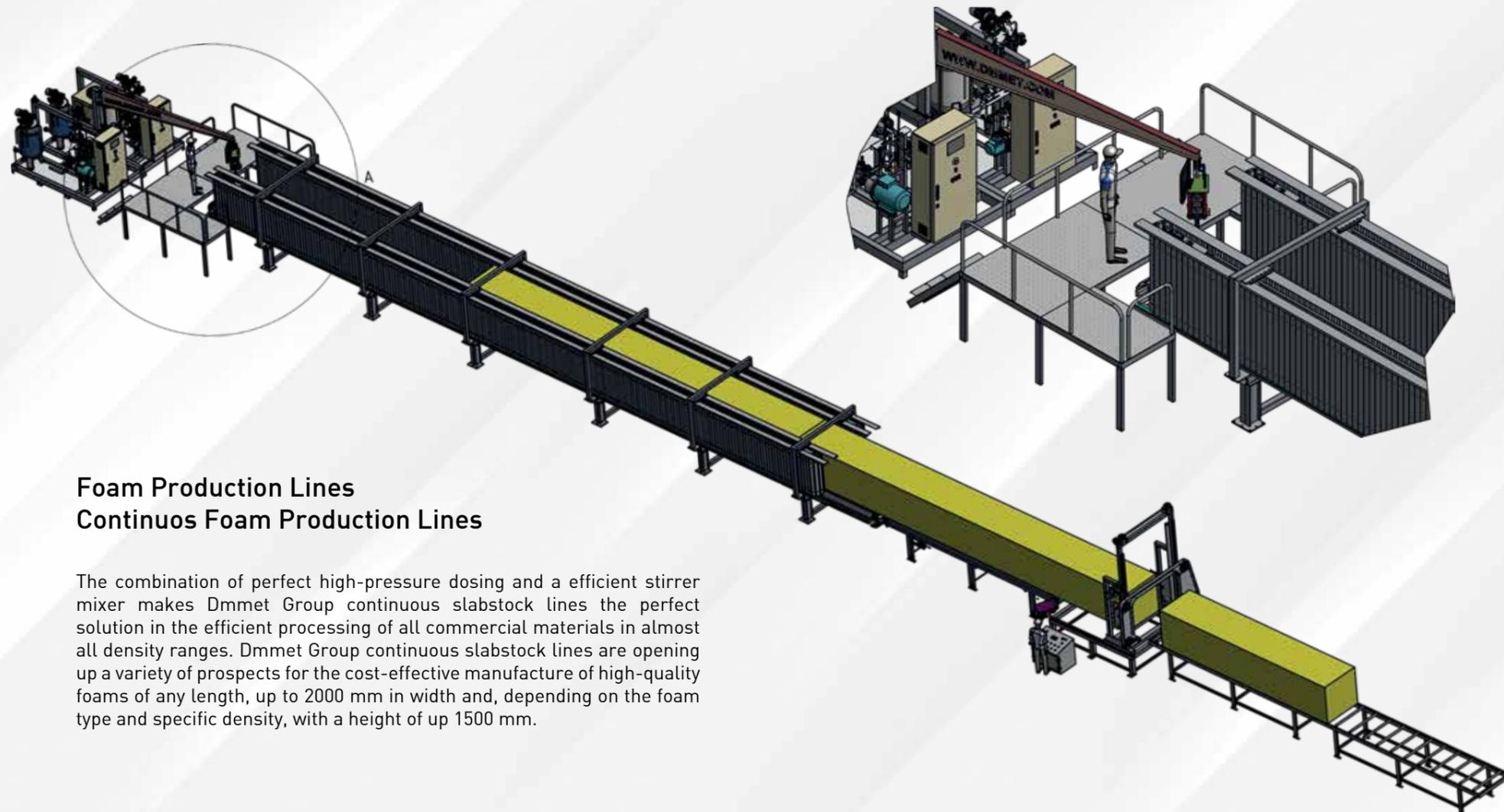
PENTANE SYSTEMS

PENTANE SYSTEMS

The need to reduce the environmental impact from greenhouse emissions policy of our company has the key point development, pushing DMMET GROUP to design a foaming machine helping those foam with hydrocarbons to sustainable development. However, choosing a machine for PU foaming with Pentane is always a very important choice. The experience of the DMMET GROUP has developed this series of foaming machines for making the only choice.

