Optical Fiber Coloring and Rewinding Line

1. Introduction

With the rapid development of optical communication technology, the amount of fiber optic cables used in optical communication systems has also increased rapidly. After drawing the optical fiber, in order to facilitate the identification of multiple optical fibers in the beam tube during subsequent processing and use, the method of coloring on the surface of the optical fiber is generally used. The fiber coloring and rewinding line is a production device that colors the surface of the optical fiber. It can also be used for fiber rewinding.
We have many years of experience in research and development and manufacturing of optical fiber and cable production equipment. The optical fiber coloring and rewinding machine provided by us uses the internationally advanced Japanese Panasonic AC servo drive system, with the advantages of high control accuracy, low noise, high efficiency and reliable operation; And adopt the programmable controller of German Siemens company to control it centrally, so that the control of the whole electric control system is more stable and more reliable. The touch screen adopts a set of control technology, man-machine interface technology, graphics technology, database technology, and network technology, including dynamic display, alarm, trend, control strategy, control network communication and other components, providing a friendly user interface to make the device more intuitive and easier. At the same time, it has the functions of automatic alarm and shutdown when all parts of the pay-off, tension control, UV curing furnace, and take-up and traverser fail, and the speed-up and speed-down procedures ensure that all motors operate strictly in proportion to ensure stable and reliable operation of the entire system without damaging the optical fiber.
We can provide LT05 and LT07 and other models of fiber coloring rewinding machines. Among them, LT07 can be made into single-line or double-line structure according to customer requirements. When the double-line structure is adopted, the coloring and rewinding of two optical fibers can be performed simultaneously, and the production efficiency is twice that of the single-line structure.

2. Main Technical Parameters

Model	LT05	LT07
Number of optical fibers	1	1 or 2
Structure speed (m/min)	1800	3000
Coloring speed (m/min)	≤ 1600	≤ 2500
Rewinding speed (m/min)	≤ 1600	≤ 2500
Payoff tension (N)	(0.3 ~ 1.5) ±0.05	(0.3 ~ 1.5) ±0.05
Take-up tension (N)	(0.3 ~ 1.5) ±0.05	(0.3 ~ 1.5) ±0.05

Traversing pitch (mm)	(0.1 ~ 1.0) ±0.01	(0.1 ~ 1.0) ±0.01
Thickness coloring layer (μm)	3 ~ 5	3 ~ 5
Additional loss after coloring (dB/km)	≤ 0.02	≤ 0.02
Bobbin size	Φ236×Φ160×108 (Corning 25km bobbin) Φ236×Φ160×225 (Corning 50km bobbin)	Φ236×Φ160×108 (Corning 25km bobbin) Φ236×Φ160×225 (Corning 50km bobbin)

Product link：https://www.linttop.com/optical-fiber-coloring-and-rewinding-line.html