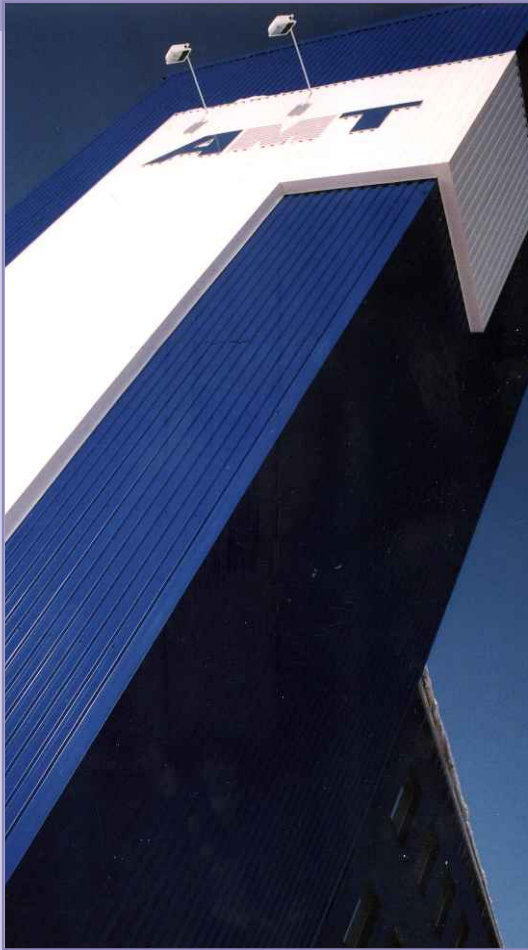


The background features a stylized architectural structure with a white top section and blue sides, set against a dark blue background with white geometric patterns. A globe is positioned in the center, surrounded by a series of white lines that create a tunnel-like effect.

AMT

Automation Mechanical Engineering Technologies

SHEET METAL PROCESSING EQUIPMENT CATALOGUE



AMTengineering specializes in designing, engineering and manufacturing of equipment and technological process development in the field of metal forming.

Development of technology to produce profiles for construction and industrial application by means of continuous forming of uncoiling metal strip is one of the major achievements in machine-building industry worldwide.

To meet our customers' demands and requirements we use an individual approach to every problem. Now our customers can produce a wide range of profiles that vary in color, coating, sheet thickness and length. AMT equipment is capable of producing sheet metal profiles of any length with high precision (up to 1.0 mm), which allows to save time and valuable material. Consequently, mass serial production was replaced by mass individual production.

AMTengineering offers roll forming lines for production of various kinds of standard sheet metal profiles used for roofing and wall coating, as well as custom-made non-standard profiles.

To minimize the tool adjustment time when changing over profiles shapes AMTengineering has developed and patented an original module design that includes 5 stands. These stands are installed in one block on a common supporting frame and can be detached quickly, if necessary. This design allows to reduce the tool adjustment time to 15-60 min depending on the number of modules.

Ideal product quality and high reliability of the roll forming line are being achieved by the implementation of new technical solutions that include:

- automatic coil change-over;
- an original sheet metal feeding device with polyurethane traction rollers pre-centering and adjusting the strip longitudinal axis;
- automatic profile stacking with the help of electromagnets and pneumatic stackers;
- delivery of formed stacks to adjoining binding and packing stations;
- protection of painted profile surface with paper or by oiling;
- individual drives for all modules, which provides for smooth adjustment of the profiling speed and helps to achieve required tightness and support;
- a state-of-the-art computer control system that allows to adjust the metal movement parameters on the machine automatically depending on material coating, metal hardness, thickness and control the roll forming line performance.

AMTengineering is also engaged in designing and manufacturing of wide range of automated lines for slitting, cutting-to-length, slitting and cutting sheet metal materials to length. This equipment is widely used in automotive, shipbuilding, and aircraft building industries, as well as in paper and construction materials sectors. AMTengineering manufactures three types of Cutting Lines:

«**Light**» - for automatic cutting of the material up to 1,0 mm thick at cutting speed of 10-50 m/min.

