



ООО Интелмашин

Manufacturer of sandwich panel continuous  
laminating production lines

Specification of sandwich panel continuous laminating production line  
"Basic"

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# Sandwich panel production line

## Advantages



Russian lines are **technically superior** to other countries manufacturers



**Perfectly flat surface** sandwich panels made in according to Interstate Standard (GOST)

The possibility to install line on facilities from 1 000 sq.m. and more.

High line output: up to 8 m<sup>3</sup>/min.

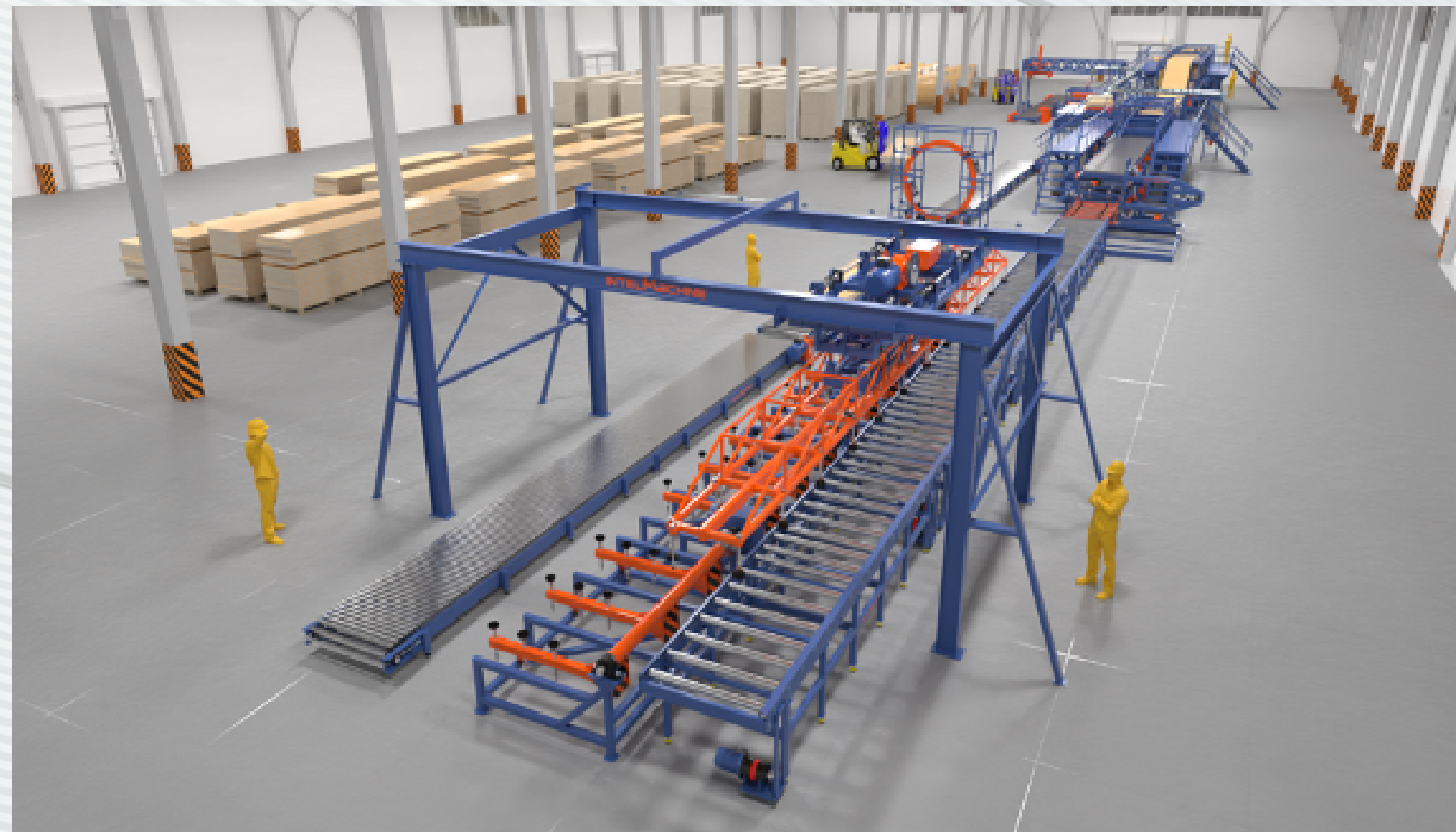
Personal: from 6 labours

Quick return on investment: from 6 months\*.

