

N2 Injection Drop Cable Applications

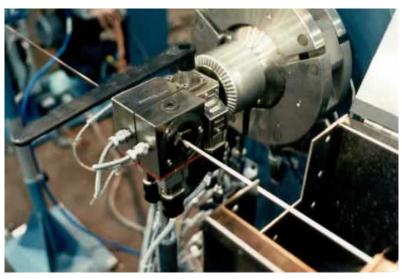
Technical Specifications:

Applications: RG58 - RG11 & Series 500

Conductor Diameter: 0.4-2.8 mm CU
Foam Dielectric Diameter: 3.7-12.5 mm
Void Rate: Up to 70%
Design Speed: 400 mpm
PO Reel Diameter: 300 - 630 mm
TU Reel Diameter: 630-1250 mm

Features:

- Air cooled (7) zone 80 mm 38:1 L/D foam extruder with unique stockscrew technology
- Sophisticated nitrogen injection system with multiple ports
- Advanced autoLine process control system
- Line components designed specifically for manufacturing high frequency cables



Royle's Drop Cable line includes driven payoff(s) and takeup(s), input dual wheel capstan with integral cleaning & sizing station, preheater, skin-foam extrusion grouping, autoLine Level 3 process controls, 3-zone temperature controlled cooling system, diameter, capacitance, & eccentricity measuring system, closed-loop load cell tension control system, belt wrap CATV capstan, and precision drive system.

Air cooled (7) zone 80 mm 38:1 L/D foam extruder with unique stockscrew technology

The single 38:1 L/D extruder with proprietary stockscrew technology with electric resistance heating/air cooling system assures accurate melt temperature & pressure control, separation of plasticating and foaming sections, and homogenous mixing of nitrogen gas and compound ingredients to produce fine, closed-cell structures. The compound environment control system features drying facilities, weight-loss metering of ingredients, paddle mixing chamber, and vacuum loading facilities.



Sophisticated nitrogen injection system with multiple ports

Royle's air-driven piston booster system integrates seamlessly with many nitrogen supply systems including bulk liquid or gas in addition to standard commercial gas cylinders. The system utilizes high accuracy non-pulsing regulators and stainless components and incorporates a gas receiver to isolate the extrusion process from the high pressure booster. The filtered gas is delivered at sonic velocity through multiple injector stems & ports strategi-



cally positioned in the extruder barrel. Advanced electronic circuitry allows use of one or more ports simultaneously and crossover on the fly.

Advanced autoLine process control system

Close control of all operating parameters is assured through the use of Royle's proven autoLine Level 3 control system that incorporates precision drives, processor based temperature controls, PLC and integration of all quality & measuring devices.



Line components designed specifically for manufacturing high frequency cables

To the extent possible, Royle has eliminated rollers and transmissions and has taken extreme care in the design of all line components to avoid periodicities and SRL problems. The dual wheel input capstan with integral load cell and sizing/cleaning station has been designed to perfectly calibrate the inner conductors and to work in combination with the specially designed CATV capstan to accurately control line tension. The CATV capstan has no transmissions or gear reducers, rollers.