«**Medium**» - for automatic cutting of the material up to 2,0 mm thick at cutting speed of 20-80 m/min.

«**Heavy**» - for automatic cutting of the material up to 2,0-6,0 mm thick at cutting speed of 20-100 m/min.

«Heavy» lines are designed and manufactured per special individual orders to meet most stringent specific customer requirements.

These lines are equipped with decoilers that are capable of handling coils weighing up to 40 tons.

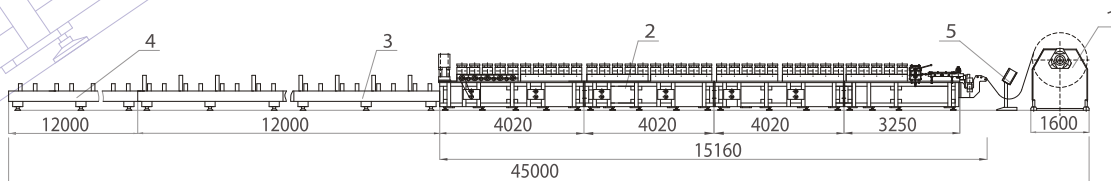
Use of components produced by such world-famous manufacturers as **Mitsubishi, Omron, Hitachi, Siemens** and **Allen-Bradley** in our automatic control systems allows AMTengineering to produce world-class state-of-the-art equipment.

AUTOMATIC ROLL FORMING LINES

LPRF.U model is a universal line designed for production of several kinds of profiles on one frame. The tool is installed into quick-detachable modules (change-over time is 15-40 min depending on the number of modules).

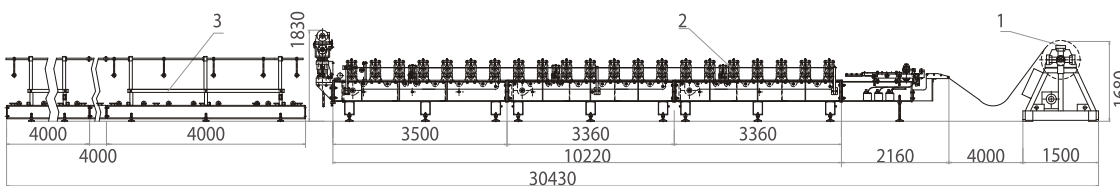


PRF model is a stationary line designed for production of one kind of profile or «Monterrey» and «Super Monterrey» metal tile profiles.



- 1 - Decoiler
- 2 - Roll forming machine
- 3 - Stacker conveyor
- 4 - Transport unit
- 5 - Decoiler control panel

Line	Raw material		Max.	Max.	Power
	Thickness, mm	Width, mm	profile height, mm	profiling speed, m/min	rating, KWt
LPRF60.U	0,5-0,9	1250	75	50	80
LPRF100.U	0,5 -1,0	900/1000	50/100	40	70
LPRF200.U	0,5 -1,0	1100/1250	150/200	40	100
LPRF160.U	0,5-2,0	900/1500	160	40	90



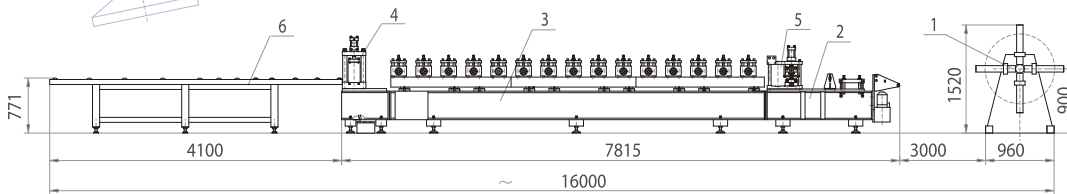
- 1 - Decoiling system
- 2 - Roll forming machine
- 3 - Stacker conveyor

Line	Raw material		Profile	Max. profiling	Power
	Thickness, mm	Width, mm	height, mm	speed, m/min	rating, KWt
PRF 8	0,5 - 0,8	1250	8	40	18
PRF 21	0,5 - 0,7	1250	21	40	22
PRF 35	0,5 - 0,8	1250	35	40	32
PRF 60	0,5 - 0,9	1250	60	40	32
PRF 75	0,7 - 0,9	1250	75	40	60
PRF 114	0,8 - 1,0	1250-1500	114	20	72

LGRF model is designed for production of siding-panels, profiled products for fastening gypsum carton boards, window profiles and various profiled products of complex configuration. A perforator is integrated into the line. The roll forming tool is installed into quick-detachable modules (change-over time is 10-30 min).