The line is a modular system

Warranty service and lifetime support

## Recommended sandwich panel production scheme:



**\*Standard production line layout**

**\*Customisation of the line by specific requirement**

## Output products specification:

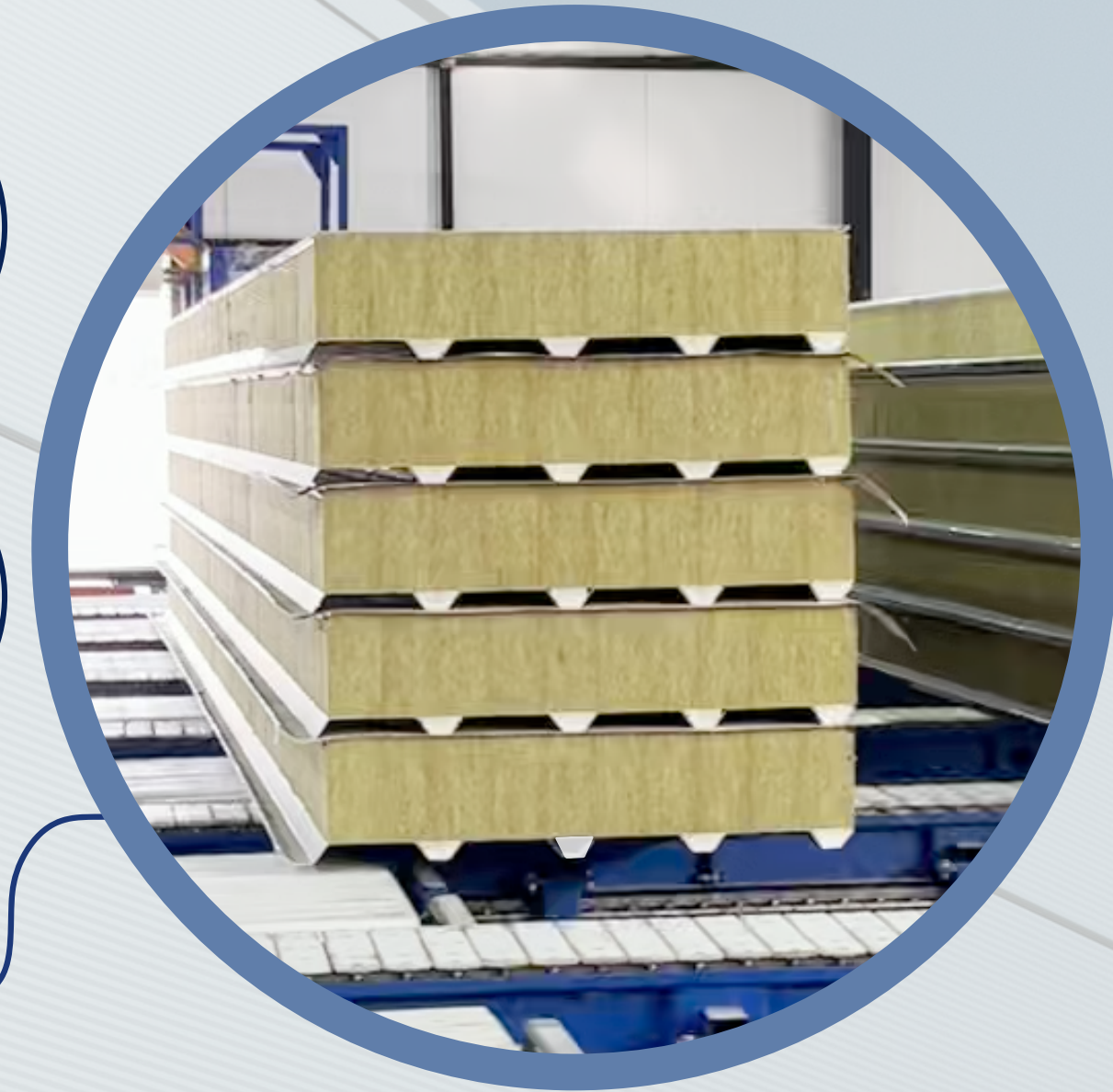
✓ **Panel thickness:**  
50 to 350 mm

✓ **Core:**  
mineral wool, lamellas,  
EPS and PIR blocks

✓ **Length of panels:**  
2.5 to 13 m  
(optionaly longer)

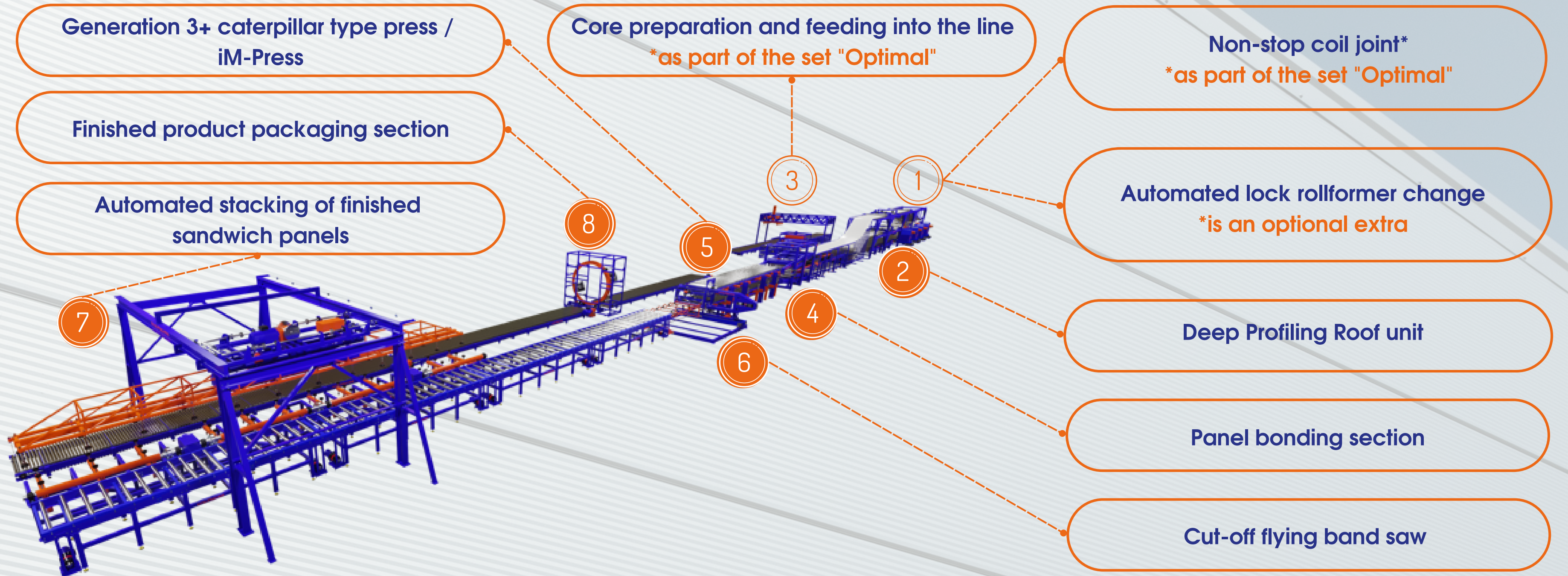
✓ **Density  
mineral wool:**  
95 -115 kg/m<sup>3</sup>

✓ **Panel width:**  
1000-1200 mm  
(wall panels)  
1000 mm (roof)



Manufactured products comply  
in acc. to **GOST standard 32603-2021**

# Sandwich panel production line is a modular system



Recombination of modules in a line  
*saves on industrial space*

## ② Deep Profiling Roof unit



Overall length:  
10 m



Forming stands:  
22 pcs.



