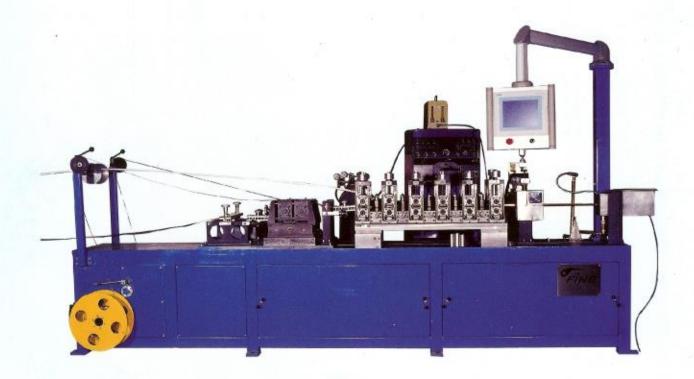


## RF/CATV TIG WELDING/ CORRUGATION LINE

Fine International offers TIG welding lines for the manufacture of aluminum and copper tube products as required in CATV and RF coaxial cables. The lines can be configured with corrugation systems as required for flexible RF inner and outer conductors.

The completely integrated lines consist of payoff system, metal strip handling system, tube forming table, TIG welding station, a closing die with cooling system, an eddy current monitoring system, optional corrugating system, linear capstan and portal takeup.

All production lines are fully tested at our factory prior to shipment and we invite our customers to participate in this important quality assurance step. Our on-site commissioning is oriented toward basic operator training and process development in additional to the standard line component and synchronization verification and testing.



The Foam Extrusion Experts Serving the Wire and Cable Industry

FINE INTERNATIONAL CORPORATION



# RF/CATV TIG WELDING/ CORRUGATION LINE

### Typical RF TIG Welding Tube Line

Cable Payoff - Portal style payoff with motor lift and close for reel flange sizes up to 3000mm. The operator controls is conveniently located on takeup side panel.

Aluminum/Copper Strip Handling Forming System - The system contains all of the elements to feed the welder with the formed tube including a strip payoff with mechanically expanding mandrel shaft with flange support; strip splicing machine to provide continuous strip from pad changeovers; an integrated trimming station to provide precise strip width and forming table preparing the strip into a round tubular geometry.

TIG Welding System - This system consist of hybrid power unit based in MSO transistor technology. The 16.5 kVA unit can operate in various voltage modes to optimize welding performance. The modes can be square wave or soft pulse. Immediately after welding, the tube entering a cooling/sizing die to swag the tube over the core material.

**Weld Monitoring Station** - The weld is monitored by an eddy current detector that distinguishes between pin-hole and seem opening faults. The non-destructive technique is linked to a marking system to clearly identify the fault location.

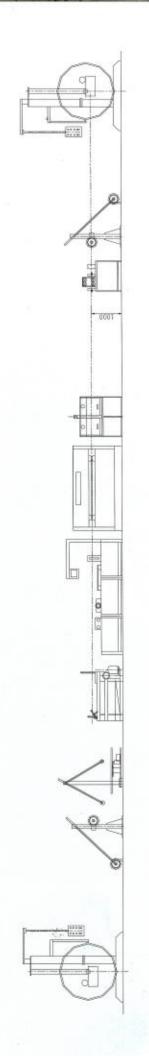
**Tube Corrugator**- Max. 10,000RPM corrugator can produce both helical and annular (ring) corrugations in copper tube with adjustable depth and pitches from 1 - 4 per 10 mm.

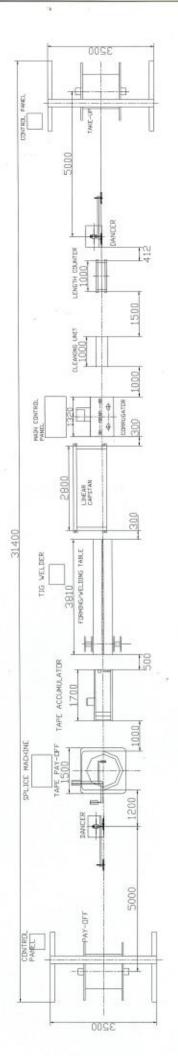
Linear Capstan - A linear capstan with 1900 mm contact length to precisely convey tube from the welding station. Precise control of belt pressure allows for thorough product grip with minimum pressure to the conveying tube. The max. line speed is up to 30mpm.

**Portal Takeup** - Driven, shaftless portal style traversing takeup with motor lift and width adjustment maintaining the cable in a fixed position. The operator controls is conveniently located on takeup side panel.

**Line Controls** - Operator interface is a touch screen display where system is PLC controlled. The drive control system synchronizes the welding current/corrugator with capstan speed.

# TIG WELDING LINE WITH CORRUGATOR LINE LAYOUT







Contact Fine International for The Best Valued Manufacturing Equipment Available In the Wire and Cable Market!

### FINE INTERNATIONAL CORPORATION

**Machinery Division** 

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