# **ROLL FORMING**

The most reliable partner a company toward the world



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Sharing technical Know-how, get Customers' credibility with Quality products containing a soul.

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## Building [Office Building]

Machine shop, R&D, Sales Dep., Overseas business dep. General affairs dep. Maintenance dep.

## Building B [Machine manufacturing]

Machine assembly shop, Welding shop, Filed office.

Building [Roll forming line]

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FORMING CO., LTD

Building D [Roll forming line]

www.rollformer.co.kr

# METAL PROCESSING **TOTAL SOLUTION** GLOBAL **CORPORATION**

## **Professional Quality for the Best Performance**

welding system.

To meet your specific needs, we always try to find the best solutions which can optimize your production processes and maximize the production rate.

From the consult, design, development, manufacture and supervision of commissioning to maintenance work, we are committed to providing a high quality, professional service to our clients and becoming the most reliable partner to you all.

Thank you





We, ROLL FORMING CO., Ltd., are specialized in the design, development and manufacture of wide range of sheet metal coil processing equipment which includes but not limited to roll forming machine line, tube mill line with high frequency

> Wan-seob Lee President of Roll forming Co., Ltd.



Tube mill line

Slitting line

Shearing Line

Press Automation System

# The structure of Roll forming line





Un-coiler



N.C Leveler Feeder



Press system





Shearing Machine

Run-out conveyor

There are different types of Roll forming machines. **The Plate-fixed type** is the exclusive use machine to produce only one kind of profile and the stand roll-replacing type that is able to replace the rolls comfortably to produce other profiles. The cassette-change type makes replacement of rolls more quickly than the stand roll-replacing type to prepare for production.

The number of forming stand is decided depending on the shape of profiles and the fly-cutting machine cutting formed profiles is designed as the ball-screw type or the rack-gear according to the production capacity.

We, Roll forming company limited, customizes and constructs a various types of roll forming lines including a standard type, a hydraulic press type, a CS-Press type, a width-adjustable type and etc.





Punch mold

**Roof system** 

#### Toll Processing

Roll forming line, which is fundamental equipment in the steel industry, forms a steel coil sheet into the profile such as guardrails, solar frames, sound proof panels, safety foot, cable trays, punching trays, swage beams, roofing panels, window rails LED-light covers, interior and exterior construction material and all kind of channels. The range of production can't be limited and it can also produce new materials for new industries in the further.



Auto-packing machine



Stacker





Forming stage





Welder

Tube mill line

Slitting line

Shearing Line

Press Automation System

# **Standard Roll forming line**



Standard -roll forming line is mainly composed of **a forming machine, a fly cutting and a conveyor** of which the specifications are decided according to the material and shape of profiles which customers need to form. The out conveyor is an equipment to be used for travelling and stacking the formed profiles. Conveyors are manually operated but the automatic equipment can be added by customers' request.







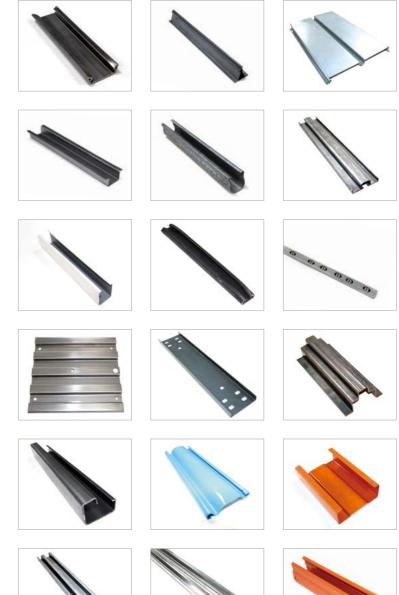










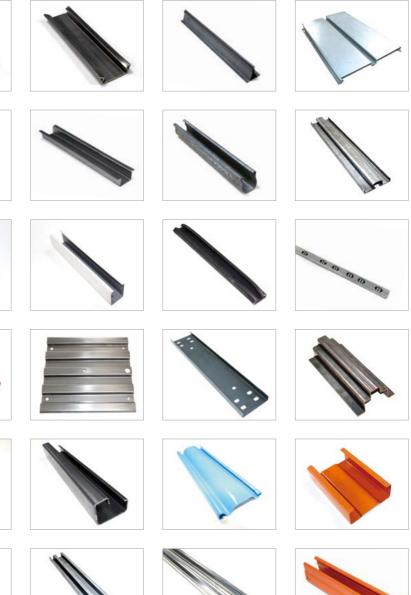












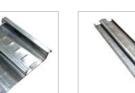














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Tube mill line

Slitting line

Shearing Line

Press Automation System

# **Oil-Hydraulic press type Roll forming line**

This roll forming line is constructed when punching process is required to make hole on the profiles. The standard –roll forming line is equipped with an oil-hydraulic press machine and a N.C leveler feeder that setup and control a distance between holes.