Steel thickness:  
0.4 to 0.7 mm



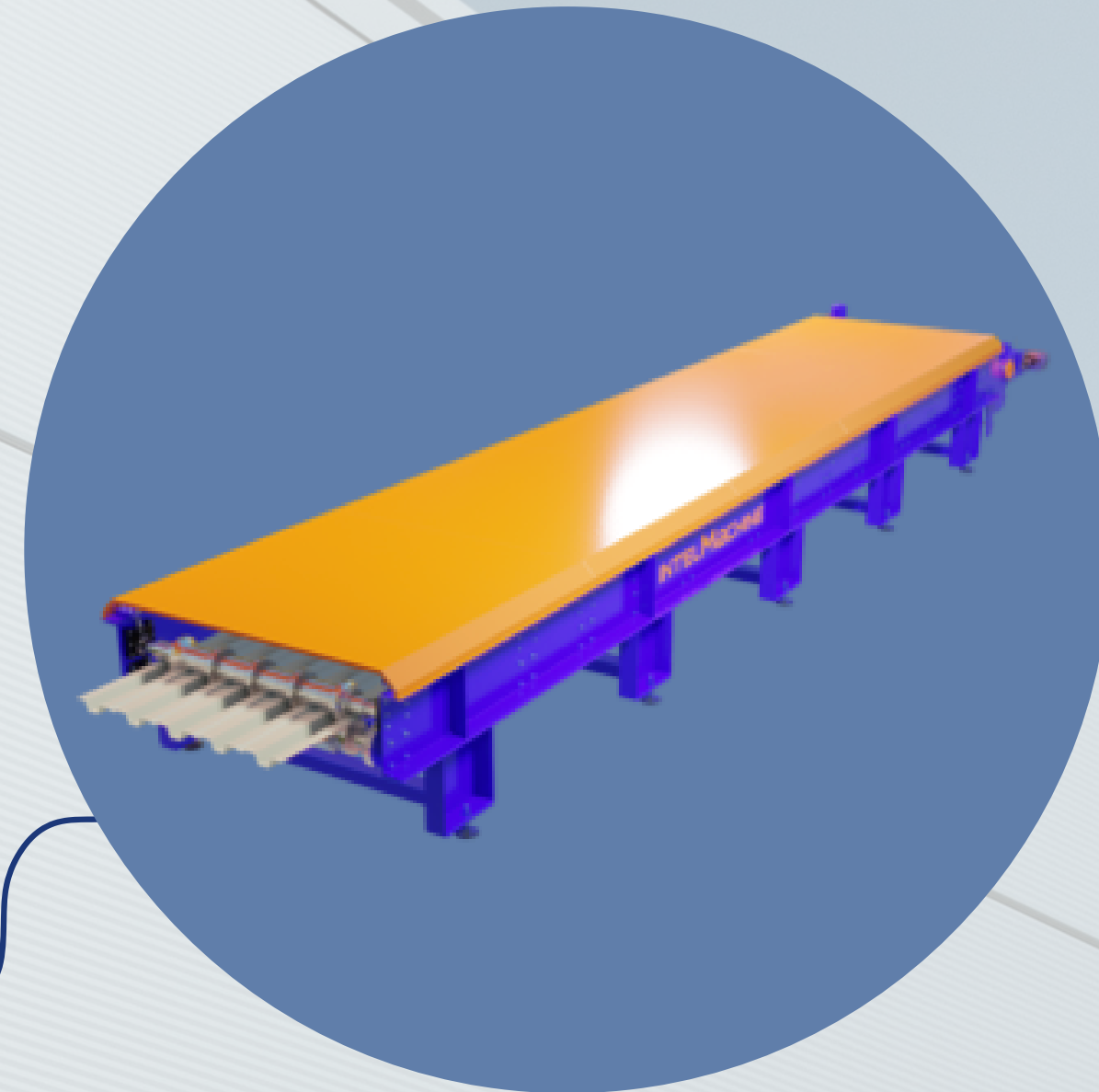
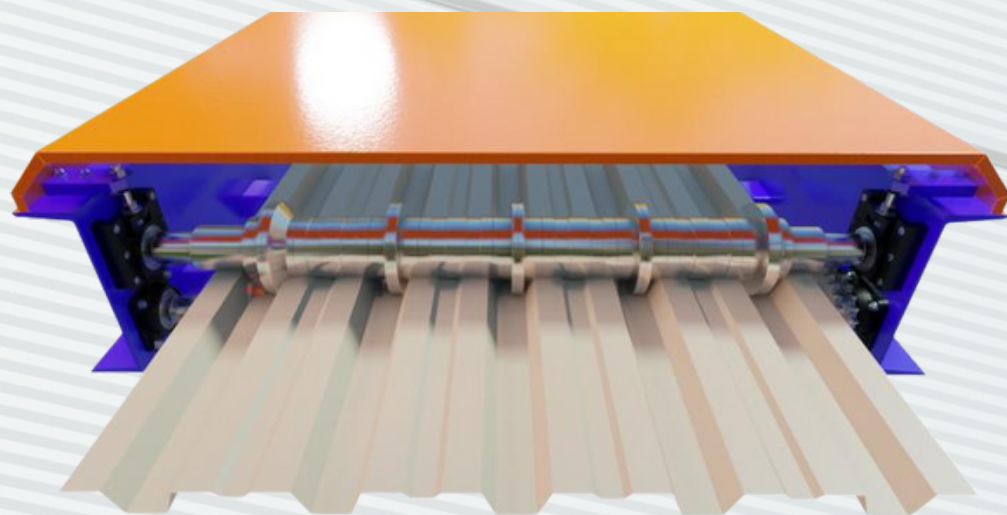
Gap microprofiling