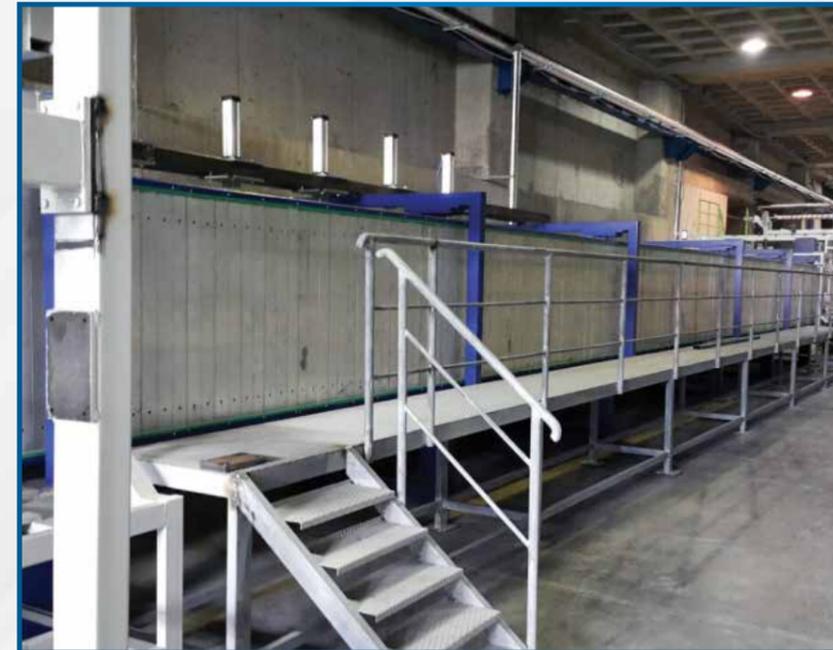


POLYURETHANE FOAM CONTINUOUS SLABSTOCK LINES



Foam Production Lines Continuos Foam Production Lines

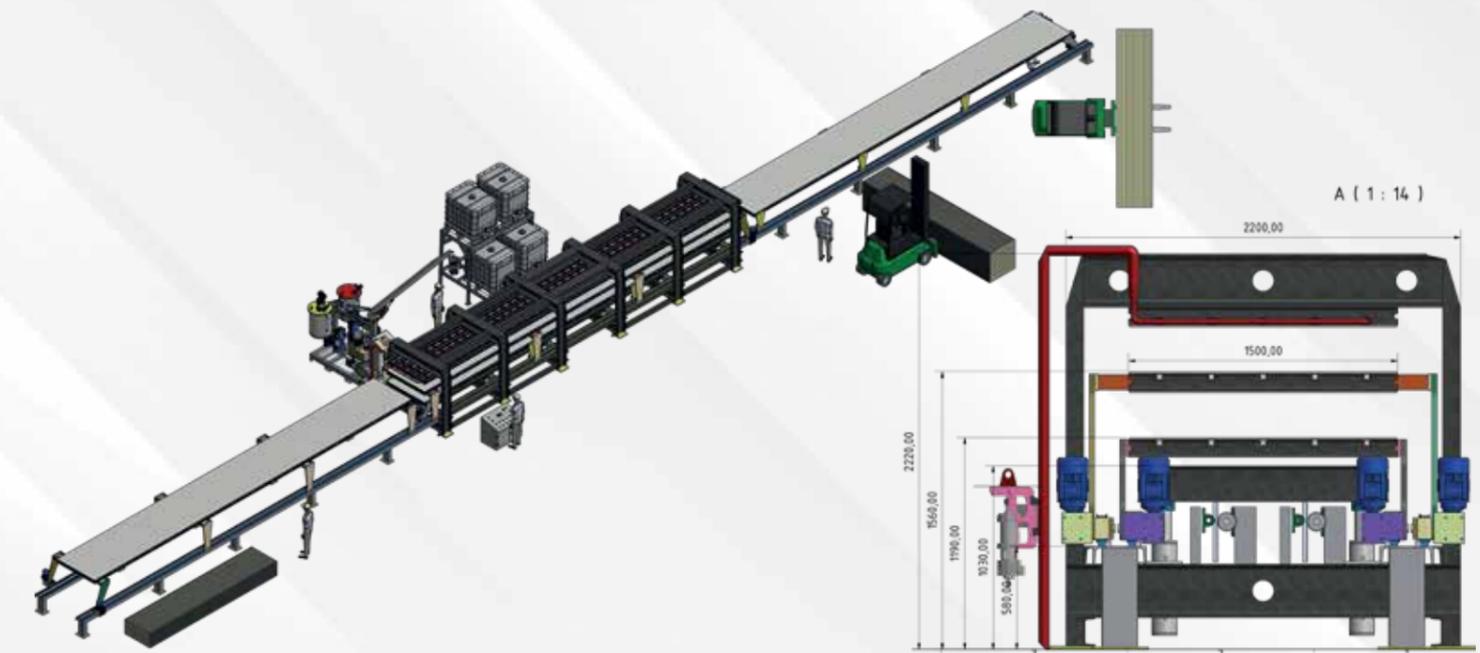
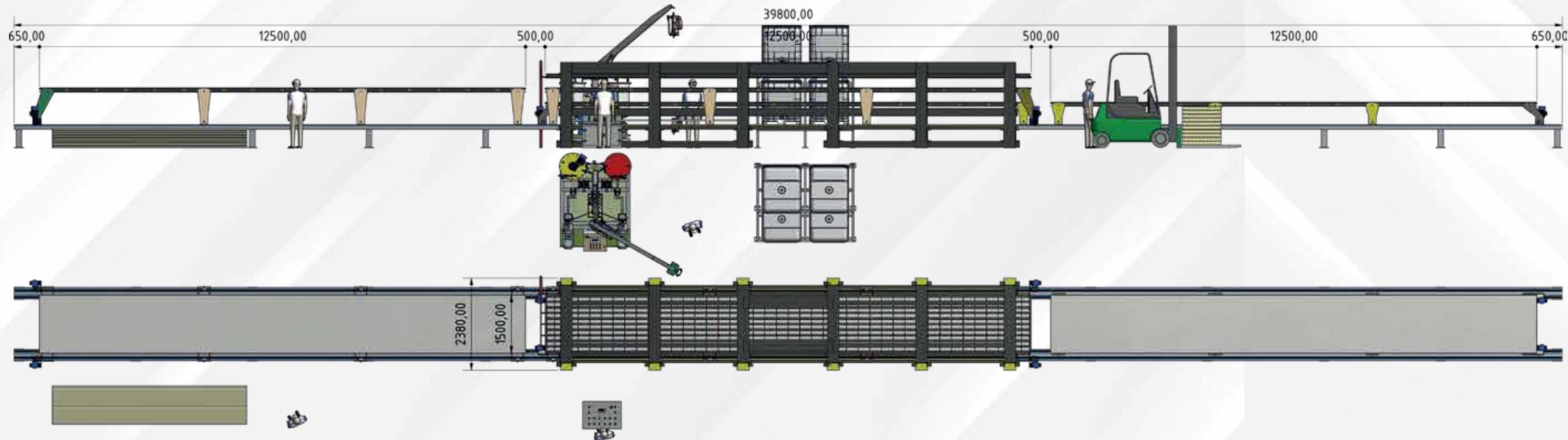
The combination of perfect high-pressure dosing and a efficient stirrer mixer makes Dmmet Group continuous slabstock lines the perfect solution in the efficient processing of all commercial materials in almost all density ranges. Dmmet Group continuous slabstock lines are opening up a variety of prospects 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 discontinuous manufacture of 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.

