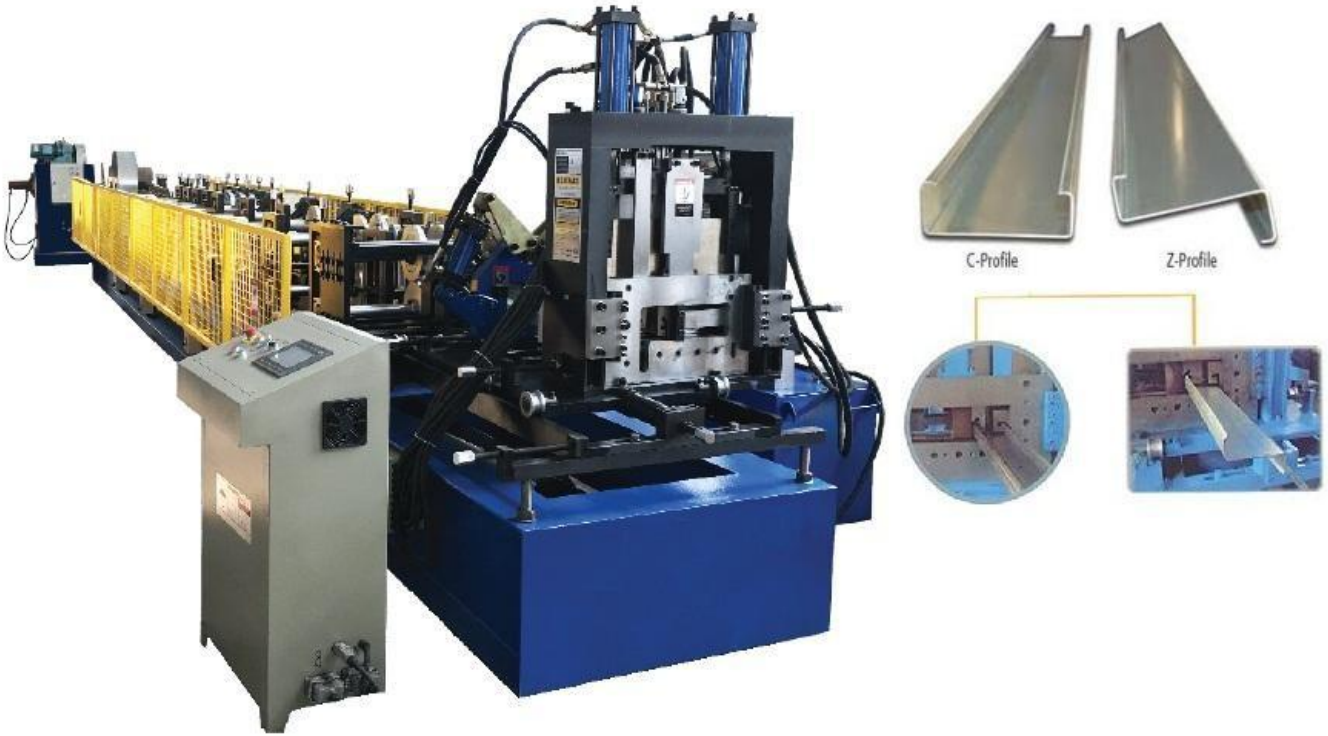
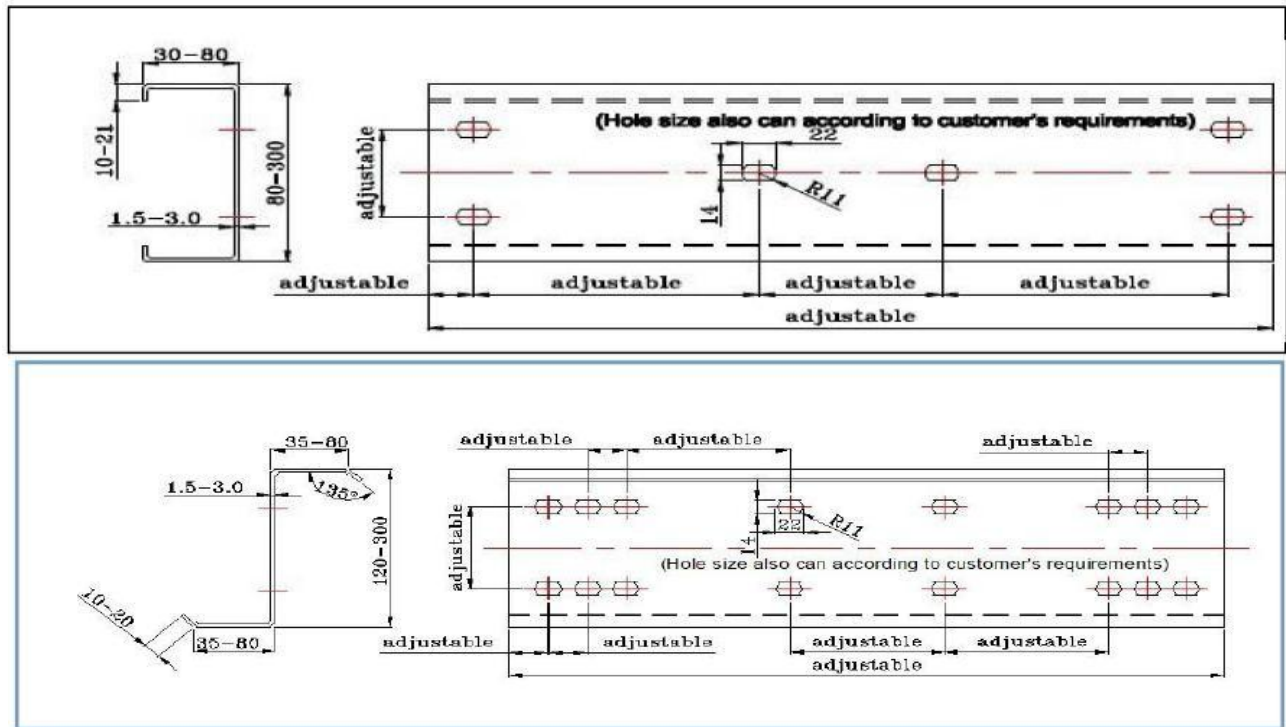