Disc cutoff unit



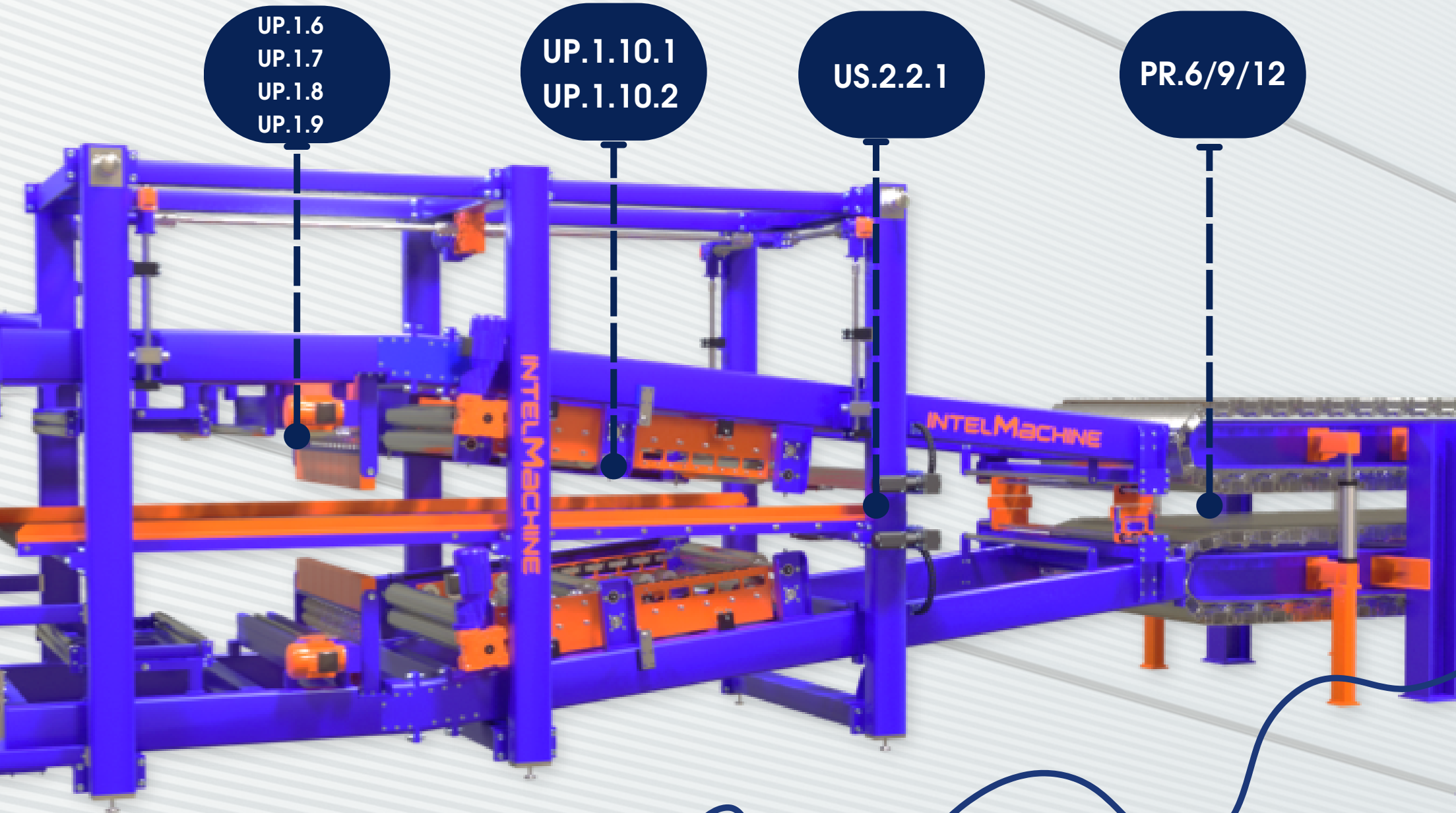
Protection film  
application



**Increased number of stands** allows for better and more precisely of roof skin profile

# 4 Panel elements assembling and bonding area

Laminator



UP.1.6  
UP.1.7  
UP.1.8  
UP.1.9

UP.1.10.1  
UP.1.10.2

US.2.2.1

PR.6/9/12

UP.1.6  
UP.1.7  
UP.1.8  
UP.1.9

Quick-change micro-profiling modules

UP.1.10.1  
UP.1.10.2

RIB, Z-LOCK and Secret FIX joints rollformers with composite reinforcement

US.2.2.1

Servo driven adhesive spray application system

PR.6/9/12

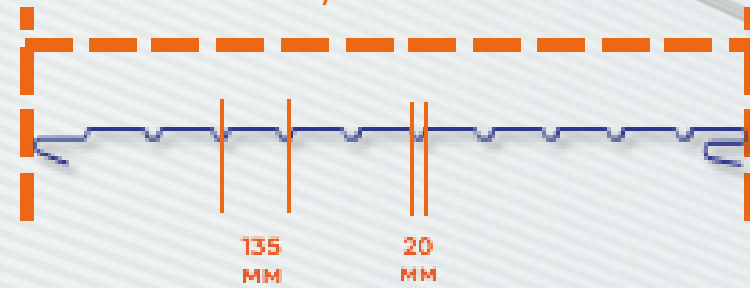
Caterpillar type press / iM-Press



## 5 off profiling types



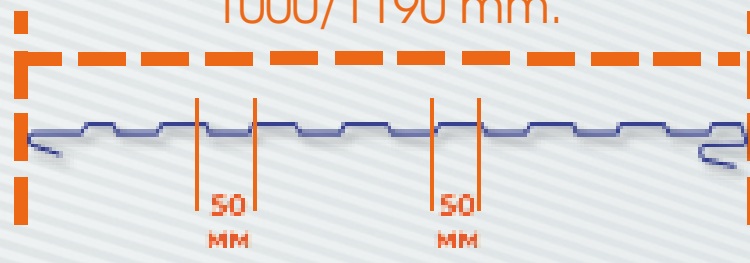
9-rib trapeze Step 135 mm.  
1000/1190 mm.



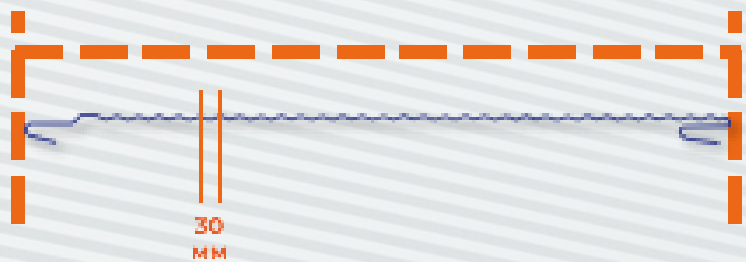
5-rib v-pitch 198 mm.  
1000/1190 mm.



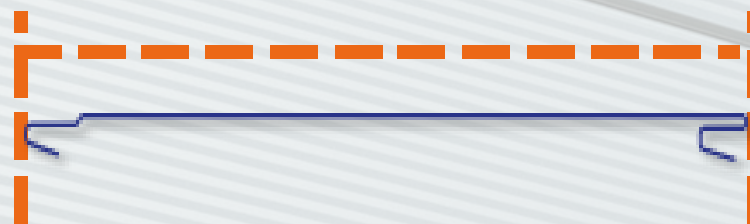
MicroRib-50/50 trapeze  
1000/1190 mm.



MicroRib-30 mm.  
1000/1190 mm.

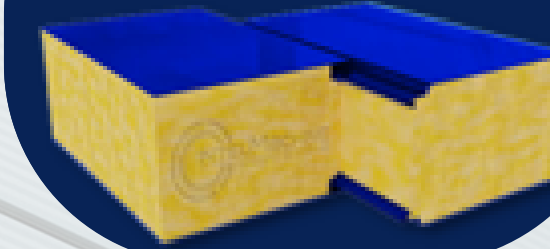


No profiling  
1000/1190 mm.



## Joint types

### Z-lock



Significantly increases the speed of installation, increases the fire resistance of the structure, ensures minimum heat loss with proper sealing of joints.

### Secret Fix



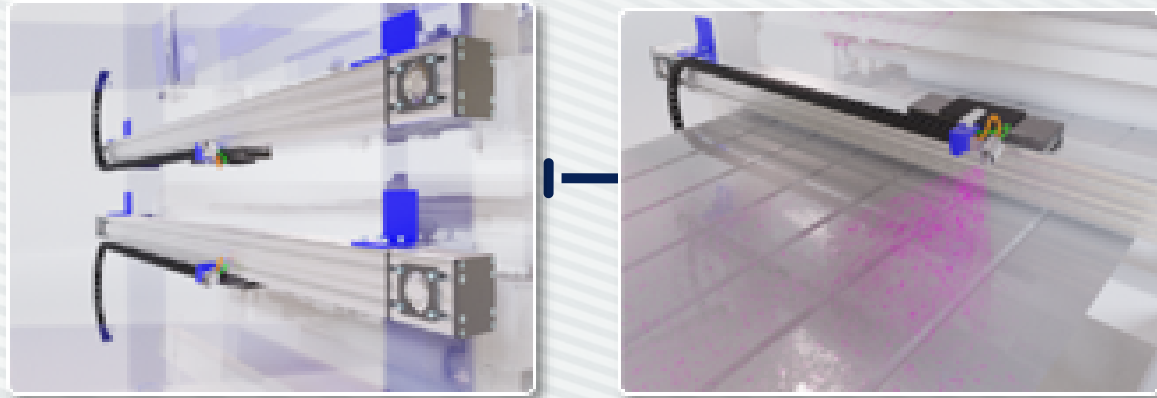
Increases thermal insulation with aesthetics, inferior to the Z-Lock in terms of speed of installation.

