
**Φ50 Extruder Quotation Sheet with
configuration and Technical Specification**

Series No.	Product Name	Unit Price (FOB Shanghai in USD)
1	Φ50 Extruder	

Series Number	Machinery Name and Specification	Quantity
1	630 active pay-off stand	1
2	3 meter vertical wire storage rack	1
3	50 straightening platform	1
4	Φ50 screw (XLPE)	1
5	Φ50 extruder principle machine	1
6	100kg hopper +suction feeder	1
7	U7 adjusting free head	1
8	Blow water device	2
9	1.5 meter movable sink	1
10	12 meter single layer U type cooling sink	1
11	500 dual wheel take in unit	1
12	1246 auto coiling wire take up machine	1
13	12 meter horizontal type wire storage rack	1
14	159 meter counter	1
15	main control system	1

16	On-line frequency spark instrument	1
17	On-line single way gauge measuring instrument	1

一、 Main specification and performance:

1. Extrusion material: Applied to extrude PVC、XLPE plastics;
2. Core wire diameter size: $\Phi 0.8\text{mm} \sim \Phi 5.0\text{mm}$;
3. Finished wire OD: $\Phi 1.5\text{mm} \sim \Phi 6.0\text{mm}$;
4. Extrusion volume: 60kg/h. (head open, soft PVC);
5. Mechanic design wire speed: Max400M/min;
6. Production line height (Head centre) : 1000mm;
7. Power source: AC 380V, 3 phases , 50Hz。

二、 Main parts brands:

1. Motor: Shanghai Huabin Motor;
2. Frequency converter: DARING ;
3. Control components: Taiwan PVA touch screen +Siemens 200PLC
4. Thermo controllers: RKC thermo controller;
5. Bearing: High quality bearing;
6. Electric components: Well-know brands。

三、 Composition and description:

1. 630 dual heads tension control pay-off rack
 - 1) Applied bobbin diameter: $\Phi 500 - \Phi 630\text{mm}$;

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- 2) Applied wire speed: Max400m/min;
 - 3) Applied wire diameter size: Max Φ 8;
 - 4) Top shaft way: Manual with shaft;
 - 5) Tension control: Mechanical lever type board with brake
 - 6) Wire breakage detection: Machine contact detection, wire break down stops;

2. 500 single way straightening platform:

- 1) Φ 50mm straightening wheel;
- 2) Center height: 1000mm, can be adjusted up and down;
- 3) Overall dimension: (L) 580* (W) 250* (H) 1080;

4) Weight: 50kg。

3. Φ 50 Extruder:

- 1) Power: 15KW AC motor;
- 2) Deceleration gear box: Gear adopts the grinding gears(Imitating Italian model)
ZLYJ133-II , extruders exclusive use deceleration gear box;
- 3) Screw: 38CrMoAlA, Φ 50mm, Length to diameter ratio 25: 1;
- 4) Screw tube: 38CrMoAlA ;
- 5) Screw rotating speed:10-110r/min;
- 6) Extrusion volume :60kg/h (head open , soft PVC);
- 7) Electric heat: the use of voltage 220 V, screw tube 3 sections, cast aluminum heater heating, each section heating power 3 kW; Machine clip of 1 section, stainless steel heating bar heating, heating power 9 * 120 W
- 8) Cooling type: Screw tube cooling by high-pressure centrifugal fan 3 sets, the fan

power 180 W, machine clip natural cooling

9) Spare parts: Machine clip, stainless steel heating bar 1 set , 1 pcs thermocouple

4. SHD-50E drier :

1) Type: SHD-50E;

2) Material loading quantity: 50kg;

3) Electric drying: 2.2kW;

4) Fan: 250W;

5) Characters:

a)0-99 hours timer automatic shutdown

b) Provide interval drying methods, in order to achieve electricity saving purpose;

c)The material of internal barrel and the internal parts materials are all by stainless steel materials;

d) he material barrel has separate bottom , and convenient for material clearance , change material quickly

e)Full digital P.I.D control and LED status display

5. U7 adjusting free head:

1) Type: U7 adjusting free head (without spill valve);

2) Applied wire diameter range: ϕ 0.8— ϕ 5.0mm;

3) Flange connection thread: M35*2;

4) Electric heating : 1 point temperature measurement, stainless steel heater, natural cooling