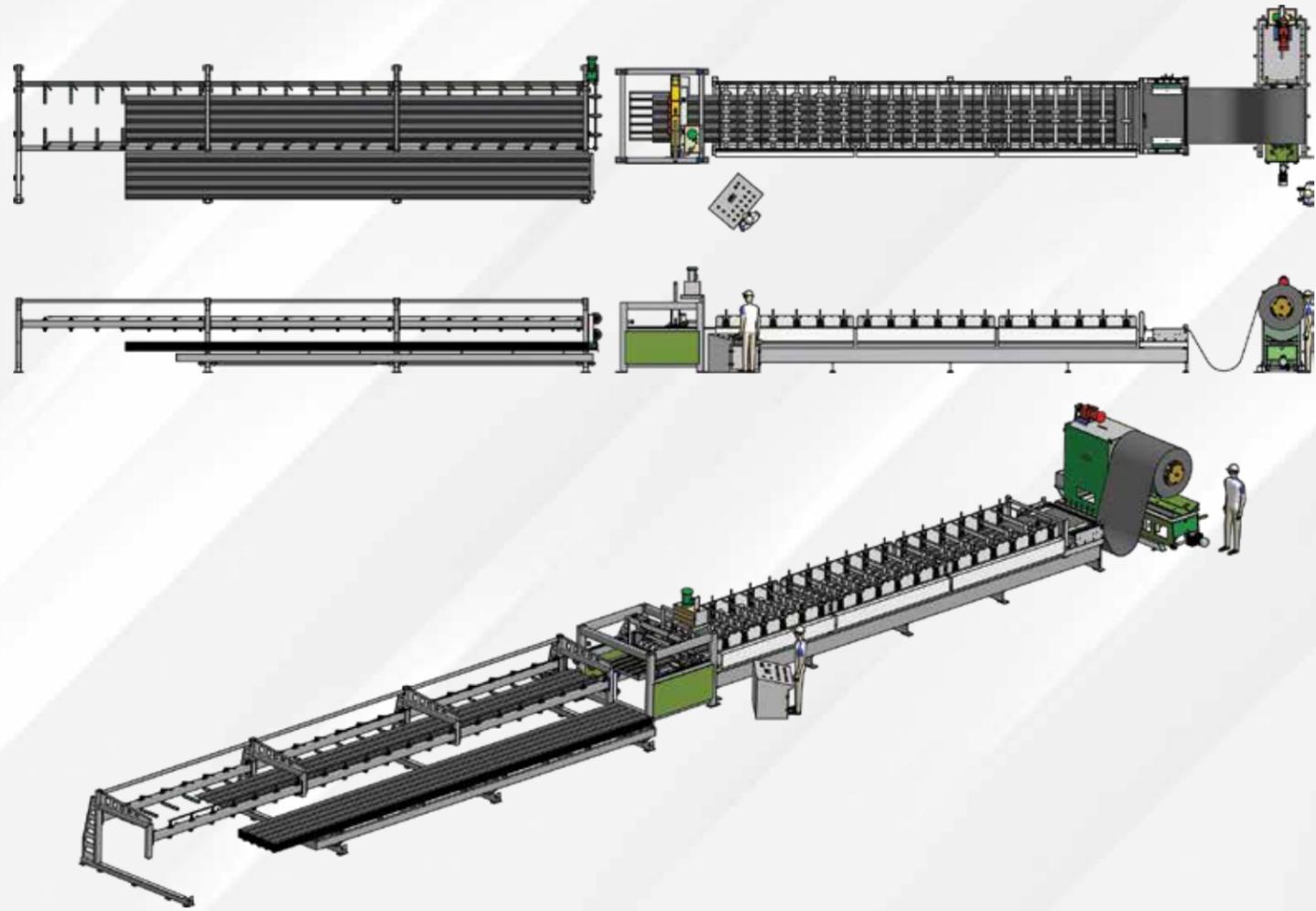


TRAPEZOIDAL SHEET ROLL FORMING MACHINE

DMMET, produces efficient and flexible production lines for trapezoidal and corrugated profiles. DMMET offers 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



TRAPEZOIDAL SHEET ROLL FORMING MACHINE PROPERTIES

Coil Material	Coil	Color Steel, Galvanised
	Coil Thickness	0,3 - 0,8 mm
	Coil Width	1000 - 1200 - 1250 mm, Customized
	Yield Strength	250 - 350 Mpa
Decoiler and Coil Car	Decoiler 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

DMMET has extensive experience in metal tile profiles and a broad overview of manufacturing technology, and offers wide range of metal roof tile designs. We can also create completely new product designs and innovations according to specific customer requirements.



