

NICA™ E140 Extruder from Aeromatic-Fielder

The NICA™ E140 Extruder is a low shear extruder designed to incorporate special extrusion technology which guarantees low temperature handling of even the most sensitive products. The extruder can be successfully used for both batch and continuous operations.

Principles of Operation

The extruders operate on a plug flow 'first in, first out' principle without stagnant areas. Product hold-up at the end of a run only amounts to a few grams. Two concentric rotors counter rotate within a cylindrical screen. The wet mass is gravity fed into the inner rotor - the 'feeder', which distributes it into cavities between blades on the outer rotor - the 'impeller'. Pressure is generated in a continuous wave as these blades sweep across the inner surface of the screen. NICA™ extruders can be fitted with a wide range of screens of different hole diameter and wall thickness and the rotors have variable speed drives. This allows a high degree of flexibility in optimizing product compaction and consistency of the extrudate.



Features

- Patented high efficiency design
 - gentle treatment of product
 - low product temperature
- Plug flow - 'first in, first out'
- Negligible product hold-up
- Easy to scale-up
- Different screen and impeller options for production flexibility
- Easy to dismantle and clean
- Compact design

Technical Data

	E140
Typical throughput	0.5 - 2 kg/min
Modules - Feeder	0.37 kW + variator 20 - 160 rpm
Modules - Impeller	0.75 kW + variator 20 - 140 rpm
Utilities	380 - 415 volts 3 phase 50 Hz