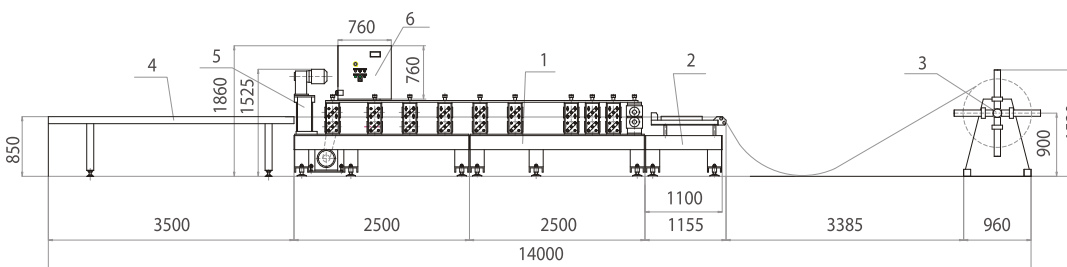


LPEK 450 model is an automatic line designed for production of profiled roof parts (ridge, angle element, wind board, etc.)



- 1 - Decoiler
- 2 - Feeding unit
- 3 - Roll forming machine
- 4 - Cutoff shears
- 5 - Shearing press
- 6 - Receiving equipment

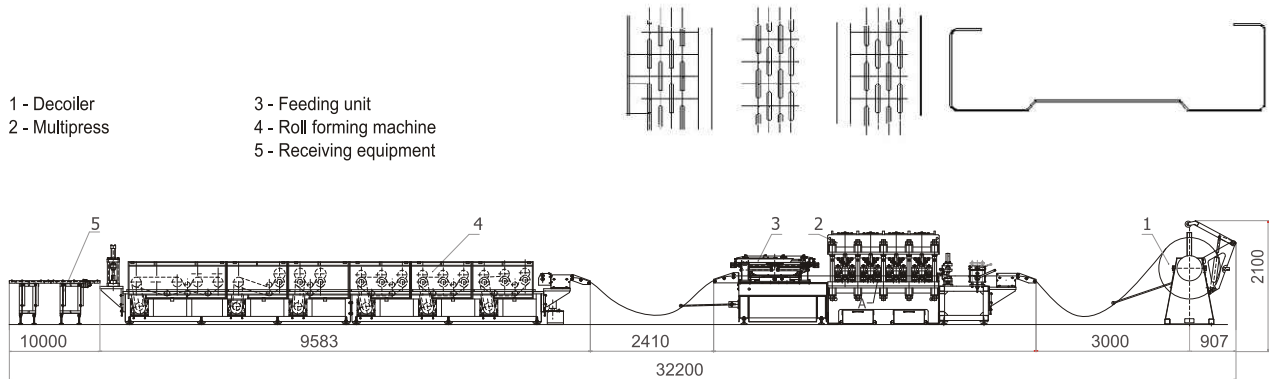
Line	Raw material		Max. profiling speed, m/min	Power rating, kWt
	Thickness, mm	Width, mm		
LGRF50	0,55-2,0	80-350(450)	50	12



- 1 - Roll forming machine
- 2 - Feeding unit
- 3 - Decoiler
- 4 - Receiving equipment
- 5 - Shears
- 6 - Control cabinet (control panel)