**%100
Satisfaction**



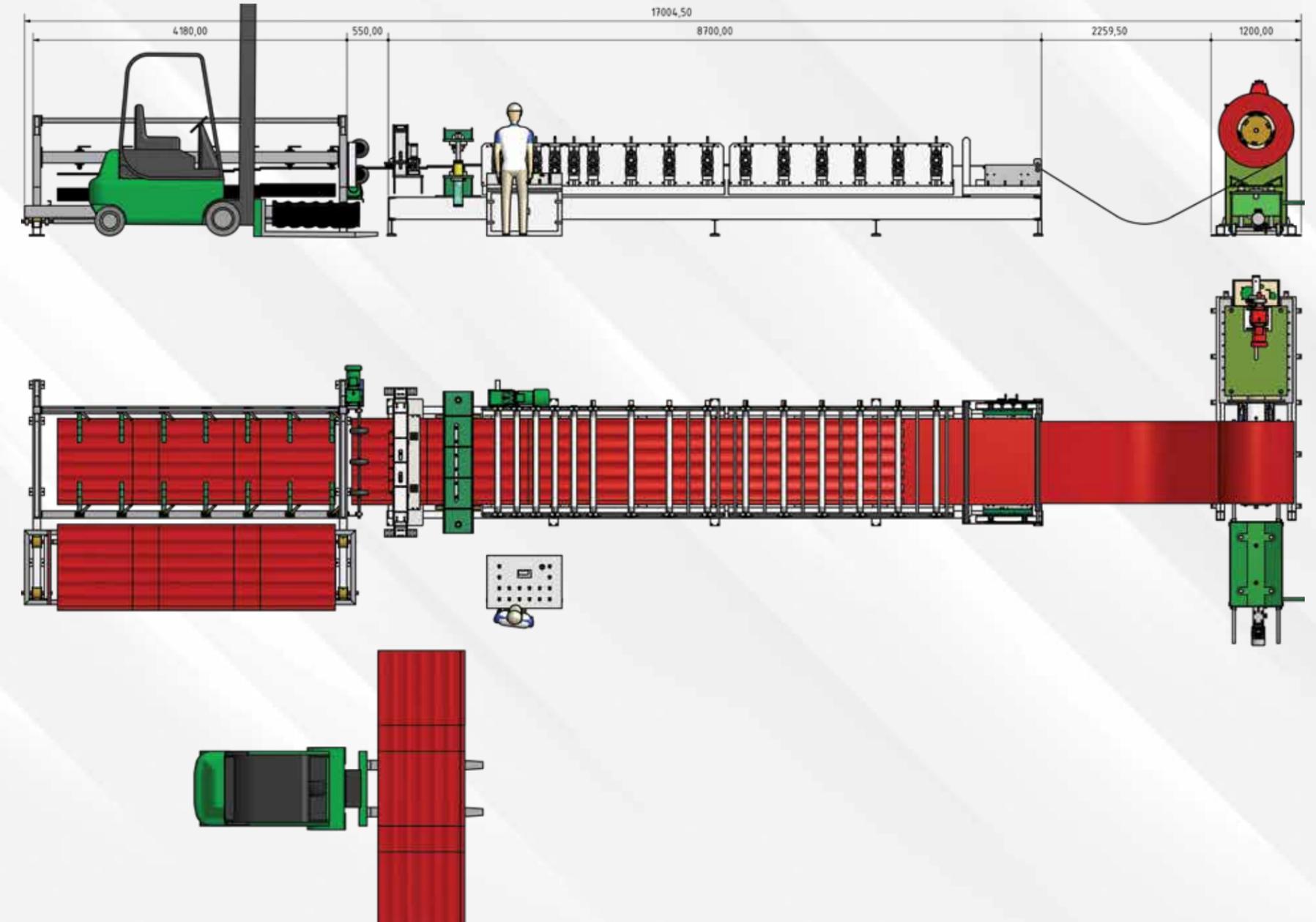
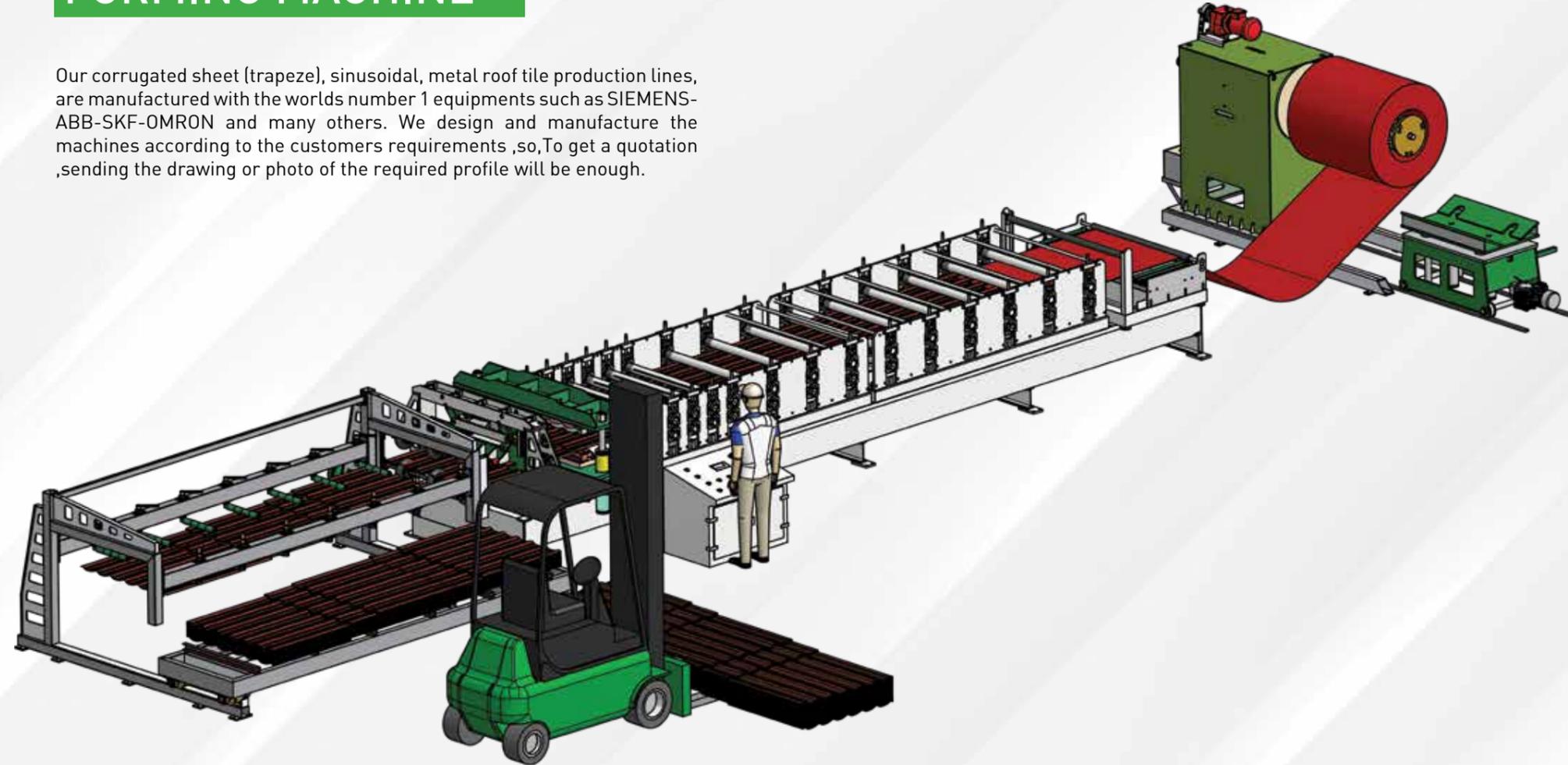
METAL TILE ROOF ROLL FORMING MACHINE PROPERTIES