### Roof lock



The classic design of the roof joint, ensures a reliable sealing of the joints.

# Integrated adhesive application system



US.2.2.1

Servo driven spraying system

US.2.2.1



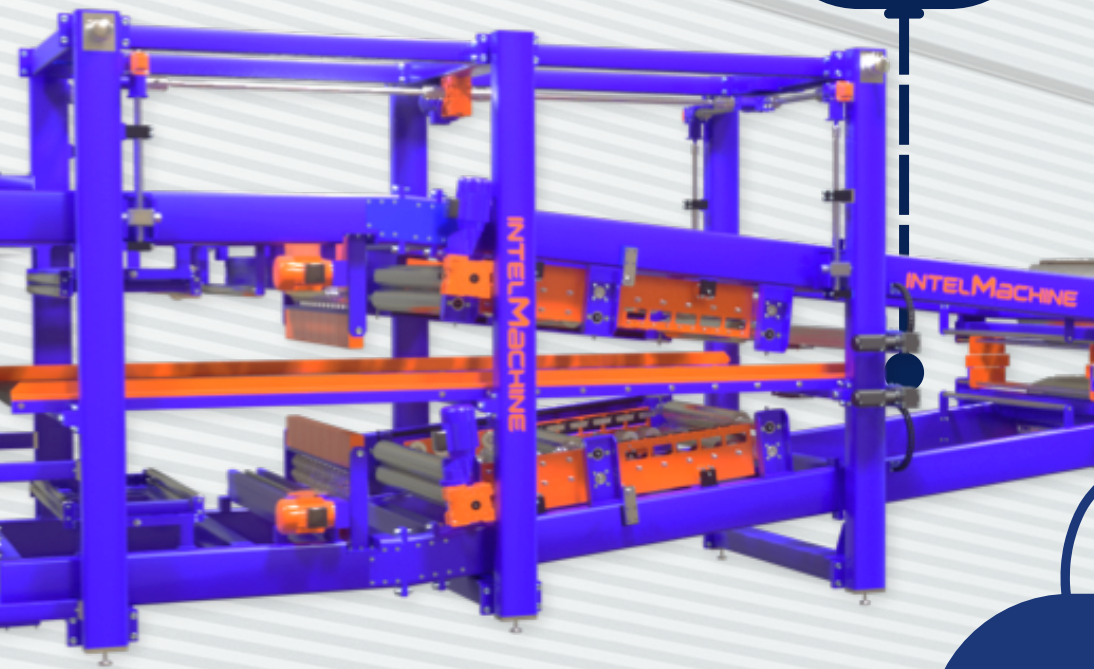
“No mist” spray adhesive applicator with precise flow control



Speed, acceleration and aperture adjustment for precise synchronisation with line speed



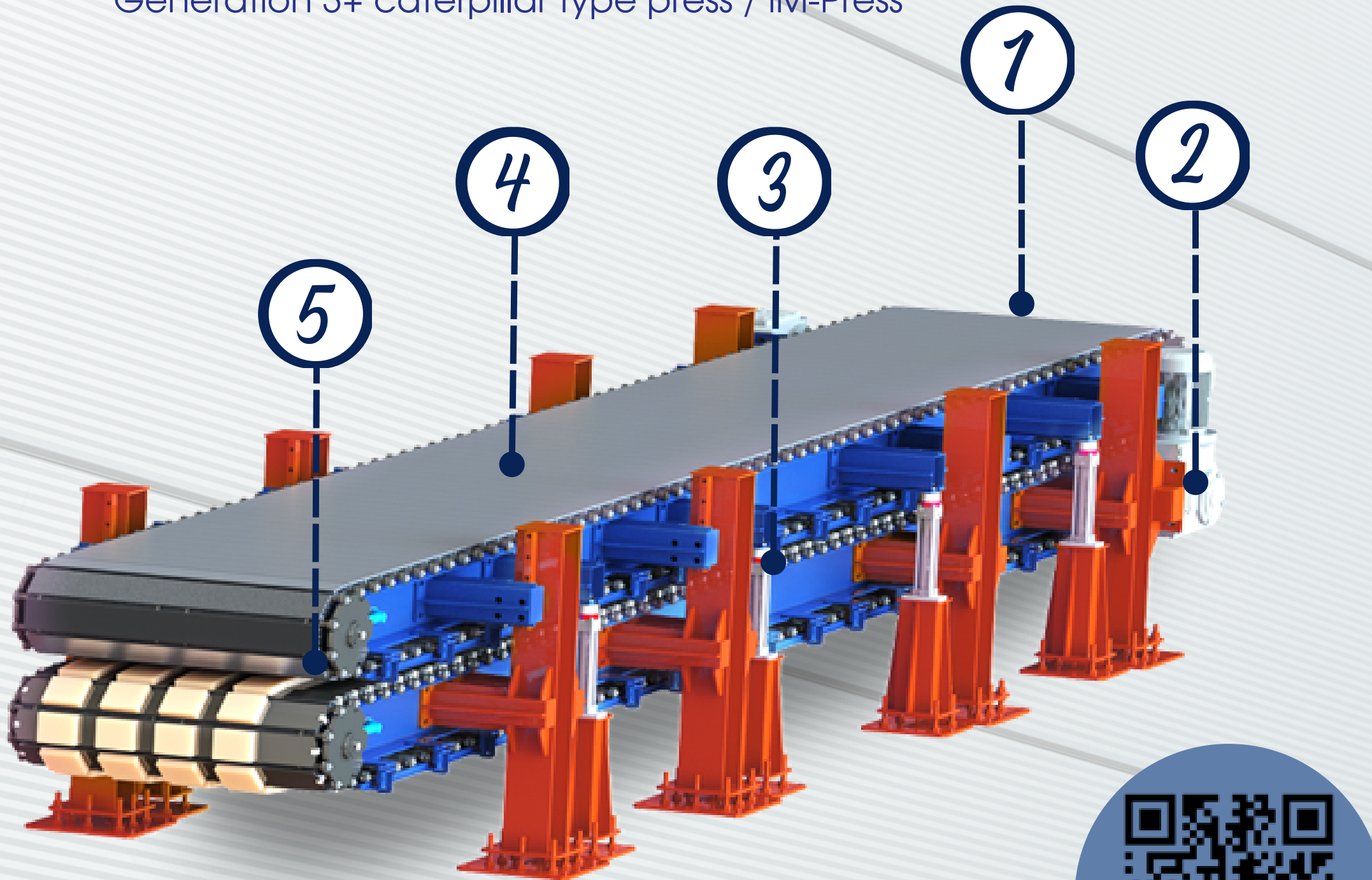
Significant adhesive cost savings\*  
\* compared to other glue application systems



The system is designed by **Intelmachine Ltd** and available as part of lines or separately, with the option of integration into existing lines of other manufacturers