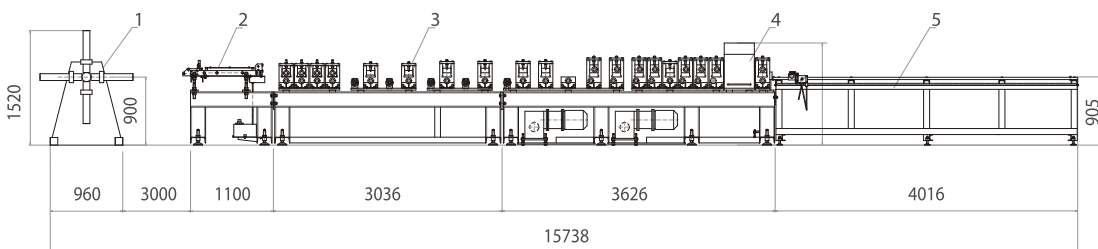
Line	Strip thickness, mm	Coating	Coil weight, t	Profiling speed, m/min	Profiled product length, mm
LPEK 450	0,5 - 0,7	Zinc, polymer	2,0	25	2000 - 3000

LPB 55 model is an automatic line designed for production of thermo profiles for special purposes including loop profiles (with and without perforation).



Line	Raw material		Coating	Profiling speed, m/min	Power rating, KWt
	Thickness, mm	Width, mm			
LPB 55	0,7-1,5(3,0) up to 337		Zinc	40	36

LT 350 and **LPKT 100** models are automatic lines designed for production of downpipes of rectangular, square, and round cross section.



- 1 - Decoiler
- 2 - Feeding unit
- 3 - Roll forming machine
- 4 - Circular shears
- 5 - Receiving equipment

Line	Strip thickness, mm	Coating	Coil weight, t	Profiling speed, m/min	Profiled product length, mm
LT 350	0,5	Zinc, polymer	2,0	16	400 - 12000
LPKT 100	0,5 - 0,7	Zinc, polymer	2,0	20	400 - 12000

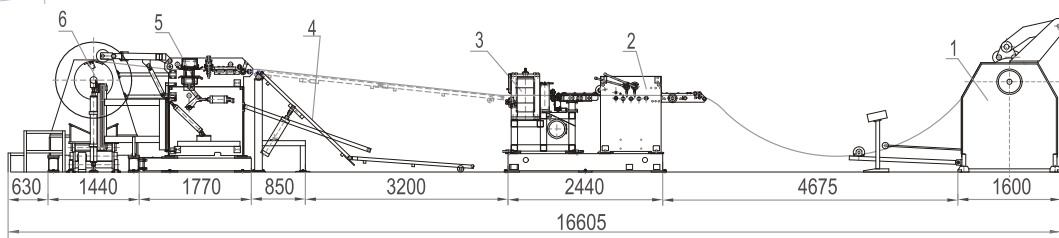
SLITTING, CUT-TO-LENGTH, SLITTING AND CUT-TO-LENGTH AUTOMATIC LINES



Automatic Slitting Lines

**LR 125,
LR 160,
LR 125-2,
LR 160-3
and
LR 160-6**

models are designed for slitting sheet metal (with zinc or polymer coating) with further recoiling of the strips.



- 1 - Decoiling system
- 2 - Straightener
- 3 - Slitter
- 4 - Roller table
- 5 - Handling system
- 6 - Recoiler

