

Break Through in R&D of Compounding with RONDOL's

40D 10.5mm Twin-Screw Horizontal Extruder

Combining Performance, Weight and Cost-Efficiency in R&D

The unique set up of our horizontal 10.5mm 40D extruder **improves material flow**, **facilitates smoother mixing**, provides **superior temperature management** and preserves the **integrity of sensitive components** with varying melt-degradation properties, enhancing your medicines and medical device performance.

Key Benefits of our Extruder:

Easy to clean barrel: Ensure traceability with different sources of critical materials thanks to inside liners easy to disassemble and clean.

Durable material contact parts: Experience minimal abrasion and extend machine lifespan with our optimized components.

Versatile screw design and die options: Cater to diverse R&D and production applications with our flexible design features such as our cast film die with various width and thickness options.

Precise monitoring of process temperature with autonomous control for each of the 8 zones up to 300°C (450°C optional).

Integrated controls for feeders: Enhance operational convenience with our advanced control panel and compatible feeders from which you can inject in-the-barrel additional materials, additives and even gases.



10.5MM 40D HORIZONTAL SPECIFICATION SHEET

Screw diameter	10.5mm
Length / Diameter	40:1
Machine material	Full stainless steel
Screw speed	0-300rpm
Screw configuration	Segmented screw design fully interchangeable
Footprint	0.46m ² / 4.95sq.ft
Dimensions	912.5mm x 500mm x 1055mm (3ft x 1.65ft x 3.46ft)
Motor power	1KW
Electrical consumption	1.7kWh (standard's maximal temperature and speed: feeder + extruder)
Torque output	7N.m per shaft maximum
Number of barrel zones	8 temperature-controlled zones (heating only)
Temperature range	15-300°C (or 15-450°C optional)
Dies	Standard: strand die Options: cast film, strip, tube, co-extrusion
Plug-and-play feeding	Options: top/side powder or pellet, liquid and/or gas feeders, calendaring
Maximum output	Up to 1kg/hr
Maximum pressure	100 bars
Product cooling systems	Water or air cooling systems
Plug in downstream equipment	Options: haul off winder (filament, film or strip), fixed or varicut pelletizer
Human machine interface	10.1" touch screen with PLC-controlled data logging and audit trail, remote diagnostic tool Option: controlled by PC or tablet
Electrical power Requirements	30amp, 110Vx2 + 1PE, 50/60Hz (North America) 32amp, 230V 1ph. 1N + 1PE, 50/60Hz (Europe)
Water supply requirements	4-6 bars
Minimum lot size	50g (or less with the side feeding option)