C & Z PURLIN ROLL FORMING MACHINE FULL-AUTOMATIC



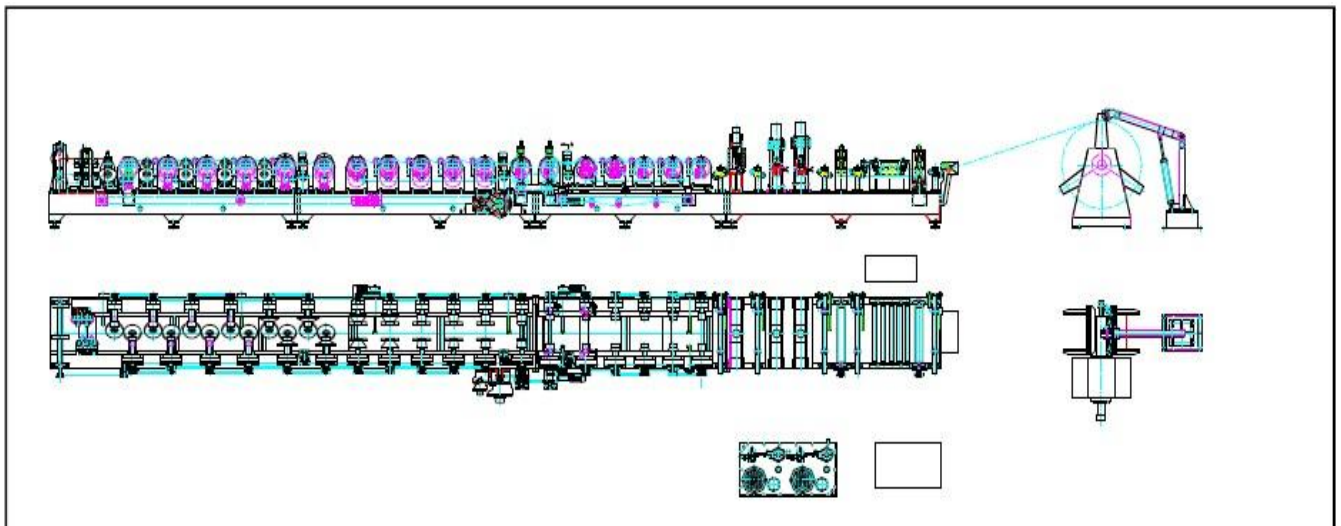
1) **PROFILE DRAWING :**

Punching size and position



2) WORKING FLOW & LAYOUT

2.1 LAYOUT DRAWING



2.2) WORK FLOW LINE

De-coiling→Entry Guide→Leveling→ Adjustable
 Rollformer→Straightening→Punching→Cutting→ Run Out Table

EQUIPMENT LIST

- 1) De-coiler
- 2) Entry Guide + Five Roll Leveler+
- 3) Hydraulic Punching Device
- 4) Hydraulic Cutting Device
- 5) Change from C to Z (4 Roll stations)+Cantilever Type Adjustable Roll Former (16 Roll Stations)
- 6) Strengthening Device
- 7) Run Out Table
- 8) Electric control system (Siemens Of PLC,Yaskawa Transducer And touchable screen are used for data processing and setting
- 9) Hydraulic station (well-know Brand in China)
- 10) Electric Motor (well-know Brand in China)
- 11) Encoder (2400 pulse accurate and stable)

