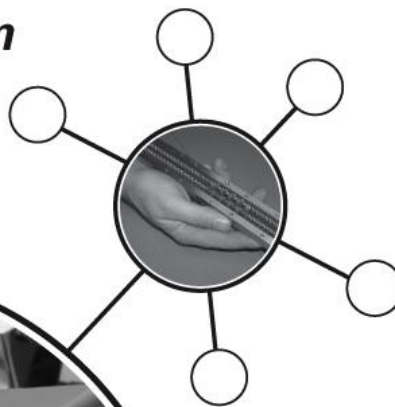
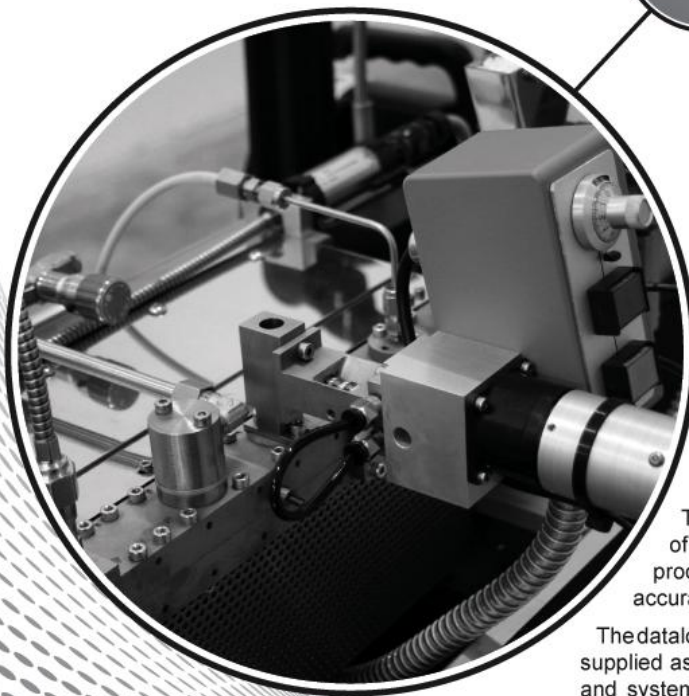




Rondol

***Polymer Processing Equipment for
Healthcare and Advanced Industries***

Microlab 10mm Twin Screw Compounding System



The Rondol Microlab 10mm twin screw compounder provides an easy to use solution for laboratory and small-scale production compounding.

With an extensive range of ancillary equipment and flexible configuration options the Microlab is an invaluable tool in any laboratory.

The Microlab is a small machine with all of the features of it's larger cousins making process development results easily and accurately scalable onto larger machines.

The datalog package and PC based control system supplied as standard permits full traceability. Data and system run conditions can be taken directly from the machine.

Running Windows XP Pro on the WiFi enabled touch screen PC, the Microlab can be connected to a network allowing access to logged data files.



Pelletising Line Options

The Microlab line can be supplied with either a cooling conveyor or a water bath to cool the strand.

There are two pelletiser options. The fixed length pelletiser is factory configured to produce either micro or full size pellets and the variable length pelletiser with a user selectable pellet length. The variable length pelletiser can produce pellets 0.5, 1, 2 and 3mm long.

In addition to this, Rondol also offer an air-swept face-cut pelletiser, ideal for highly filled polymers and PVC.

Feeder Options

Rondol offer a wide range of feeding options including: single screw primary and secondary pellet feeders, twin screw primary and secondary powder feeders and both single and twin screw side feeders.

Rondol can also supply and incorporate many proprietary feeders with the Microlab.

Film and Sheet Options

An extensive range of cast sheet dies are available to fit the Microlab along with conveying, roll stack and winding systems.

Also available is a blown film system consisting of: a blown film die, air powered cooling and stabilising ring and a take off and tension controlled winding system.

Devolatilisation System

Both air and vacuum devolatilisation systems can be supplied. The connection adapter can be fitted to any of the ports in the upper section of the barrel offering maximum flexibility.

Liquid Feed System

A liquid feed compatible version of the Microlab can be supplied along with an integrated peristaltic pump feed system.

Rondol PASS

With high value and difficult to manufacture products, minimising wastage during trials is vital. Rondol PASS (Process Analysis & Simulation Software) allows the user to simulate the running of the Microlab without actually using any product. The software provides data including: temperature and pressure evolution along the screw profile, filling ratio, shear rate, viscosity and residence time distribution. The results can be displayed in tabular or colour graphical form.

This software enables the user to optimise and test the screw configuration, temperature profile, feed rate and die geometry for the specific polymer prior to beginning any trials with real product.

Rondol PASS is available for all Rondol twin screw compounders.

All Rondol Microlab Compounders will accept powders, micro pellets and full size standard pellets straight into the main feed port without prior processing.

SPECIFICATION				
Barrel Length	L/D	20:1	25:1	40:1
Nominal Screw Diameter	mm	10		
Screw Speed	rpm	0-200 (0-500 option)		
Motor Power	W	200		
Torque per Screw	Nm	6		
Number of Barrel Heating Zones		4	5	8
Maximum Temperature	C/F	300/570 (420/790 option)		
Barrel Heater Ratings	Qty./W	14/35	18/35	30/35
Die Heater Ratings	W	100		
Minimum Run Size	g	10		
Typical Wastage	g	<3		
Minimum Output	g/hr	<25		
Maximum Output	g/hr	400		
Electrical Power Requirements	V/ph/Amp	220/1PH/25		400/3PH+N/16
Cooling Water Requirements	Litres/Min	1		

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