# 5 Panel laminating line

Generation 3+ caterpillar type press / iM-Press



1 Infrared heating system with temperature control

2 Cyllindro-conical Gearmotors 5.5 kW x 2 pcs.

3 Distributed hydraulic system for open and close the press

4 Extruded profile AD31T1 \*

\* Original Intelmachine Ltd design

5 Link connection "Swivel Loop"



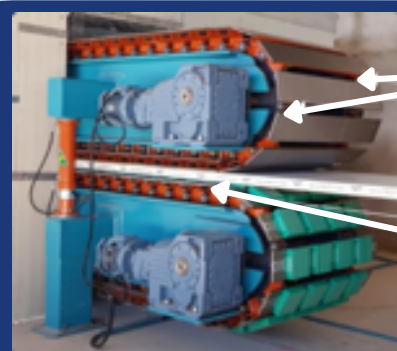
# Generation 3+ caterpillar type press / iM-Press

Low-profile links

4 support rails



- ✓ Operating pressure up to 20 kPa
- ✓ Operation speed up to 10 m/min
- ✓ Press gate 350 mm
- ✓ Working field dimensions 9000 \*x 1250 mm
- ✓ \* Press length 6 - 27 m



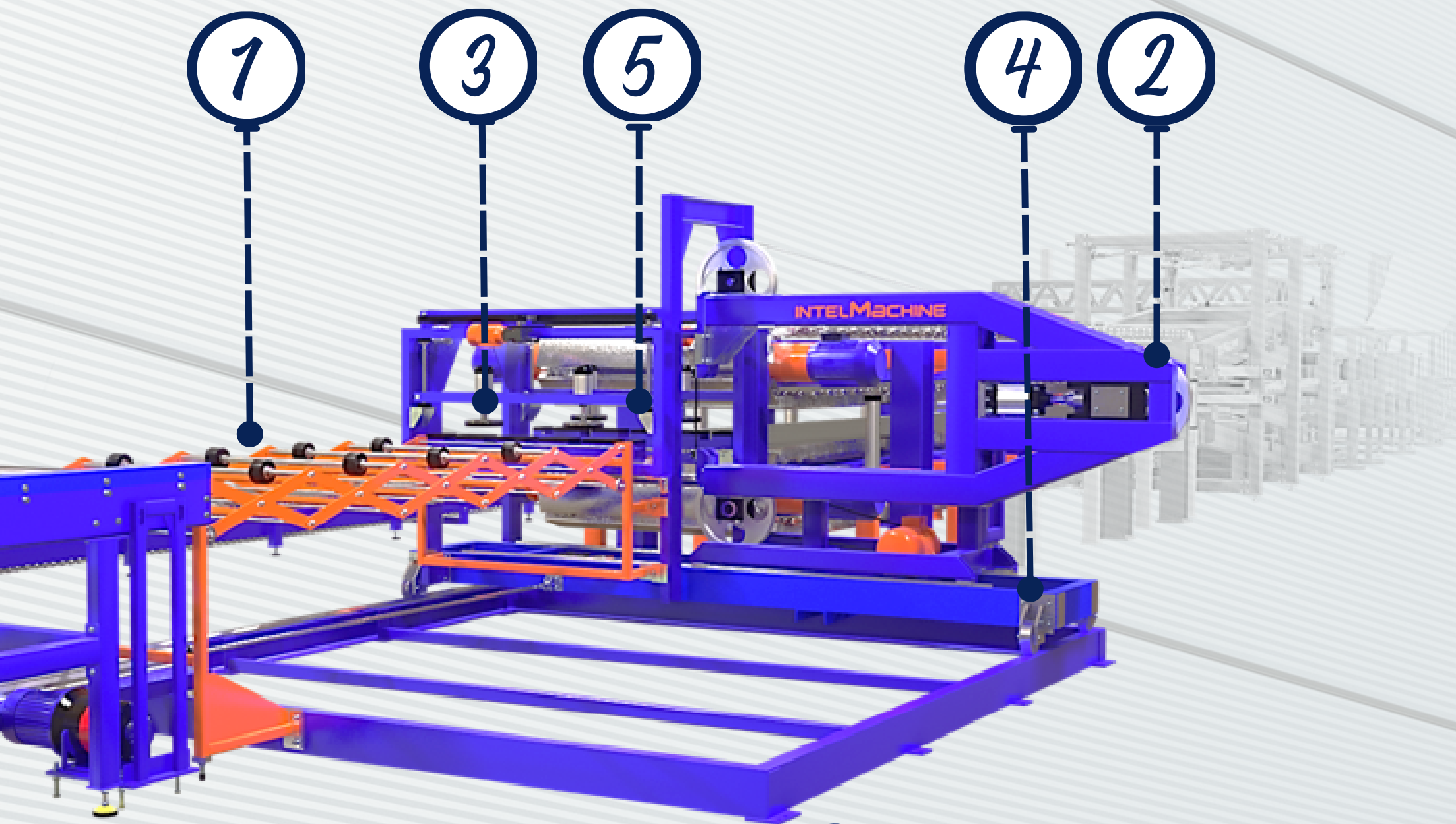
Support on two rail traction chains

Example: photo of a previous generation press

High profile links

The design of the new iM-Press caterpillar press is a particular source of pride for Intelmachine Ltd: we have taken into account and eliminated all the shortcomings of previous generations of presses

