Automated Wire Harness Feeder & Heat-Shrinking Tubing Oven WPM-50F

Model No. WPM-50F



SPECIFICATIONS

Model Number	WPM-50F
Application	Wire harness production
Function	Automated heat-shrinking and feeding
Compatibility	Large-diameter, thick-walled, super-long heat-shrinkable sleeves
Heating	Precise, zero burning
Production Type	High-volume, mass production

The WPM-50F feeds heat-shrinkable tubing to position on a wire harness and shrinks it in the same cycle. It is built for large-diameter, thick-walled and super-long sleeves, the sizes that a hand-held heat gun cannot recover evenly along the full length, and it is set up for high-volume harness production rather than single assemblies.

The sleeve is advanced by the feed mechanism and passed through a regulated heating zone, where heat is applied at multiple points along the sleeve instead of from one nozzle. Multi-point application is what lets a long, thick-wall sleeve recover from end to end without the middle staying cold, and it is also what keeps the surface below the scorch point of the sleeve and the wire jacket underneath. The result is a shrunk joint with no burn marks and no cold section, without an operator judging distance and dwell time by eye.

This unit handles the sleeve, not the wire. The WPM-02, WPM-C002, WPM-F001, WPM-F003, WPM-E001 and WPM-E005 in the same range are pay-off units that deliver wire to a cutter, with capacities from 14 kg to 60 kg; the WPM-50F sits downstream, after the harness is cut and assembled.

Key Features

1. Combined feed and shrink in one cycle: the sleeve is positioned and recovered without a separate handling step.

2. Multi-point heating along the sleeve length, so long and thick-wall sleeves recover evenly end to end.

3. Zero-burn heating: regulated heat input keeps the sleeve surface below its scorch point and protects the jacket underneath.

4. Accepts large-diameter, thick-wall and super-long heat-shrinkable sleeves beyond the range of a hand nozzle.

5. Built for continuous high-volume harness runs rather than batch assembly at a bench.

6. Single frame with a vertical feed column, guide rollers and an integrated control enclosure, so the whole sleeve path is supported.

Technical Specifications

Parameter	Specification
Model	WPM-50F
Machine type	Automated heat-shrink tubing feeder and oven
Function	Automated feeding and heat shrinking
Sleeve compatibility	Large-diameter, thick-wall, super-long heat-shrinkable sleeves
Heating	Multi-point, precise, zero burning
Production type	High-volume, mass production
Application	Wire harness production
Sleeve feed	Automatic

Applications

— Wire harness assembly: shrinking sleeve over splices and branch joints on long harness runs

— Automotive harness lines: covering connector-to-branch sections with thick-wall sleeve

— Cable joint protection: recovering long sleeve over in-line splices on power cable

— Industrial control harness: insulating and strain-relieving multiple branch points in one pass

— Appliance and equipment wiring: sealing sleeve over terminal joints before final assembly

FAQ

What wire harness sizes can the WPM-50F Heat-Shrinking Tubing Oven process?

The WPM-50F accepts wire harnesses with a maximum diameter under 50mm and heats them over a maximum length under 500mm. A 200mm cooling zone follows the heating section to set the tubing.

How is heat applied inside the WPM-50F heat-shrinking tubing machine?

Heating uses hot air generated by two sets of 2KW heating tubes made from stainless steel and aluminum alloy. The hot air is directed over the harness so the tubing is shrunk as it passes through.

What heat shrinkable speed and conveying motor does the WPM-50F provide?

Heat shrinkable speed ranges from 0 to 100mm/s, and the conveying motor is a 25W unit with stepless speed regulation. Operators can slow the line for heavy harnesses or speed it up for simple ones.

What power and air source demands does the WPM-50F machine have?

The WPM-50F requires 220V two phase three line power at 50HZ and an air source demand of 3.5 KPa to 6KPa. Total power is 4.5KW, driven mainly by the two 2KW heating tubes.

What are the overall dimensions of the WPM-50F wire harness heating system?

The whole machine measures 1350 x 720 x 1300mm (L x W x H). With heating and a 200mm cooling zone built into one unit, it handles wire harness heat shrinking in a single pass.