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6. Blow water device:
 - a) Power: compressed air,
 - b) Ring air tap, can open and close up and down;
 7. 1.5 meter movable water sink :
 - 1) Material: Stainless steel ;
 - 2) Sink length :1.5 meter dual type;
 - 3) Sink shape : Movable sink , U shape 200mm(Height)*200mm(Width)Movable 500mm;
 8. 12 meter single layer sink:
 - 1) Material : Stainless steel ;
 - 2) Sink shape : U shape 280mm(Height)*300mm(Width);
 - 3) Sink length :12 meter single layer water immersion sink;
 - 4) Cooling length: 12 meters;
 9. 500 dual wheel take in unit :
 - 1) Power: 3.7kW AC motor;
 - 2) Type: dual wheel water tank type;
 - 3) Applied wire speed: Max400m/min;
 - 4) Applied wire diameter range: Max ϕ 12mm;
 - 5) Take in wheel: ϕ 510, Alloy aluminum oxidation process, dynamic balance correction
 - 6) Tank material : Stainless steel;
 10. 12 meter horizontal wire storage rack

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- 1) Type: 12 meter horizontal;
 - 2) Applied wire diameter range: Max ϕ 6.0mm;
 - 3) Tension type: 2HP motor coordination and 10kg magnetic powder clutch;
 - 4) Tension range: \leq 700N;
 - 5) Transmission : multi core steel cable;
 - 6) Wire storage length: 200m;
 - 7) Capstan: diameter ϕ 200mm, material is hard aluminum, number is 10+11 capstan;
 - 8) Anti collision: Compression spring;
 - 9) Dual detection device: No contact with linear displacement sensor detection
 - 10) Safety device: The limit switch in the front and end position , sudden stop synchronization control if wire breakage happens
 - 11) Control Box: in wire storage rack inlet position corner, control: DC-24V power, Motor reversible control and switch tension adjustment VR, tension ampere indication meter, power indicating light;

11. 159 meter counter :

- 1) Type: One way stop back;
- 2) Meter counter wheel : ϕ 159;
- 3) Meter counting: 500mm/r;
- 4) Overall dimension: (L) 415* (W) 250* (H) 500;
- 5) Weight: 45kg。

12. 1246 coiling machine:

- 1) Applied wire diameter range: Φ 1.0mm- Φ 8.0mm round and flat wire;
- 2) Coiling shape: Max OD Φ 460mm, Min ID Φ 120mm, Height 60mm—100mm, can do limit change according to requirement;
- 3) Applied rotating speed: Max1250rpm;
- 4) Power: 7.5HP AC motor;
- 5) Traversing type : 400W Mitsubishi servo motor+precision ball screw;
- 6) Meter forecast function and meter reached automatic stop, manual waste wire remove control
- 7) Control: Mitsubishi PLC+ 6 inch human-computer interface, PLC program control wire taking in, pressing, coiling , cutting , pushing out finished coil , etc entire action .
- 8) Machine center height: 1000mm

13. System control box

- 1) Power: 380V, 3 phase , 50HZ;
- 2) System:
 - a)Electric heating thermo control: 6 sections thermo control;
 - b) Power control: By main switch and each branch switch control;
 - c)Motor operation control: By frequency converter drive control each motor respectively;
 - d) Flow auto control: by 10 inch color touch screen+ SIEMENS PLC auto control of the overall production process .

e)Affiliated fittings interlink control: gauge diameter measurement instrument, spark machine etc, fully combination into the whole system, high automation degree .

f) Taiwan PVA touch screen+PLC (SIEMENS 200 Series);

3) Control flow

- a) Whole process quality control;
- b) The real-time data acquisition and display the various process and control parameters
- c) Real time failure detection and automatic alarm;
- d) Specialist knowledge system maintenance reference instructions;
- e) Online change and set up technological parameter ;

14. On-line OD measuring instrument:

2) Type: DDM-2020;

1) Characters:

2) Using high pulse infrared light source 、USA EG&G Reticon Company high precision CCD and so on computer digital image processing technology new device, new technology, with high precision, good stability, long lifetime, high sweep speed, good dynamic property。

3) Main parameters:

3) Valid measuring range: 20mm;

4) Recommended measuring range: 0.1—16mm;

5) Measuring accuracy: $\pm 0.03\text{mm}$;

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- 6) Exposure time: $\leq 200\mu\text{s}$ / time
 - 7) Control interface output: $-10\text{V}-+10\text{V}$;
 - 8) Max output current: 5mA;
 - 9) Central height adjustment range: 850-1100mm;
 - 10) Overall dimension (not including the holder): 630*120*135;

15. ST-15A frequency spark instrument:

- 1) Brand: Shanghai on-line;
- 2) Detection range: 0-30mm;
- 3) Max test voltage: 15kV;
- 4) Max wire speed: 330m/min;
- 5) Test electrode length: 280mm.