Material Thickness	0.3 - 0.7 mm
Material Width	Depend on Profile
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 Pnomatic System	1,2' chain Transmission



METAL TILE ROOF ROLL FORMING MACHINE

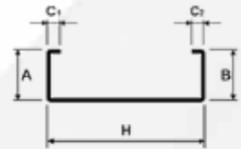
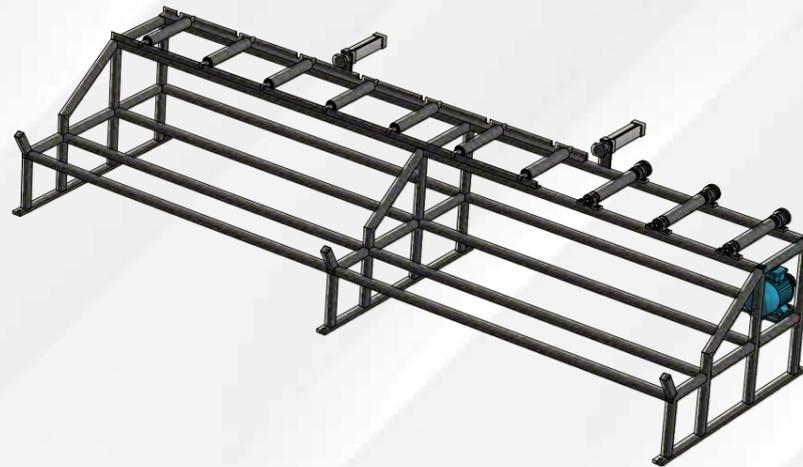
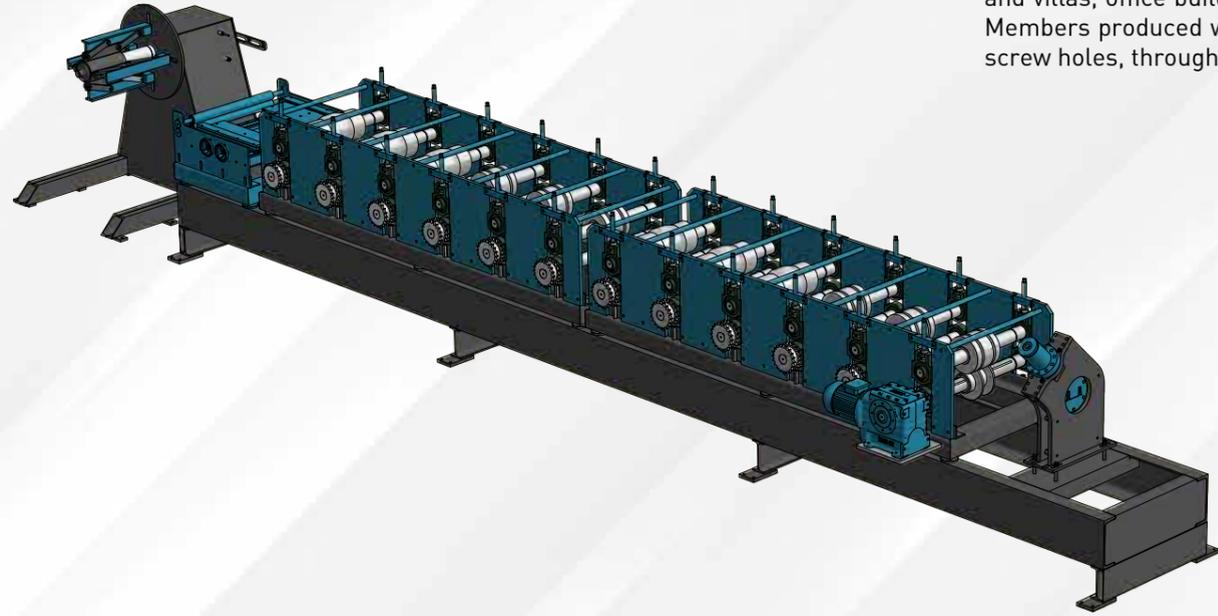
Our corrugated sheet (trapeze), sinusoidal, metal roof tile production lines, are manufactured with the worlds number 1 equipments such as SIEMENS-ABB-SKF-OMRON and many others. We design and manufacture the machines according to the customers requirements ,so,To get a quotation ,sending the drawing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



