

BKG[®] Water Ring Pelletizers

Pelletizing Technology for:

- Reclaim
- Recycling
- Compounding



WRP 12i

BKG Water Ring Pelletizing Systems offer a modern, cost-effective method of pelletizing a wide range of unfilled and filled thermoplastic polymers.

The Water Ring Pelletizer ensures a consistent, uniform pellet and is insensitive to short term polymer flow interruptions. Pellets are cut and immediately quenched in a unique cooling chamber design that transfers the pellet slurry to the spin dryer. An integral dryer blower is standard for improved drying efficiency. Typical applications include polymer reclaim, post-consumer recycling, and compounding.

The rheologically optimized design minimizes polymer inventory between the extruder and the die plate and evenly distributes the polymer flow to each die plate hole.

The result is a consistently uniform pellet.

Simple, trouble-free cutting

The BKG advanced cutter head design evenly distributes molten polymer to the die. Since pellets are cut in air, there are no strands to drop, nor will die holes freeze off in the event of momentary flow disruption.

Efficient pellet cooling

Submersion of the pellet in the water slurry system provides highly efficient heat transfer. Water temperature and residence time can be varied to accommodate specific resin cooling requirements.

Fines management

All circulating water is continuously filtered through high-capacity filters fitted to the dewatering and dryer drain lines. Filters can easily be exchanged, cleaned without tools or line shutdowns.



BKG® Water Ring Pelletizers

| Model Description | 12i | 35s | 36s |
|-------------------------------------|---------------|-----------------------------|------------------------------|
| Nominal Rate kg/hr (lb/hr) | 816 (1800) | 816 - 1587 (1800 - 3500) | 1361 - 2268 (3000 - 5000) |
| Max. Operating Pressure Bar (PSI) | 207 (3000) | 207 (3000) | 207 (3000) |
| Max. Operating Temperature °C (°F) | 315 (600) | 315 (600) | 315 (600) |
| Max. Cutter rpm | 3600 | 3600 | 3600 |
| Electric Supply | 460/3/60 | 460/3/60 | 460/3/60 |
| Cutter Motor hp | 3 | 3 | 7.5 |
| Slurry Pump Motor hp | - | 7.5 | 3 |
| Dryer Motor hp | 3 | 5 | 5 |
| Die Heater (kW) | 5.5 | 4.25 | 8.8 |
| Circulating Pump Motor hp | 3 | 1.5 | 5 |
| Circulating Water Flow l/min. (gpm) | 511 (135) | 473 (125) | 1325 (350) |
| Weight kg (lb) | 998 (2200) | 1633 (3600) | 1633 (3600) |
| Temperature Zones: | 1 | 2 | 2 |

Benefits:

- Uniform polymer flow to die plate
- Lower inlet pressure = increased rates
- Rapid blade and die plate removal
- Fast color changes
- Easy clean-out
- Simple start-up and operation
- Improved pellet dryness
- Easy dryer access and cleanability
- Insensitive to process variations

Features:

- In-line cutter geometry
- Retractable cutter head design
- Open water trough
- New cylindrical pellet dryer
- Integral dryer blower
- Fully interlocked control system
- Independent pellet cut

WRP 35s



Testing Facilities

To demonstrate the ease of operating the BKG Water Ring Pelletizer on customer specific resins, Nordson maintains multiple process laboratories. Customers are encouraged to visit our lab for a demonstration. Please visit our website, www.nordsonpolymerprocessing.com, to find your nearest Nordson lab facility.

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