Oil-Hydraulic press type Roll forming line has an advantage of punching **irregular and discontinuous holes** on the formed profiles. This roll forming mainly produces solar frames, electric panels, guardrails and etc.





























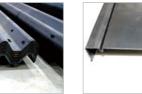
















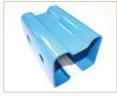




























Tube mill line

Slitting line

Shearing Line

Press Automation System

# CS press type Roll forming line



This forming line is equipped with CS press machine. Likewise, it punches holes on the formed profiles. The process is similar to the oil-hydraulic press type but CS Press machine has an advantage to make **regular and continuous holes** at a much faster rate.

This roll forming line is widely used to produce system channels, cable trays, safety foot and etc.































































Tube mill line

Slitting line

Shearing Line

Press Automation System

# Width-adjustable type Roll forming line



Width-adjustable type Roll forming line is designed for the purpose of avoiding time consuming work which can cause low productivity when users replace rolls to produce profiles in different width. This roll forming line produces any desired width of profiles without replacing rolls.



























Tube mill line

Slitting line

Shearing Line

Press Automation System

# **Additional equipment**



Considering the property of profiles, capacity, work environment and etc. you can add additional equipment to the customized roll forming line.

We manufacture welding machine, bending machine, auto-packing system and we invent other necessary equipment that our customers need.



## Welding machine

When welding process is required on the formed profiles, welding machine can be equipped before the cutting process.



Stacker is a device to extract the formed profiles right after the cutting process. Depending on the profiles, you can select the way of stacking such as down stacking, magnet, air vacuum, over-lap and etc.



## **Bending machine**

This equipment can be added to the Roll forming line in order to bend the profiles or steel sheets.

. The bending machine is representatively able to shape the corner of Guardrails and cable trays into round shape.



Magnet stacker for guardrails





Welding machine for width-adjustable Cable trays

Welding machine for cable trays



Stackers for channels



Bending machine

Bending machine for 2&3 wave guardrails



Mini-forming machine





SPOT welding machine



Stacker for Guardrails





Stacker for side-rails

# **Tube Mill Line**

Model : RFM-TM 100 to 1200

**BANKA** 

# Tube mill line produce pipes welded by using high frequency induction heating apparatus(ERW). Automatic welding and cutting proceed after forming a slit coil continuously to the desired standard.

Pipe standard : KS, BS, DIN, ASTM, API

Slitting line

Tube mill line

Tube mill line is composed of Entry section, Mill section, Cutting section and Finishing section

Shearing Line

## Specification

	The second se			
Model	Pipe size (inch)	Tube OD (mm)	Square Tube (mm)	Thickness (mm)
RFM-TM 100	1"	Ø10-Ø25.4	12×12-20×20	0.4-2.0
RFM-TM 150	1 1/2"	Ø10-Ø38.1	12×12-30×30	0.6-2.4
RFM-TM 180		Ø12.7-Ø50.8	12×12-40×40	0.8-3.2
RFM-TM 200	2"	Ø21.7-Ø60.5	15×15-50×50	0.8-4.0
RFM-TM 250	2 1/2"	Ø25.4-Ø76.3	20×20-65×65	1.0-4.5
RFM-TM 300	3"	Ø34-Ø89.1	25×25-70×70	1.4-4.5
RFM-TM 500	5"	Ø50.8-Ø139.8	40×40-100×100	1.6-6.5
RFM-TM 600	6"	Ø60.5-Ø168.3	50×50-125×125	2.0-7.9
RFM-TM 800	8"	Ø89.1-Ø219.1	70×70-175×175	3.2-9.5
RFM-TM 1200	12"	Ø114.3-Ø323.9	90×90-250×250	4.5-12.7

## Press Automation System



Tube mill line

Slitting line

Shearing Line

Press Automation System

# The structure of Tube mill line





Un-coiler



Shear & Welder



Accumulator



Forming Stage



**Pinch Leveler** 



QC stand



High frequacny Welder

### Toll Processing



Cut off



Automatic packing machine

Tube mill line

Slitting line

Shearing Line

Press Automation System

**Slitting Line** Slitting line slit steel coils to meet the size of desired profiles. It is basically composed of a un-coiler, a slitter, a re-coiler.