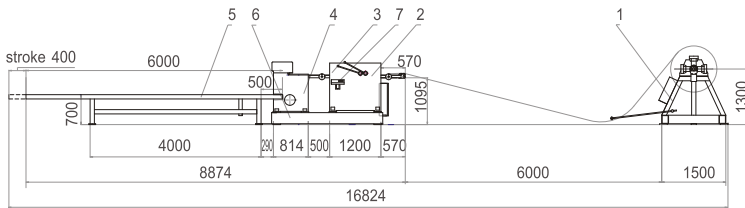
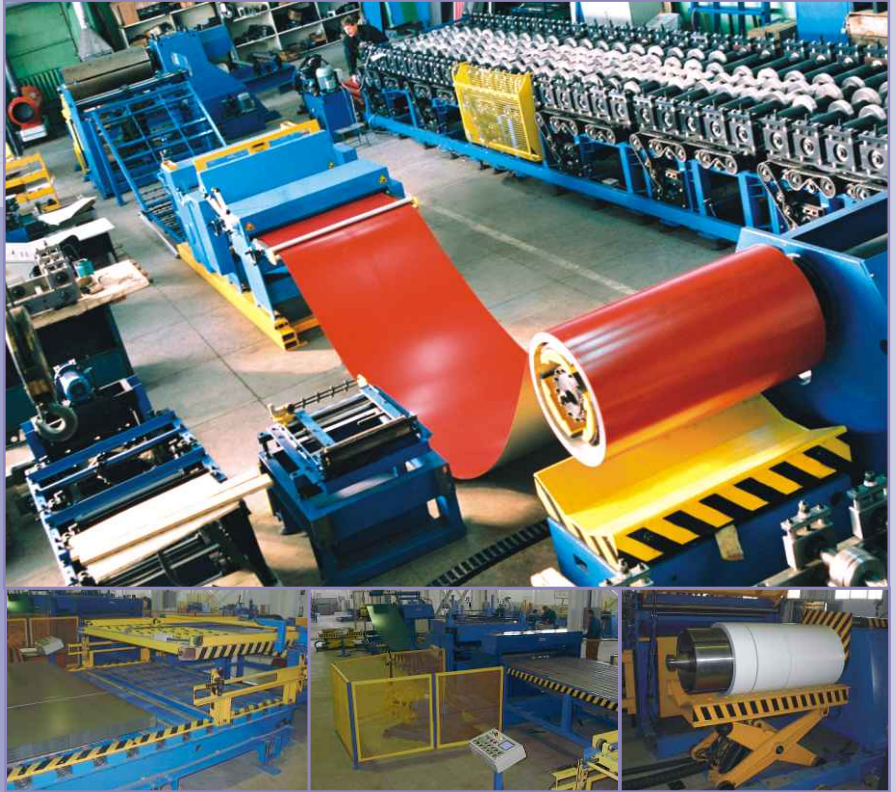
Line	Raw material width, mm	Raw material thickness, mm	Coil weight, t	Slitting speed, m/min
LP 125	500 - 1250	0,4 - 1,0	8	25
LP 160	500 - 1600	0,4 - 1,0	8	25
LP 125-2	500 - 1250	0,4 - 2,0	10	25
LP 160-3	500 - 1600	0,4 - 3,0	16	25 (50)
LP 160-6	500 - 1600	1,0 - 6,0	20	50 (100)

**Automatic Cut-To-Length Lines
LPR 125, LPR 160,
LPR 160TA**

models are designed for cutting the raw material (with zinc or polymer coating) crosswise into sheets.

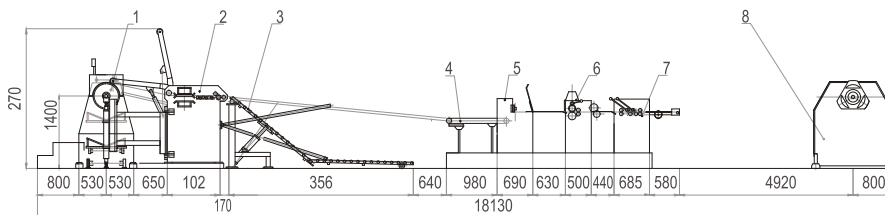
**Automatic Slitting and
Cut-To-Length Lines
LPPR 125, LPPR 150,
LPPR 150T**

models are designed for cutting the raw material (with zinc or polymer coating) lengthwise into slit strips and crosswise into sheets.



- 1 - Decoiler
- 2 - Straightener
- 3 - Circular shears
- 4 - Shears
- 5 - Frame
- 6 - Length sensor
- 7 - Control panel

Line	Raw material width, mm	Raw material thickness, mm	Coil weight, t	Coil speed, m/min	Sheet length, mm	Stacking
LPR 125	1000 - 1250	0,4 - 2,0	10	25	500-6000	Manual
LPR 160	1000 - 1600	0,4 - 2,0	10	25	500-6000	Manual
LPR 160TA	1000 - 1600	0,4 - 5,0	16	25	500-6000	Automatic



- 1 - Recoiler
- 2 - Handling system
- 3 - Roller table
- 4 - Conveyor
- 5 - Cut-to-length device
- 6 - Slitting device
- 7 - Straightener
- 8 - Decoiler