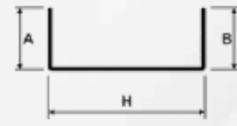
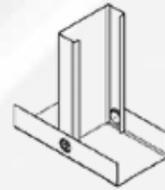
FLEXIBLE U-C PURLIN MACHINE

Pre-Punching and Pre-Cutting Purlin Roll Forming Machine

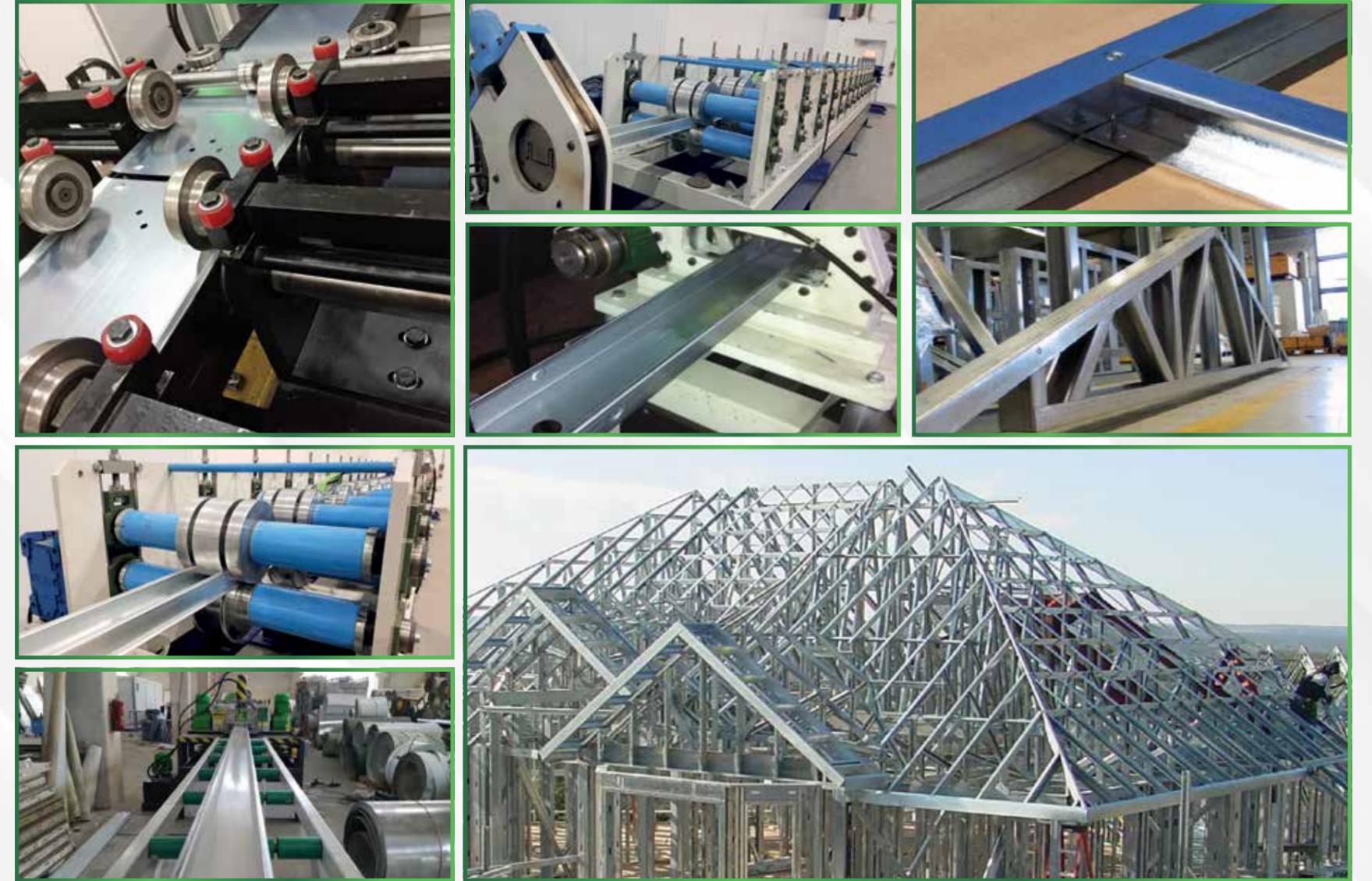
Flexible production line for prefabricated C and U members for wall, truss and floor framing. Wall, truss and floor frames for prefabricated buildings like: residential houses and villas, office buildings, social premises, module containers, façade elements, etc. Members produced with all the needed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



