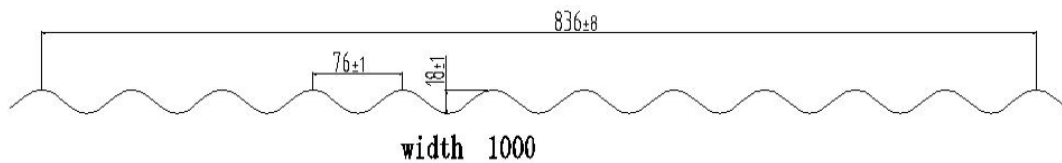


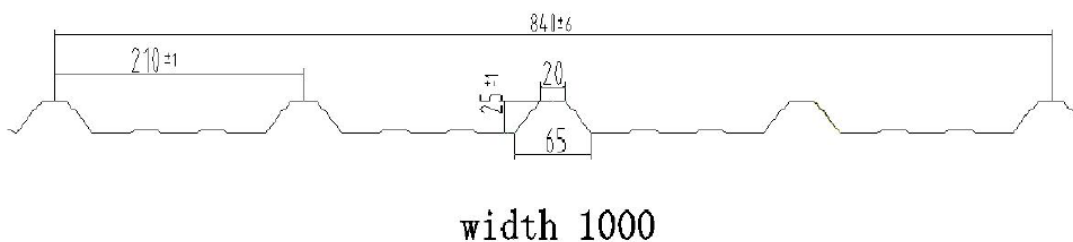
Double Layer Roll Forming Machine

(1). Profile drawing: as attached bellow;

Upper layer:

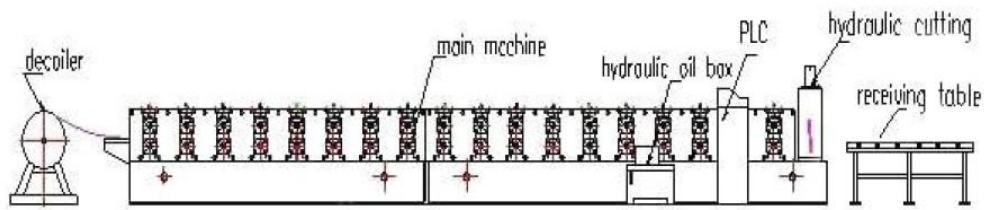


Bottom layer:



(2). Processing technique and deployment:

Hydraulic decoiler—Roll forming machine—PLC system—Hydraulic system—Blade—Receiving table



(3). Technique parameters of the processing line:

- a. Suitable material to process: Color steel sheet; galvanized steel sheet, aluminum sheet,
(for corrugation 550MPa)
- b. Thickness of the plate: 0.18-0.5mm, for glazed tile: 0.35-0.5mm;
- c. Width of the plate: 1000mm;
- d. Effective area for use: as per drawings;
- e. Productivity: 20-25m/min for corrugated and profiling, 4m/min for glazed tile;
- f. Roller stations: 24+1 rows for corrugation / 18 stations for 840glazed tile
- g. Stand: 400 tools steel;
- h. Middle plate thickness: 20mm;
- i. Diameter of the shaft: $\phi 70\text{mm}$;
- j. Material of roller: 45# steel finish machining, plated hard chromium surface;
- k. Material of main shaft: 45# steel finishing machining and then slack quench processed;
- l. Hydraulic Motor: 7.5KW;

- m. Electrical control system: Panasonic PLC
- n. Material of cutter: GCr12;
- o. Driving mode: single chain 1 inch;
- p. Power supply: 380V, 50HZ, 3 PHASES;
- q. Dimensions of major structure: 11.4m * 1.7m * 1.6m
- r. Weight of machine: about 10T;
- s. Machine color: blue.

(4). Components of line:

No	Name
1	Main machine for roll forming
2	Control system
3	Hydraulic system
4	Blade
5	3m manual Receiving table
6	5T hydraulic Decoiler

(5). Machine picture:



(6) Summary of the structure of the machine:

a. Hydraulic Decoiler:

1).Decoil type: hydraulic tense, motor-driven decoiler;

2).Decoiler motor power: 4KW;

3).Decoiler hydraulic tense oil-pump motor power: 3KW;

4).Steel coil inner diameter: $\phi 508\text{mm}$ -- $\phi 610\text{mm}$;

5).Steel coil external diameter: $\text{max}\phi 1500\text{mm}$;

6).Steel coil width: 0-1220mm;

7).Bearing weight: 5T;

8).Decoil speed: 0-30m/min, it can adjustable will match with machine speed;

9).Decoil hydraulic system pressure: 10MPa;



b. Feeding the material into the platform

With manual pre-cutting



c. Molding core

Functional and structural characteristics : In order to keep the product shape and precision, adopts welded sheet structure, motor reducer drive, chain transmission, roller surfaces polishing, hard plating, heat treatment and galvanizational treatment . The polished surface and the heat treatment towards the molds also can keep the molding plate surface smooth and not easy to be marked when it is being stamped.

Rolling galvanizational thickness:0.01 mm

Rolling material: Forging Steel 45#

Material of the mold: Cr40. and the mold is heat-treated.

d. Shearing mechanism

It adopts the hydraulic drive and automatic location to decide the dimension and cut the target products.

Match equipment: It contains one set of cutting tools, one hydraulic

tank

and one cutter machine.

Material of the cutting blade: Gcr12

e .Computer control cabinet:

It adopts Panasonic to control. The target piece's length is

adjustable and

digit of it can be adjusted. Computed mode has two

modes: automatic and

manual one. The system is easy to operate and use.

f. Counter : One counter gauges length, pulses, and

decides length, Omron.

g. Molded pieces receiving table

It adopts welded steel and supported roller to transmit the

products.