Туре	Material	Thickness of sheet	Width	Line speed
CR Slitter line	CR, GI, AL,S TANLESS	0.2-1.6mm 0.3-2.3mm 0.5-3.2mm	600-800mm 1,220mm 1,550mm 1,830mm	Max. 250M/Min.
HR Slitter line	HR, HR STAINLESS	1.2-6.4mm 1.5-9.0mm 3.2-12.7mm	600-800mm 1,220mm 1,550mm 1,830mm	Max. 150M/Min.

Tube mill line

Slitting line

Shearing Line

Press Automation System



Shearing line cut steel coils into steel sheets according to the desired profiles. In other word, it called '**Cut-to-length line**'. The structure of shearing line consists of a un-coiler, a lever feeder, a shear machine, a piler and a lift that move and stack the cut-sheet automatically.





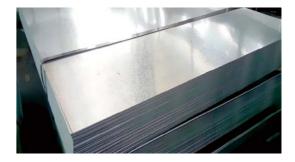


Туре	Material	Thickness of sheet	Width	Line speed
CR Shearing line	CR, GI, AL, STANLESS	0.2-1.6mm 0.3-2.3mm 0.5-3.2mm	600-800mm 1,220mm 1,550mm 1,830mm	Max. 80M/Min.
HR Shearing line	HR, HR STAINLESS	1.2-6.4mm 1.5-9.0mm 3.2-12.7mm	600-800mm 1,220mm 1,550mm 1,830mm	Max. 30M/Min.









Tube mill line

Slitting line

# **Press-Automation System**

A designed metal mold, corresponding to the standard and shape of products, is installed in a press machine with a un-coiler and a leveler feeder. This Press-automation system is able to produce small products and various brackets massively at a high rate of speed.