3) TECHNICAL PARAMETER

ITEM		PARAMETER	NOTE
Suitable Material	Type	Cold-rolled steel strip and heattreated galvanized steel strip	Steel strip
	Thickness	1.8mm-3.0mm	
	Yield Stress	<350mpa	
Product Specs	Feeding coil width	150-500mm	
	Cover width	80-300mm	
Machine Material	Machine side Panel	Cast steel arch	
	Forming shaft	High grade No.45 steel, with grinding process	Diameter :85mm

	Forming roller	Cr12 mould steel being quenched treatment, with digital-controlled procession, which ensures the rollers' hardness to be HR62 and durable. Last surface-chrome hard electroplate(HB260)	
Power Motor	Type	380V,50hz,3PH	Depend on customer
	Total motor power	30kw	
	Electric drive motor power	18kw	Drive the machine
	Hydraulic station power	7.5kw	For punching holes and cutting
	Automatic move motor	4kw	Adjustable the width and height size
speed	Working speed	0-18m/min	Including punching and cutting
Decoiler	Manual	Max capacity 6 ton	
Forming station		About 20 Stands	
Transmission type		Chain drive	
Main Machine structure		ARCHWAY	More firm
Type of cutting		Length -setting cutting	
Type of punching		Length-setting punching	
Control system		Siemens PLC	Length Tolerance $\pm 1.5\text{mm}$
Product table		Max 6 meter	Simple run out table
Total weight		About 12 ton	
Installation Size		Abt 11mx1.6mx1.7m	Final design

4) MACHINE COMPONENT AND CHARACTERISTICS

6 Ton Manual Decoiler		<u>Decoiler :</u> Consists of one uncoiler with capacity of 6000kgs and its base. The steel sheet is manually fed to the guiding equipment under the function of friction and traction. Inner Dia: 508mm Max OD : 1500mm
Sheet Guide and Leveler Equipment		Adopting guiding bar and sliding block to control the width and position of the steel sheet. The coil is guided in the correct position and passed to the roll forming equipment. Leveler roller with motivation to pinch the steel strip to next process.
Strengthening Device		Keep the result C and Z Purlin smooth and straight.

Automatic adjustable the width size and height size of the C and Z Purlin



The size of the products Purlin can be adjustable from width 80mm-300mm, height 30mm-80mm (C Purlin), and width 120-300mm, height 35mm-80mm (Z Purlin) automatic by motor power.
Power motor: 4kw
Every sizes Control by the button on the control box.

Exchange C&Z Purlin Roll forming system



1)The main base frame of machine is welded separately and with CAST STEEL ARCH structure on base frame, (Reference Picture), it's more beautiful and strong structure.

2)The rollers are surfacechrome plated after being machined by the exact machine tool.

3)This forming system can changed the size purlin automatic quickly.

4)User can change the Z to C or C to Z purlin through change the up and down direction of the 4 row rollers only by manual.

Punching Device		Punching two sets holes by hydraulic station. The length and blocks can be set by the buyer through the control panel, when reach the set length, the machine will punching and cutting the panel automatically.
Cutting device		Cutting by hydraulic station. The length and blocks can set by the buyer through the control panel, when reach the set length, the machine will punching and cutting the panel automatically.
Transmission System		Quality 32B-1-30L Chains: Transfer the main motor power to the rollers through chains and sprockets, and also transfer the coil sheet.

Hydraulic Station		Supplies the initial power to the voter and punching through a closed oil tank. The power is 7.5kw
Run out Table		To support the finished panels. The quantity we supply is 2 pieces with length 300mm, it can support panels with 10000mm at normal condition.

PLC Control System



The electric controlling system of this machine consists of five parts:

Operating system,
Screen, PLC,
transducer and
strong electricity part.

The controlling system of this machine are imported from Siemens company of Germany. The system uses modularized structure and has convenient, reasonable, canonical wiring arrangement. The independent operating console facilitates the mutual dialogue between the operator and the machine.

The operation is easy and steady and can be choose operation by manual or automatically.

5) SUPPLYING COMPONENTS OF LINE

No	Name	Quantity
1	Decoiler	1
2	Main Roll Forming System	1
3	Cutting and Punching	1
4	Hydraulic station	1
5	Electric Motor	4
6	PLC Control System	1

7	Run out table	2
8	Spare parts	1
9	Technical document	1

6) SPARE PARTS

No	Category	Description	Quantity
1	Electric part	Limited switch	2
		Normal bottom	2
		Solenoid valve oil	2
2	Hydraulic parts	Hydraulic oil	2
		Absorption filter	
		Cutting cylinder sealing rings	2
3	Tools	Key wrench	1
		Adjustable wrench	1
		Screw drive	1
		Fixing wrench	1