Line	Raw material width, mm	Raw material thickness, mm		Coil weight, t	Coil speed, m/min	Sheet length, mm	Stacking
		Cut-to-length	Slitting				
LPPR 125	500 - 1250	0,4 - 2,0	0,4 - 2,0	10	25	500-2500	Manual
LPPR 150	500 - 1500	0,4 - 2,0	0,4 - 3,0	10	25	500-2500	Sheet Stacker
LPPR 150T	500 - 1500	0,4 - 2,0	0,4 - 5,0	12	28	500-3000	Sheet Stacker

DECOILERS



Electromechanical and hydromechanical decoilers (equipped with coil-lift chairs for coil handling) have various load capacity (up to 40 tons - custom-made).

Decoiler	Type of drive	Coil weight, t	Coil width, mm	Power rating, KWt
RM 125	Electromechanical	8	1250	5,5/7,5
RM 160	Electromechanical	8	1600	5,5/7,5
RM 120M	Hydromechanical	10	1250	10
RM 50 / RM 50D	Without drive/ with drive	3	630	-/2,2
RM 160MT	Hydromechanical	16	1600	14
RM 160MT2	Hydromechanical with coil telescoping automatic control	20	1600	22
RM 50TN	Two-coil rotary	6	630	6

AUTOMATIC CONTROL SYSTEMS

The purpose of the automatic control systems is automation of profiling and cutting processes and correction of their parameters depending on material coating, hardness and thickness.

Frequency converters ensure accurate control of profiling rollers drive over a wide range of settings, have high overload capacity and maintain accurate motor speeds.

Programmable logical controllers, which comprise a wide variety of base and add-on modules, are used for configuration of automatic control systems in order to meet the requirements of technological process.

Operator's control panels are used to provide more efficient technological process-flow control and adjust the required parameters.

Automatic control system elements and electrical equipment are assembled in **RITTAL** cabinets.

Use of components produced by such world-famous manufacturers as **Mitsubishi, Omron, Hitachi, Siemens** and **Allen-Bradley** in our automatic control systems allows AMEngineering to produce world-class state-of-the-art equipment.



Electrical assembly department (automatic control systems assemblage)

Control cabinet for LR 125 model

Control panel for LR 125 model



Control cabinet for PRF-21 model

ROLL FORMING TOOL



By the present time we have designed roll forming tools for all existing profiles. Tools are produced from alloyed structural steel which undergoes special preliminary heat treatment. Our highly skilled engineers can design tools for any kind of profile.

ANCILLARY EQUIPMENT



Our lines can be equipped with stackers, conveyors and packers for sheets stacking and discharge.

AMTEngineering is specializing in design, engineering and manufacturing of equipment for metal-working industry. It has nearly 190 employees (including 76 design engineers) working on 8 000 square meters of manufacturing area and engineering center. Many years of research activities and design developments are reflected not only in the high quality of our equipment but also in the fact that since the company began operations in 1999 it has received 42 patents for various types of equipment and special tools. During years of productive work AMT has increased the profitability of its customers and provided them with new business opportunities. Our goal is to meet and exceed our customer expectations and become the most advanced and respected metalworking solution expert and supplier worldwide.

COMPANY ACTIVITIES

- **Design and engineering works, consulting**

- **Sheet metal processing**

- Automatic Roll Forming Lines
- Bending Machines
- Automatic Slitting, Cut-To-Length, Slitting and Cut-To-Length Lines
- Decoilers
- Automatic Control Systems
- Roll Forming Tool
- Ancillary Equipment

- **Cross-Wedge Rolling**

- Automatic Cross-Wedge Rolling Machines
- Ancillary Equipment
- Feeding Devices
- Induction Heaters and Special Resistance Furnaces
- Automatic Control Systems
- Cross-Wedge Rolling Dies

- **Modernization of forging, assembly, blanking and other productions of various industrial plants at the stage of:**

- nonstandard, special-purpose equipment designing;
- equipment manufacturing;
- warranty and maintenance servicing.



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