

*Compact and Efficient Food, Cosmetics and Compound  
Manufacturing with*

## **RONDOL'S 21MM 30D HORIZONTAL TWIN-SCREW EXTRUDER**

**Performance, Weight and Cost-Efficiency in R&D and Manufacturing**

RONDOL's 21mm twin-screw extruder makes it possible to manufacture:

- ✓ Semi solids (ointments, creams, pastes, gels)
- ✓ Transdermal films
- ✓ Plant extractions
- ✓ Compounding of ingredients

Our unique set up **improves material flow**, facilitates **mixing**, provides **superior temperature management** and **preserves the integrity of sensitive components** with varying melt-degradation properties, enhancing your compounds' performance.

### **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 6 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

<b>Length / Diameter</b>	30:1
<b>Screw diameter</b>	21mm
<b>Machine material</b>	Full stainless steel
<b>Screw speed</b>	0-300rpm (0-600 rpm optional)
<b>Screw configuration</b>	Segmented screw design fully interchangeable
<b>Footprint</b>	1.08m <sup>2</sup> / 11.63sq.ft
<b>Dimensions</b>	1800mm x 600mm x 1220mm (5.91ft x 1.97ft x 4.00ft)
<b>Motor power</b>	3.3KW
<b>Electrical consumption</b>	6.86KWh (standard's maximal temperature and speed: feeder + extruder)
<b>Torque output</b>	55N.m per shaft maximum
<b>Number of barrel zones</b>	6 temperature-controlled zones (heating only)
<b>Temperature range</b>	15-300°C (or 15-450°C optional)
<b>Dies</b>	Standard: strand die Options: cast film, strip, co-extrusion
<b>Feeding</b>	Options: top/side powder or pellet, liquid and/or gas feeders
<b>Maximum output</b>	Up to 8kg/hr (or 16kg/h optional)
<b>Maximum pressure</b>	100 bars
<b>Product cooling systems</b>	Options: Air cooling system or water bath
<b>Plug in downstream equipment</b>	Options: haul off winder (filament, film or strip), varicut pelletizer
<b>Human machine interface</b>	10.1" touch screen with PC-controlled data logging and audit trail (tablet optional)
<b>Electrical power requirements</b>	40Amp, 3x276/480V + 1N + 1PE (North America) 40Amp, 3x230V/400V + 1N + 1PE (Europe)
<b>Water supply requirements</b>	15°C water, 4-6 bars