



FILAMENT WINDING MACHINE

THE SPECIFICATIONS



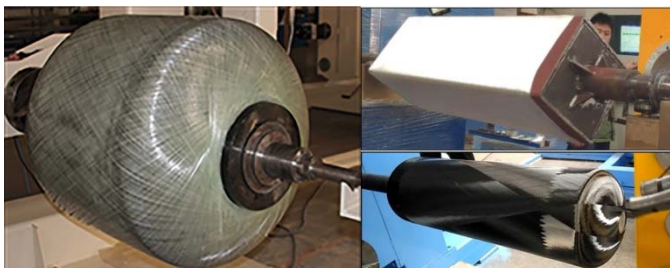
Equipment Series: Winding Machine for FRP Pipe (by quartz sand injection)

- ◆ Linkage axis: 2 axis
- ◆ Pipe diameter: DN50-DN4000MM
- ◆ Pipe length: Max. 12m
- ◆ Winding angle: 45° - 90°
- ◆ Yarn feed speed: 120m/min
- ◆ Fiber placement accuracy: ± 0.1 mm
- ◆ Pipe pressure: Max. 3.5MPa
- ◆ Control system: CNC/computer control
- ◆ Joint type: Bell & spigot, flange, taper, locking key, butt joint.

Equipment Series: Winding Machine for Pressure Vessel/Filter vessel

- ◆ Linkage axis: 4 axis
- ◆ Spindle quantity: 1/2/3/4/5/6/8 spindles
- ◆ Structure type: gantry type
- ◆ Cylinder diameter: DN50-2000mm
- ◆ Cylinder length: 600-6000mm
- ◆ Winding angle: 7° - 90°
- ◆ Angle of swing around nozzle: 0° - 360°
- ◆ Carriage speed: 0-50m/min
- ◆ Cross feed arm speed: 0-30m/min
- ◆ Fiber placement accuracy: ± 0.1 mm
- ◆ Control system: CNC/computer control

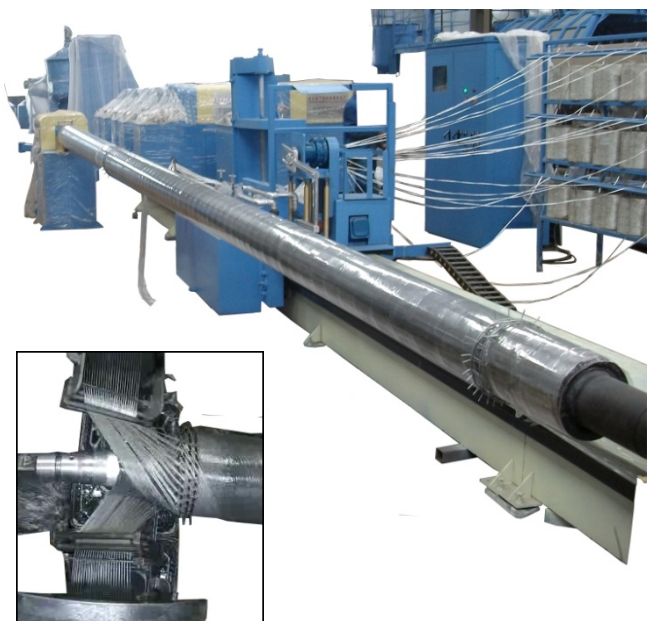
Winding form: cylinder, cone, sphere etc.



Final Products:



THE SPECIFICATIONS



Equipment Series: Winding Machine for FRP Pole

- ◆ Linkage axis: 4 axis
- ◆ Spindle quantity: 1/2 spindle
- ◆ Structure type: horizontal type
- ◆ Pole length: max.12m
- ◆ Winding angle: 7°- 90°
- ◆ Angle of swing around nozzle: 0°- 360°
- ◆ Control accuracy: $\leq 0.1^\circ$
- ◆ Cross feed arm speed: 0-30m/min
- ◆ Fixing method of resin bath: lateral moving together with winding trolley
- ◆ Control system: CNC/computer control
- ◆ Winding linear: helix, hoop, and automatic cross
- ◆ Brand of motor and driver: Japan Yaskawa servo motor and driver

Equipment Series: Winding Machine for FRP Storage Tank

- ◆ Linkage axis: 4 axis
- ◆ Spindle quantity: 1/2 spindle
- ◆ Tank type: horizontal type, vertical, cone
- ◆ Tank diameter: DN300-3000mm
DN3000-DN25000mm
- ◆ Tank length: max.12000mm
- ◆ Winding angle: 7°- 90°
- ◆ Angle of swing around nozzle: 0° - 360°
- ◆ Yarn feed speed: 120m/min
- ◆ Control system: CNC/computer control
- ◆ Fiber placement accuracy: $\pm 0.1\text{mm}$
- ◆ Brand of motor and driver: Japan Yaskawa servo motor and driver



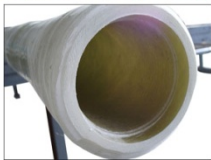


THE SPECIFICATIONS



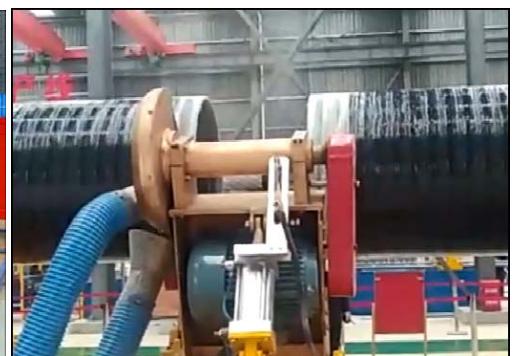
Equipment Series: Winding Machine for High-pressure/Low-pressure Pipe

- ◆ Linkage axis: 4 axis
- ◆ Winding angle: 7°- 90°
- ◆ Pipe diameter: DN50-DN600mm
- ◆ Pipe length: 9000mm
- ◆ Pipe pressure: 3.5MPa-25MPa
- ◆ Curing method: internal curing by steam
- ◆ Winding spindle: 2 spindles
- ◆ Winding and curing process complete at the same time
- ◆ Control accuracy: 0.01mm
- ◆ Control system: CNC control



Equipment Series: Continuous Winding Machine for GRP Pipe

- ◆ Linkage axis: 2 axis
- ◆ Winding angle: 30°- 90°
- ◆ Pipe diameter: DN300-DN4000mm
- ◆ Pipe length: cut the length of pipe according to client's requirement
- ◆ Winding, curing, de-molding and cutting complete at the same time
- ◆ Control method: CNC control
- ◆ Control accuracy: 0.01mm
- ◆ Brand of motor and driver: Japan Yaskawa servo motor and driver



THE AUXILIARY EQUIPMENT

The filament winding machine is a part of a complete production line for producing kinds of FRP/GRP/GRVE pipes, besides that, we also provide other auxiliary equipments:

- The lining machine
- Curing oven
- De-molding machine
- Trimming machine
- Hydrostatic test machine
- Tension system
- Resin mixing system
- Resin supplying system
- Steel mould
- FRP mould
- Steel fitting mould



Lining device
Automatic and high accuracy



Oven device
Different heating zones by adjustable temperature



Fitting mould
The surface roughness: 0.4

OUR SERVICE

- According to the analysis of the actual needs of customers, we recommend the most appropriate equipment.
- Equipment manufacturing.
- Plant & workshop layout proposals.
- Equipment overseas installation.
- Equipment overseas operation training.
- Equipment maintenance and software & hardware upgrades.
- Production technology & raw material supplying.