H = (50) 60 - 300 mm
A/B = 50 mm
C₁/C₂ = 15 mm
T = 0.7 - 2.0 mm



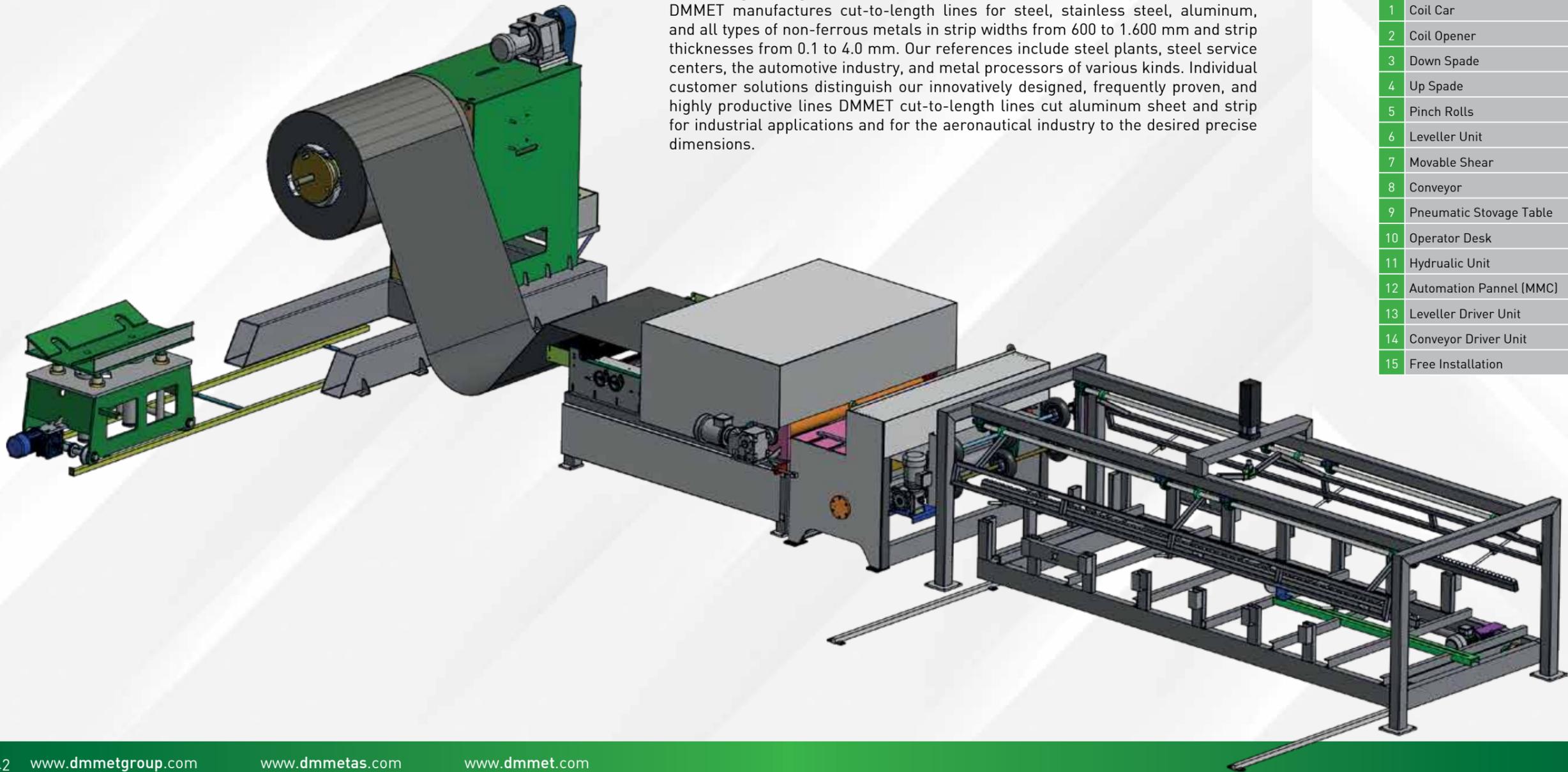
H = (50) 60 - 300 mm
A/B = ~ 63 mm
T = 0.7 - 2.0 mm



CUT to LENGTH LINE

The lines are equipped for such processes as trimming, recoiling, precision leveling, and cutting-to-length.

DMMET manufactures cut-to-length lines for steel, stainless steel, aluminum, and all types of non-ferrous metals in strip widths from 600 to 1.600 mm and strip thicknesses from 0.1 to 4.0 mm. Our references include steel plants, steel service centers, the automotive industry, and metal processors of various kinds. Individual customer solutions distinguish our innovatively designed, frequently proven, and highly productive lines DMMET cut-to-length lines cut aluminum sheet and strip for industrial applications and for the aeronautical industry to the desired precise dimensions.



