

Breakthrough in R&D of Compounding with

RONDOL'S 10.5MM 40D HORIZONTAL TWIN-SCREW EXTRUDER

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

Our unique set up **improves material flow**, facilitates **smoother mixing** and provides **temperature management**. Additionally, our scalable geometric proportions allow for **seamless transition from lab testing to industrial production**.

Key benefits of our extruder:



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.

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

SPECIFICATIONS SHEET

Length / Diameter	40:1
Screw diameter	10.5mm
Machine material	Full stainless steel
Screw speed	0-300rpm
Screw configuration	Segmented screw design fully interchangeable
Footprint	0.46m ² / 1.78sq.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	12N.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, co-extrusion
Feeding	Options: top/side powder or pellet, liquid and/or gas feeders
Minimum lot size	50g
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 PC-controlled data logging and audit trail (tablet optional)
Electrical power requirements	30amp, 110Vx2 + 1PE (North America) 32amp, 230V 1ph. 1N + 1PE (Europe)
Water supply requirements	15°C water, 4-6 bars