

Optical Cable Secondary Coating Line



1. Introduction

The secondary coating of optical fiber is to coat the outer surface of the optical fiber once, and then squeeze the loose tube with a certain diameter and a certain thickness. The primary coated fiber can move freely in the loose tube, and the loose tube is filled with water blocking ointment.

The secondary coating of the optical fiber is the second layer of protection for the optical fiber after the primary coating and coloring. The optical strength of the optical fiber after one-time coating is still low, and it cannot be used without further reinforcement. The purpose of the secondary coating operation is to protect the primary coating of the optical fiber, increase the mechanical strength of the optical fiber, and improve the transmission characteristics and temperature characteristics of the optical fiber.

This is one of the most important processes in the manufacture of optical cables, and its quality directly affects the performance indicators of finished optical cables.

We have many years of experience in research and development and manufacture of optical fiber and cable production equipment. The optical cable secondary coating line provided by us can be used to extrude 2-12 cores grease filled fiber optic loose tube, suitable for extruding PBT material. The extruded shape is round, uniform in diameter and smooth.

The whole line adopts the control technology (PC + PLC mode) which combines industrial control computer and programmable logic controller.

As the main control system, PLC realizes the linkage control of the whole line. The operator can select the stop, slow, and fast running states through the interface. The production line will automatically switch between the three states according to the operating instructions and the various state signals of the equipment. There is no sudden change in the speed-up and speed-down time. It can automatically respond to various fault signals and have clear fault indications. The production speed and metering data are clearly displayed, and the meter length can be pre-designed.

The industrial computer realizes human-machine data exchange and production data recording. The man-machine interface provided by IPC includes production interface, curve interface, and recipe interface. The human-computer interaction interface is friendly and easy to operate.

2. Main Technical Parameters

Model	LT06
Number of fiber cores	2 ~ 12
Payoff tension (N)	(0.4 ~ 1.5) \pm 0.05
Payoff bobbin (mm)	ϕ 236 ~ ϕ 305

Structure speed (m/min)	≤ 800
Production speed (m/min)	20 ~ 600 (φ1.8mm)
Surplus length control	0 ~ 3‰
Takeup bobbin (mm)	PN800
Additional loss (dB/km)	≤ 0.02
Outer diameter of beam tube (mm)	1.2 ~ 4.0

Product link : <https://www.linttop.com/optical-cable-secondary-coating-line.html>