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 Storage Table |
| 10 | Operator Desk |
| 11 | Hydraulic Unit |
| 12 | Automation Pannel (MMC) |
| 13 | Leveller Driver Unit |
| 14 | Conveyor Driver Unit |
| 15 | Free Installation |

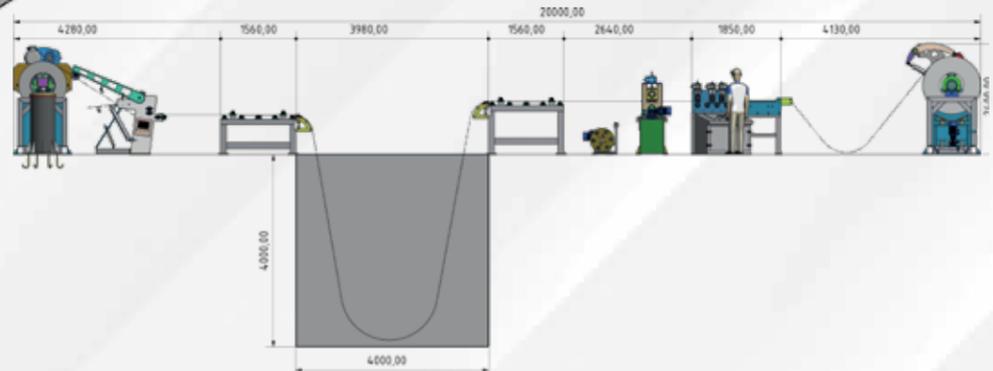
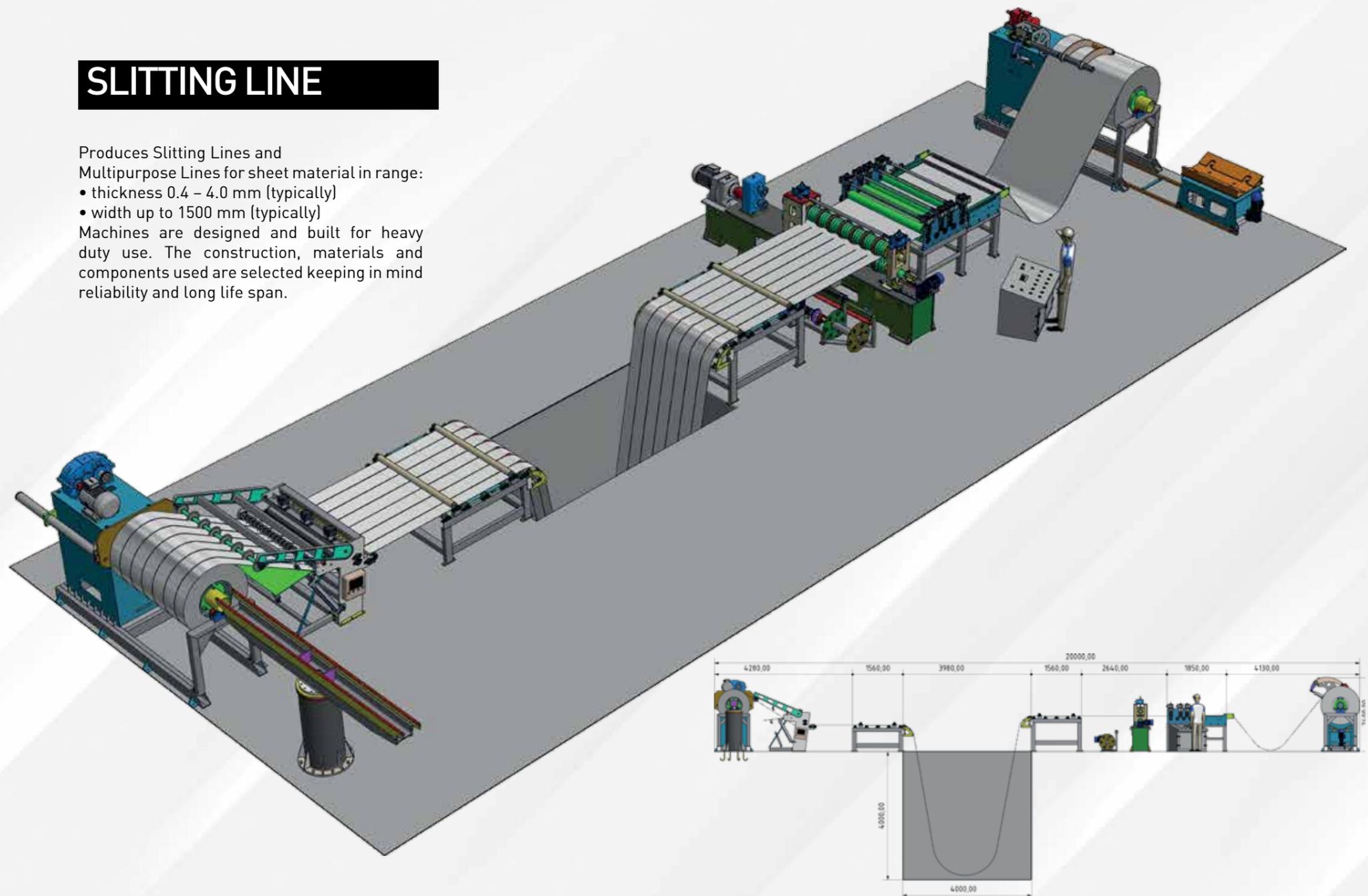


SLITTING LINE

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

- thickness 0.4 – 4.0 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.



FORMING INNOVATION BY TECHNOLOGY



26
Years



DMMET GROUP®

FORMING INNOVATION BY TECHNOLOG

www.dmmetgroup.com

www.dmmet.com www.sandwichpanelline.com www.polyurethanefoammachine.com



Arslanbey OSB. Yanı Bakırlı Mah. Nazım Demirci Cad. No: 368 Sarımeşe-Kartepe / KOCAELİ / TURKEY

Phone : +90 262 373 40 04 Fax : +90 262 373 44 84

E-mail : info@dmmet.com E-mail : info@sandwichpanelline.com