

High-precision Optical Fiber Winding Machine

■ Product Description

HTH-4.0 high-precision optical fiber winding machine is the core equipment for manufacturing optical fiber coil for high-precision gyroscope, which can wind various optical fiber coil products with complex processes such as quadrupole symmetry, octopole symmetry and hexadecapole symmetry. The equipment is equipped with ultra-high precision tension control system, high precision automatic fiber discharge, suitable for orthogonal and spiral winding process, and high-precision automatic glue coating function.

■ Product Features

- Suitable for winding high-precision optical fiber coils with various quadrupole, octupole and hexadecapole symmetrical winding methods
- Marble optical platform
- Automatic tape
- Compact structure
- High precision tension control
- Orthogonal, spiral winding method
- With loop video monitoring function



■ Product Application

- FOG
- Fiber optic sensor
- Optical fiber current transformer

■ Product Specifications

| Project | Unit | Index |
|---|-------|-----------------------------|
| Wrappable fiber diameter range | μm | 50~350 |
| Cabling stroke | mm | > 200 |
| Spindle radial runout | mm | ≤0.003 |
| Axial runout of main shaft | mm | ≤0.003 |
| Maximum outer diameter of optical fiber coil capable of being wound | mm | 15~300 |
| Width of the fiber supply loop | mm | 40 |
| Winding speed | r/min | 0~60 |
| Tension control range | g | 3~50 |
| Tension fluctuation range | g | < ±0.3 |
| Turn counting error | turn | ≤0.01 |
| Power supply | V | 220 |
| Equipment power | kw | 3 |
| Equipment weight | kg | 1200 |
| Dimensions | mm | L(1500) x W(1000) x H(1950) |