## 6 Cut-off flying band saw

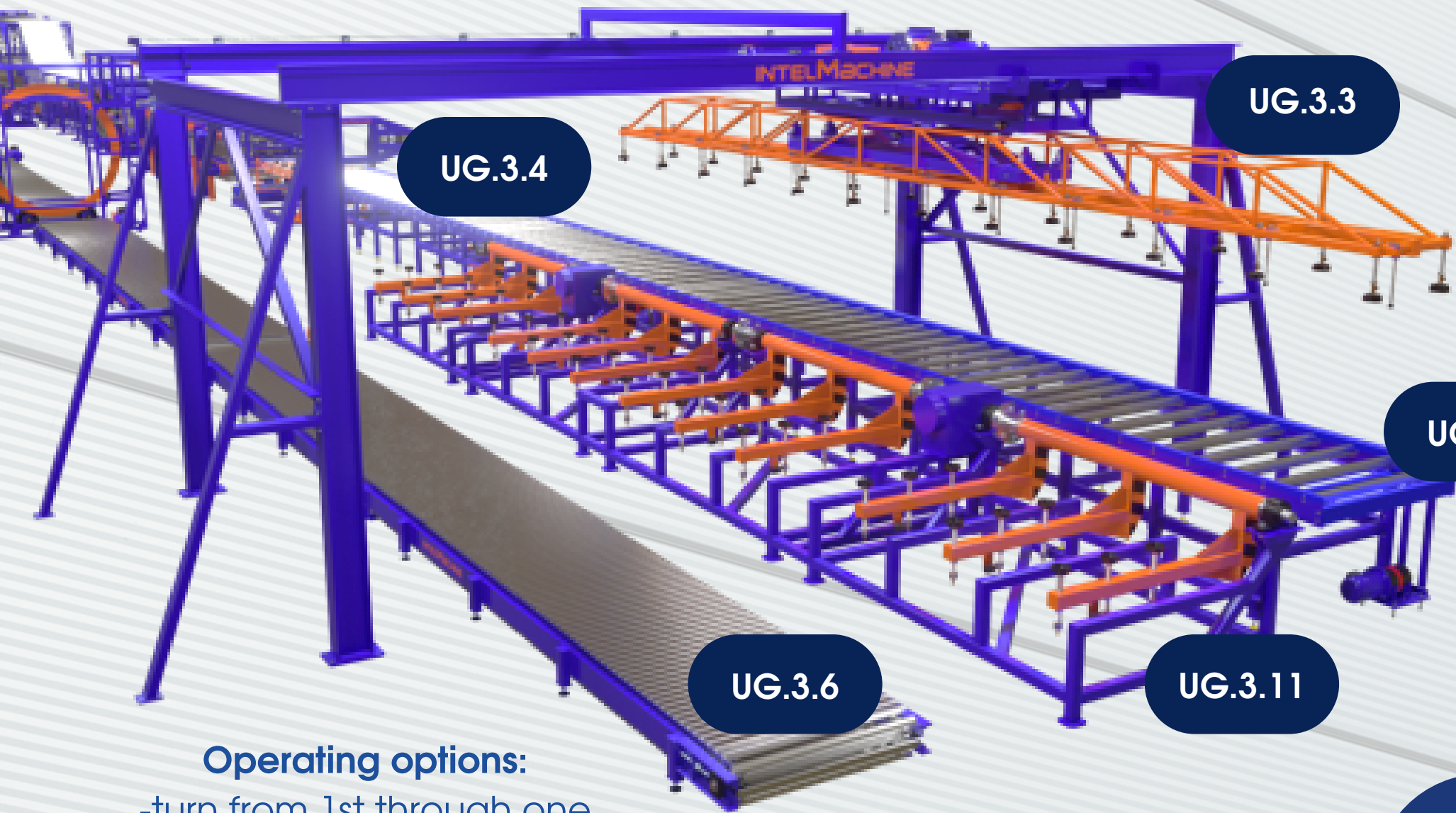


- 1 Sliding roller conveyor
- 2 Bandsaw module
- 3 Pneumatic panel retainer
- 4 Longitudinal offset platform
- 5 Encoder panel length measuring unit



The settings for the number and length of the panel to be cut are controlled from the central control touchscreen

# 7 Automated stacking of finished sandwich panels



UG.3.4 Intermediate roller conveyor

UG.3.3 Vacuum transfer unit

UG.3.2 Finished panel roller conveyor

UG.3.11 Vacuum turner  
*\*as part of the set "Optimal"*

UG.3.6 Slat conveyor

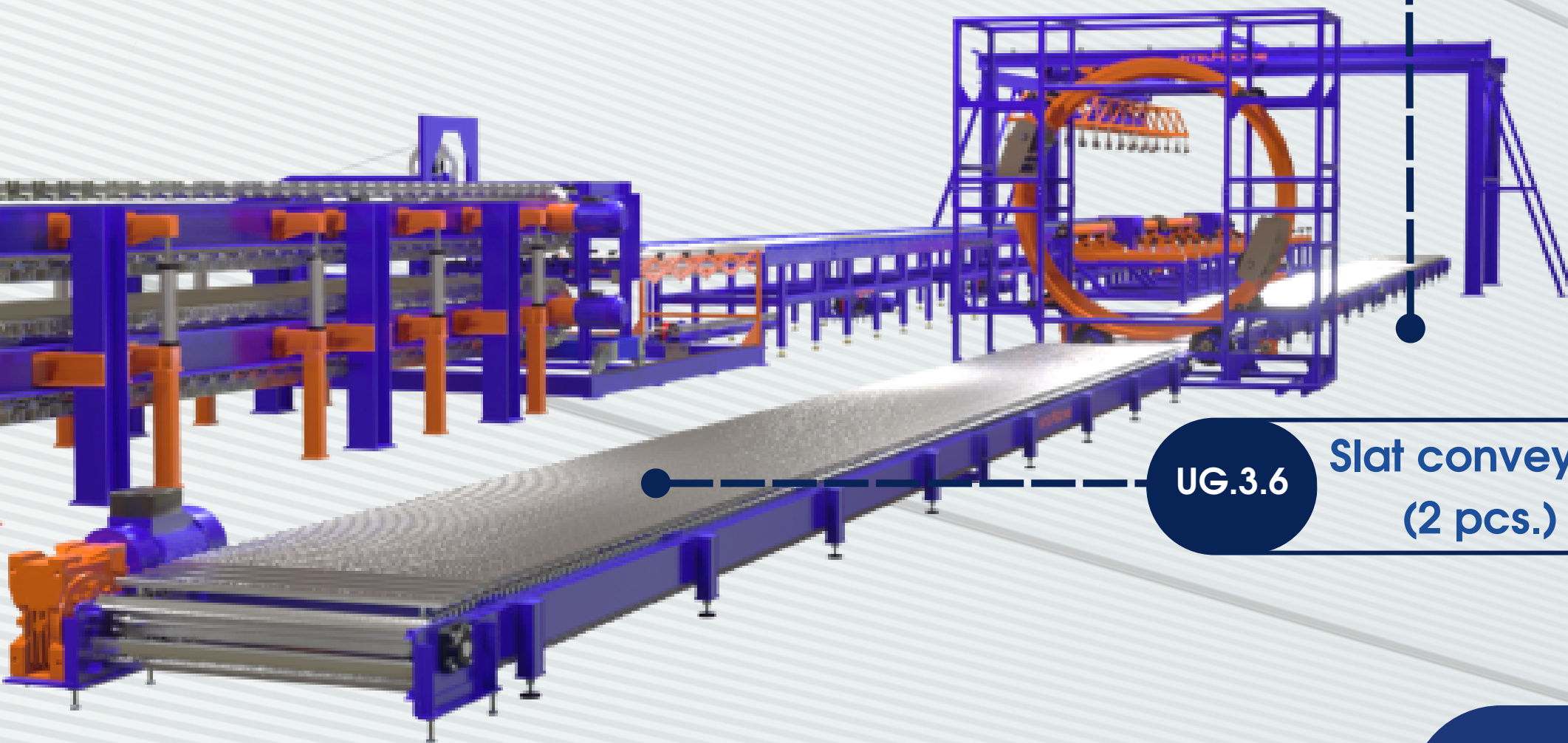
**Operating options:**  
-turn from 1st through one  
-turn from 2nd through one  
-reverse each panel  
-without coup  
**Work in manual mode**

**Fully autonomous complex to work with any type of continuous sandwich panel production lines**

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## 8 Finished product packaging section

- Automatic feeding of pallets for stack packaging
- Automatic wrapping of the stack ends
- Two pre-loaded stretch film cassettes
- Allowable load 500 kg/rpm (6 tonnes per conveyor)



UG.3.5

Stretch film  
wrapper

UG.3.6

Slat conveyor  
(2 pcs.)