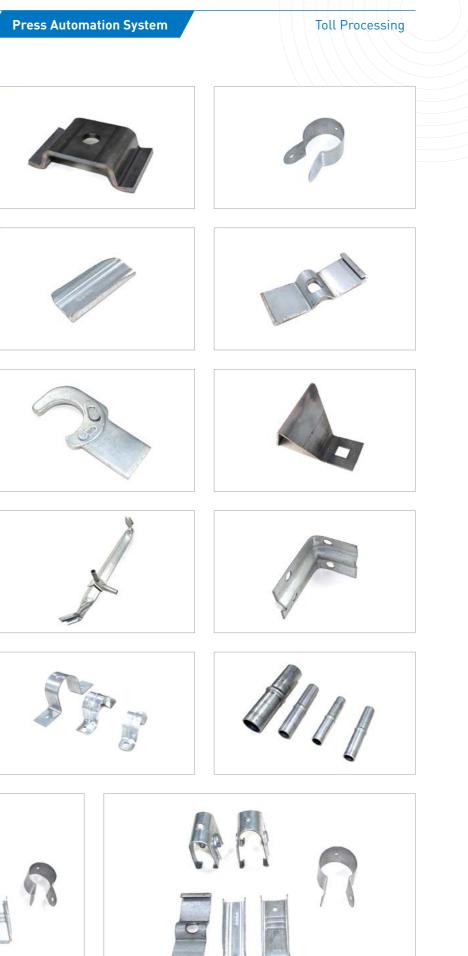




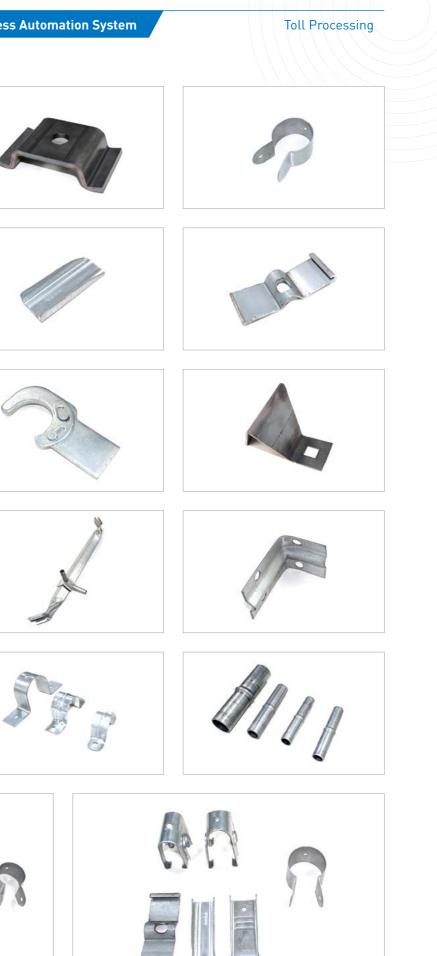




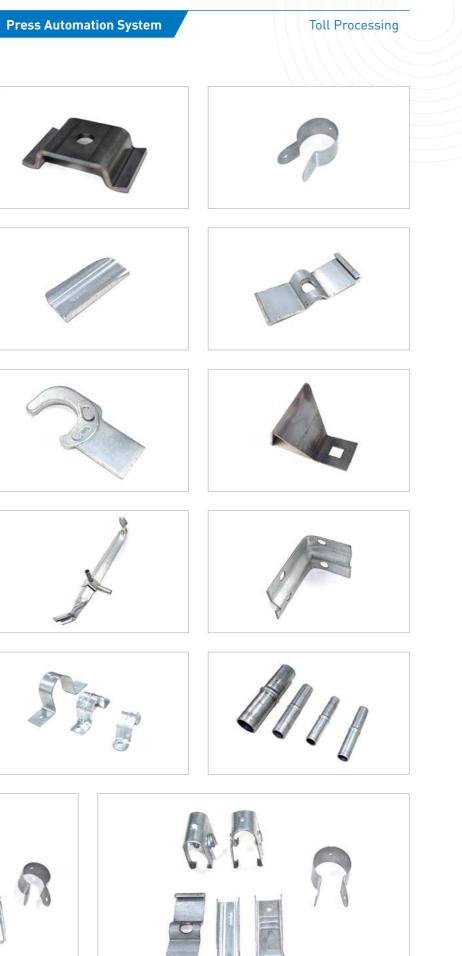




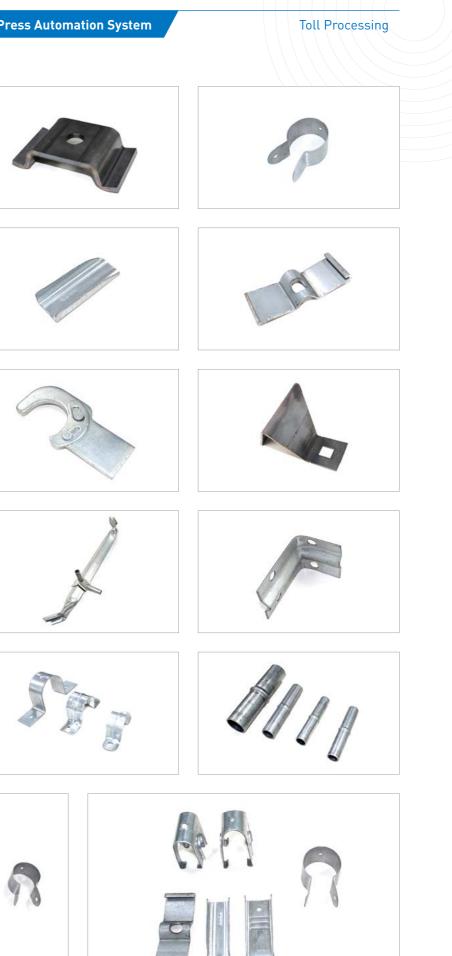




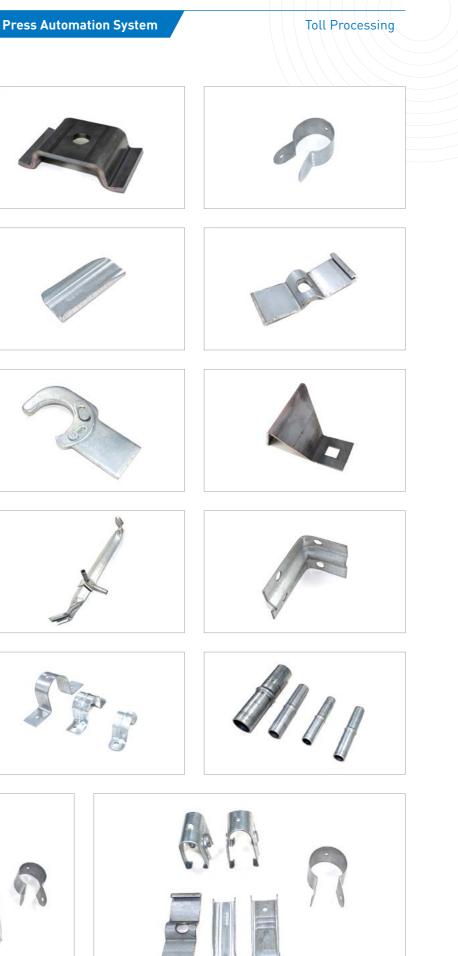


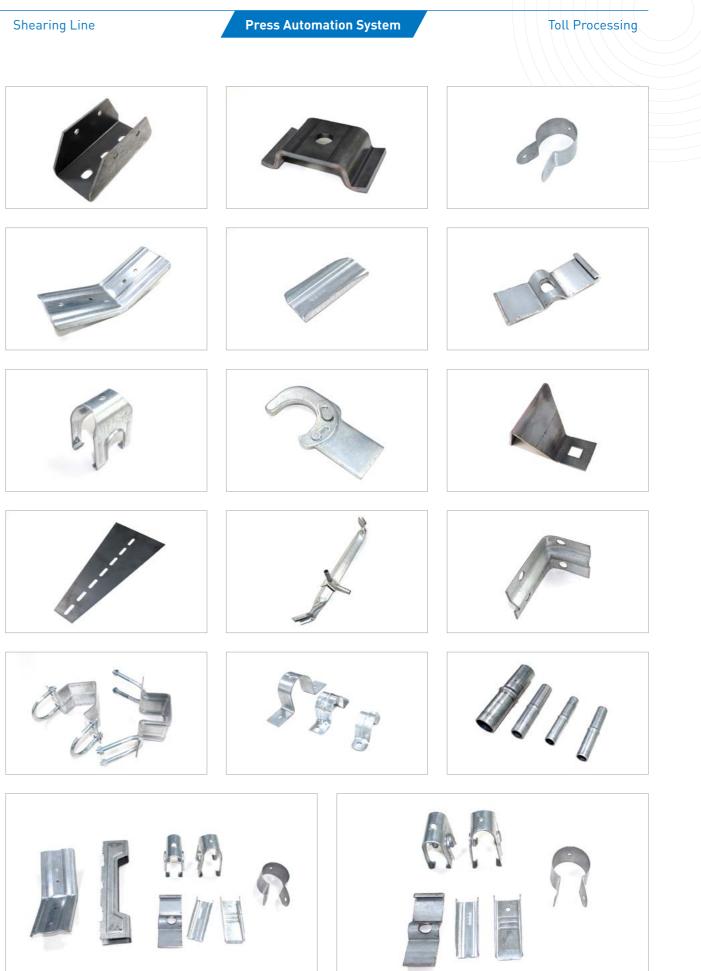












Tube mill line

Slitting line

Shearing Line

Press Automation System

# **Toll processing**

We, Roll forming company limited, have our own Roll forming line to meet the demand from customers and our professional staff members are constantly engaged in research and development. You are fully satisfied with our productive capacity, technology application and immediate response.

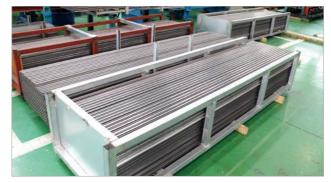


01	Consulting product	Talk over the produceableness, way of delivery, quantities, lead time according to shape and material of products.
02	Estimating and Scheduling	Estimate cost of products based on the level of products and output.
03	Customers' work request	Consult with customer about output, work, date of delivery, material supply and etc.
04	Design	Make a plan about roll design corresponding to the products.
05	Prototype production	To produce the best quality of products, produce the sample first and get an approval from customer.
06	Mass production	Start to produce the products in the best quality approved by customers.
07	Shipment	Release the products form factory in the way of delivery pre-agreed with customers before dead-line.

## The specification of Roll forming line







Thickness of coil	0.8mm ~ 3mm
Width of coil	30mm ~ 410mm
Length of product	300mm ~ 10,000mm
The number of roll stage	25 stage
Thickness of coil	0.8mm ~ 3mm
Width of coil	30mm ~ 410mm
Length of product	300mm ~ 10,000mm
The number of roll stage	25 stage
Thickness of coil	0.8mm ~ 2mm
Width of coil	30mm ~ 220mm
Length of product	300mm ~ 10,000mm
The number of roll stage	18 stage
Thickness of coil	1mm ~ 2mm
Width of coil	500mm ~ 730mm
Length of product	1,000mm ~ 20,000mm
The number of roll stage	25 stage







