

# Roll forming machine setup

## How to setup roll forming equipment in metal sheet manufacturer.

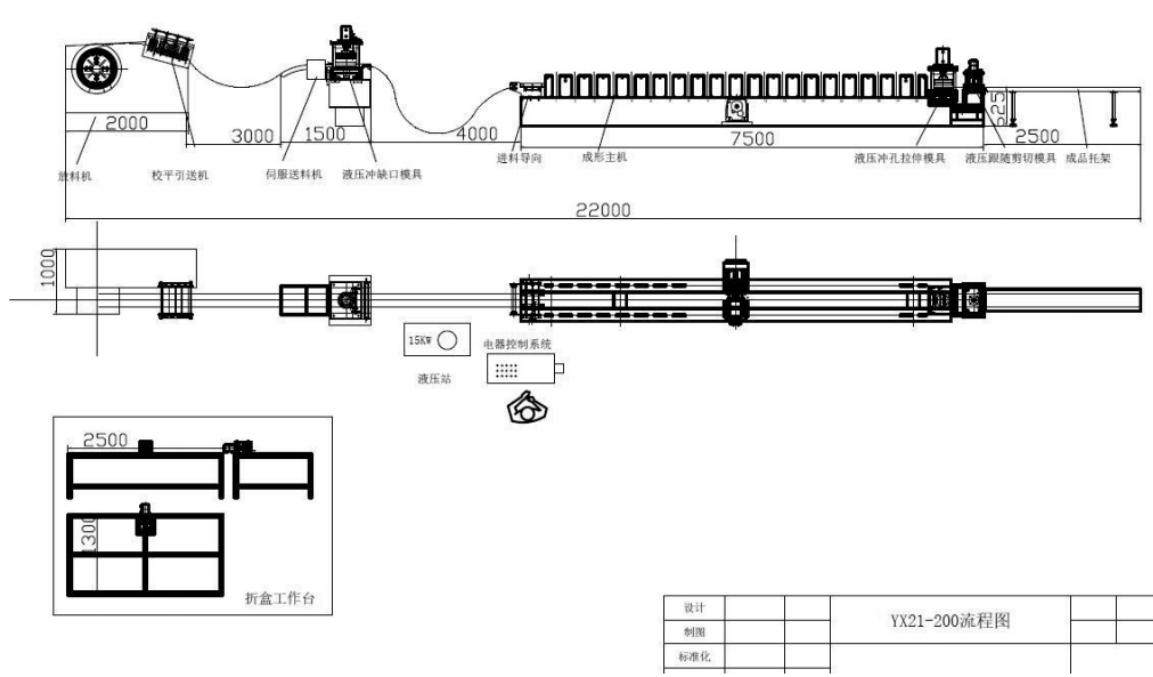
1. Provide a reliable grounding at the power supply terminal, and connect the main motor and the pump motor ground to the grounding terminal of the control cabinet.
2. Please check the power supply voltage is stable, the required voltage range (three-phase 380V  $\pm$  10%). Do not use this control cabinet if it is out of range or the power grid is unstable.
3. Do not place the control cabinet in direct sunlight. Do not use this control cabinet in air pollution areas such as dusty or corrosive gas. Keep the cabinet and the surroundings dry.
4. Encoders and other control lines should be separated from the power lines to avoid interference.
5. PLC use of ambient temperature: 0-55 °C, touch screen using the ambient temperature: 0-50 °C,
6. Inverter use of the ambient temperature: -10-50 °C (not frozen), above 1000 meters above sea level should be reduced to use (detailed consultation after-sales).
7. It is not allowed to drive a motor whose rated power is greater than or equal to half of it. Only when the rated current of the inverter matches the nameplate of the motor can it operate.
8. Non-professionals do not adjust the cabinet.
9. The frequency converter in the control cabinet is not suitable for "emergency stop" machine.
10. Power down the control cabinet and place all switches and buttons in the stop position during power failure or when there is no press plate.
11. When the unit is not in power outage but needs to be stopped temporarily, push the manual / automatic switch to the middle stop position and press the emergency stop button. To prevent the equipment caused by accidental action.
12. During maintenance, please refer to the above precautions to ensure safety, such as the need to run the equipment required for maintenance, there must be someone to operate the control cabinet, and during the maintenance shall not leave.
13. If equipment damage or personal injury caused by neglect of the above-mentioned causes is caused, the consequences shall be borne by itself.
14. Wiring inside the cabinet is subject to change without notice.

## PLC control cabinet cable show



## Roll Forming Line Devices Layout

2 in 1 Uncoiler Straightening→servo feeder→Hydraulic press breach device  
→ Guide device → roll forming machine → hydraulic punch →shear device  
(including knife)→ finished product rack



## Second, Roller Forming line System functions

System main function:

- 1) manual part of the manual debugging, production.
- 2) Automatic part can be set in the number of pieces, the length of the case of automatic production.
- 3) can be more than the number of plate production and length of the set.
- 4) Chinese, English, Polish operation display panel, the use of touch-type digital key input, easy to operate, easy to understand.
- 5) The running length of the steel plate is automatically tracked by the code counter.
- 6) The entire system running and cutting process automatically, and dynamic display on the display panel machine operation: such as lot number, the number of pieces and the length of the dynamic display, without human intervention.
- 7) can be individually controlled oil pump, cutter movements and machine operation.
- 8) power storage: memory power before the work batch number and cut board count, re-transmission, you can continue to run from the original working point.
- 9) The system can set the maximum number of cut plate 99, the maximum number of pieces per batch of 99999, the length of the range of 0.1 to 200 meters.

The main components of the system:

- 1) PLC: the core of the control system.
- 2) limit switch: the upper and lower limits on the cutter to control.
- 3) touch screen: automatic control of the control panel.
- 4) Encoder: Collect steel plate running length data.
- 5) inverter: control the motor running at different frequencies.