Optional extras:

Front / Rear end

EPS block dispenser

Maximum performance area  
✓ capacity: > 12 metres per minute

## Delivery terms:

Design and Manufacturing	From 8 months
Installation and commissioning	included
Customer staff training	included
Warranty service	12 months and optionally more
Post-warranty service	Lifetime available
Technical support and service	Lifetime available
Payment terms	60% prepayment, 30% on readiness for shipment, 10% after commissioning
Price	Depends on line spec and equipment configuration (calculated on request)



## Payment options:

### Standard conditions

Payment upon signing the contract  
-60% of the price of the equipment to be supplied  
-30% upon readiness for shipment  
-10% after commissioning and start-up of the delivered equipment

In accordance with the terms of the main contract

Product name	Quantity
<b>Preparation section</b>	
Hydraulic decoilers with lateral position adjustment 10 tonnes	2
Hydraulically driven undercarriages 10 tonnes	2
The bottom logiform frame	1
The upper logiframe frame	1
Trapeze lamella multyblade disc saw	1
Micro-profiling module 5-Rib (top/bottom set ) Microprofiling module 9-Rib (top/bottom set) 50/50 trapezoidal microprofiling module (trapezoidal top/bottom set) Microprofiling module Rib -30 (top/bottom set)	4
Z-lock joint Rollformer (non-driven) top/bottom	1
Deep Profiled Roof module	1
Disc Cutoff block	1

**Line specification:**

**Set "Basic"**

**Capacity:** up to 40,000 m<sup>2</sup> / month

**Number of staff:** from 10 labours

Product name	Quantity
<b>Lamellas blending area</b>	
Thickness calibration module	1
Core pushing table	1
Roller conveyor loading mineral wool into the saw (idle)	1
Slat receiving roller conveyor (idle)	1
Hand-setting mineral wool mat table	1
Multi-blade disc lamella saw	1

Line specification:  
**Set "Basic"**

**Capacity:** up to 40,000 m<sup>2</sup> / month  
**Number of staff:** from 10 labours



Product name	Quantity
<b>Bonding and laminating section</b>	
Laminator	1
"No mist" spray adhesive applicator	2
Servo driven spraying system	2
Adhesive components supply station	1
Caterpillar type press (9 m) / iM-Press	1
<b>Finished sandwich panel section</b>	
Cut-off flying band saw with encoder	1
Buffer roller conveyor 12 metres	1
Finished panel roller conveyor 12 metres	2
Vacuum stacker	1
Strech film tunnel wrapper	1
Slat conveyor (12 metres)	3
Feeding unit for polystyrene blocks	1
Dust extraction unit 10 000 m <sup>3</sup> /min	1

**Line specification:**

**Set "Basic"**

**Capacity:** up to 40,000 m<sup>2</sup> / month

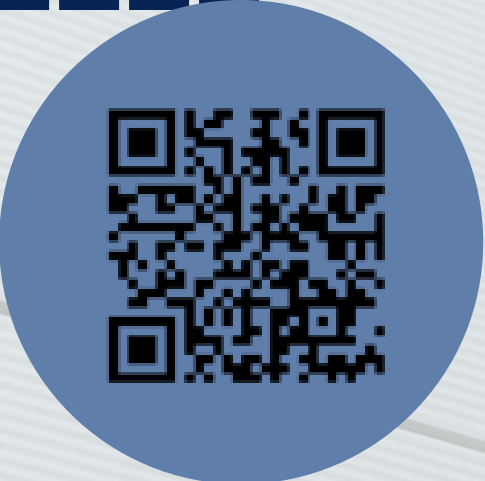
**Number of staff:** from 10 labours

Product name	Quantity
<b>Control system and installation and commissioning services</b>	
Equipment instrumentation and automation software	1
<b>Services</b>	
Supervising installation	1
Commissioning work	1
Customer staff training	1

**Line specification:**  
**Set "Basic"**

**Capacity:** up to 40,000 m<sup>2</sup> / month  
**Number of staff:** from 10 labours

\*The information provided in the presentation is not a public offer.



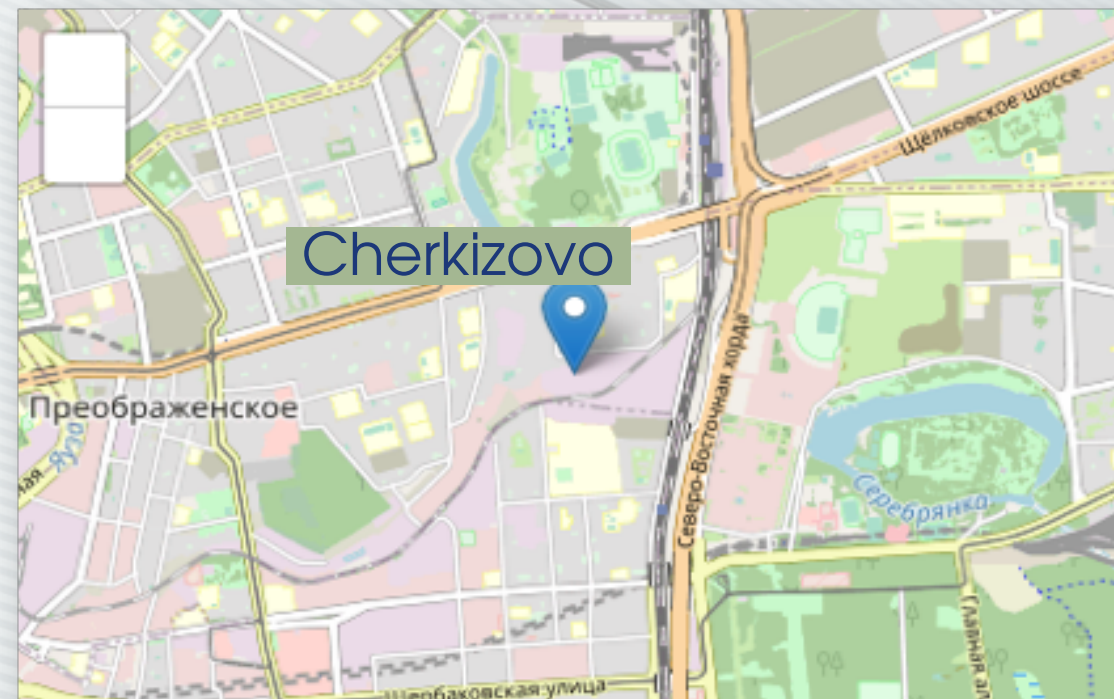


We may help expand your production capacity!

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