

SLITTING AND CUT TO LENGTH MACHINE FOR SHEET COIL

Components

This line includes supportable table, coil car, hydraulic uncoiler, sheet guiding equipment, leveling system, shearing equipment, liner equipment, slitting equipment, coil arm, electric controlling system and recoiler equipment.

Components and functions

1. Supporter table: Support the material steel coil, in order that the coil car can feed the coil into the hydraulic uncoiler.
2. Coil car: Made of the coil car main body, V elevator, lifting oilcan, lifting post. And main motor, reducer and train transfer equipment, and railway. with the function lifting and moving.
3. Hydraulic uncoiler with both head: consist of the frame and railway and hydraulic cylinder, washer, hydraulic oilcan.
4. Guiding equipment: Consists of flexing supporter panel and oilcan.
5. Rectify Equipment: Consist of one stand of rolls and can adjust the rolls distance to adapt to different thickness.
6. Shearing equipment: Can cutting at the length when you need.
7. Middle bridge 1#: Guiding the sheet when the sheet twists.
8. Fix the width equipment: Limited rolls mainly adjust the width from 500 mm to 1600 mm and fixed and limited the sheet out the limited rolls when high speed.
9. Slitting equipment: Consist of the fixtable base and movable base, the up and down knife shaft, the equipment of lifting the up knife shaft, and fix the shaft equipment. the knife shaft diameter: 240 mm the knife diameter 350 mm, and thickness 10 mm. Main power 75 kW.
10. The press the end of the coil equipment: Press the coil when slitting will be finished.
11. The waste side recoiler: Recoiler the waste side after slitting.
12. Middle bridge 2#: Reduce the speed difference at different equipment.
13. Separate equipment: Consist of separate rolls and its base.in order that every strip go ahead in their orbit.
14. Recoiler equipment: Finish recoil the strips slitted. Main power: 90 kW
15. Hydraulic supporter: support the recoil shaft to get more capacity.
16. The unload coil car: It is near the uncoiler car
17. Hydraulic pneumatic system: Consist of motor, oil pump, hydraulic valve, oil tank, oilcan, hydraulic pipe, cylinder and value, control the whole line hydraulic move. Main power 11 kW, oil pump: pv1-23 (the speed is 33 l/min) system pressor: 14 Mpa, air irignal pressor 0.7 Mpa. (0.9 m³/min) and the air original is provided by the buyer.
18. Electril control: Consist of the standard electric box, main control panel, vice control panel and the swich box. The whole line is under control, the main control panel can control the slitting speed, and spot slitting and continuous slit.



Technical Parameters

Material Specification	galvanized steel sheet at stress 235 Mpa less than 450 Mpa.
Thickness	0.3-3.0 mm
Coil width	500-1600 mm
Coil inner diameter	508-610 mm
Coil out diameter	less than 2000mm
Max coil weight	30 t
Product coil inner diamer	508 mm
Product coil out diamt	less than 1500 mm
Product coil weig	10 t
Production speed	0-120 m/min
The slit width tolerance	±0.05 at thickness 0.5-1.0 mm +0.1 mm at thickness 1.1-2.0mm +0.15mm at thickness 2.1-3.0mm
Slitting straighten tolerance	0.2 mm/m
the slitting burr	less than 0.05 mm
Min slit width	30 mm
The slit strip quantit	20 strips
The waste edge	3-15 mm
The quantity of waste edge	2 strips
The Max weight of waste edge	less than 150 kg/roll
The main power	220 kW
The weight of the line	about 68 t
The dimension of the line	250 m × 8,5 m



Hydraulic conical uncoiler system



Rolling Orbit table



Slitting host machine



Tension pad and pre-separator