Nordson
Polymer
Processing
Systems

BKG® Pelletizing Technology
You require innovative solutions.

History of Innovation

BKG® was founded in 1994 in Muenster, Germany with one goal in mind, provide customers will an innovative underwater pelletizing solution. Since then, the company has continued to provide the industry with complete turn-key pelletizing systems with throughputs of 2 – 35,000 kg/hr. Our underwater pelletizing solutions can effectively and efficiently process all materials that have thermoplastic features, even for the most demanding polymers that the industry processes today.

BKG® was acquired by Nordson Corporation in 2013 and is now part of Nordson’s Polymer Processing Systems product line and is a leading international supplier of innovative underwater and water-ring pelletizing systems and pellet dryers for extrusion and polymerization.

As one of the many examples of leading edge technology developed by Nordson, BKG®’s CrystallCut® technology allows for a highly economical crystallization of PET. With this patented in-line crystallization process, pelletizing and crystallization are completed in just one step. No additional energy is needed. The crystallization is effected only by the inherent heat of the PET pellets.

Value in Resources

Nordson Corporation’s Polymer Processing System product offering provides a broad range of technologies for melting, conditioning, dispensing and giving shape to plastics. Nordson delivers a full range of precision melt stream products — from screws and barrels for extrusion and injection molding — to filtration systems, pumps, and valves — to the extrusion dies and pelletizing systems to meet the constantly evolving needs of the polymer industry.

All of the businesses that Nordson Corporation has acquired leverages the collective plastics industry experience from a series of strategic acquisitions to offer a comprehensive portfolio of industry-leading technologies. They excel in precision engineering, and place a high value on supporting customers before and after the sale. Nordson’s customers will benefit from the wide range of products, global capabilities for manufacturing and localized service, and from the strategy of bringing together complementary technologies to optimize polymer processes.

Nordson Corporation has extensive resources that will benefit their customers. With operations in more than 30 countries, Nordson provides a global base for increasing localized access to sales and technical services. The company’s strong support and investment in R&D provides a continuous flow of innovations in components for plastics processing, from new screw and barrel technologies to breakthroughs in filtration systems, pumps, pelletizers and extrusion and coating dies.

We’re ready to meet the challenge.
**BKG® Pelletizers** Type AH and AHD offer automatic, hydraulic blade pressure regulation:
- Throughput rates of 2 – 35,000 kg/hr (4 – 77,000 lb/hr)
- Superior and constant cutting quality for all viscosities
- Minimal operator intervention through automatic die plate grinding
- Optimized wear by fine adjustment of blade pressure regulation

**BKG Master-Line™ with Belt Filter** is an economic, automated, self-cleaning tempered water system:
- Throughput rates of 50 – 2,000 kg/hr (110 – 4,400 lb/hr)
- Entry-level underwater pelletizing system with BKG standard quality
- Simple handling and fast cleaning
- Hydraulic or mechanic blade pressure regulation

**BKG® Combigon™ / Combi-Line™** is a generously equipped pelletizing system with various process water filtration systems:
- Throughput rates of 50 – 2,000 kg/hr (110 – 4,400 lb/hr)
- Available with filter cassette, curved sieve or BKG® Polygon™ filter
- Best technology for low and medium throughput range
- Hydraulic blade pressure regulation

**BKG® Optigon™ / Opti-Line™** is a full featured pelletizing system with various process water filtration systems and an extensive range of optional features that are available:
- Throughput rates of 50 – 35,000 kg/hr (110 – 77,000 lb/hr)
- Available with filter cassette, curved sieve or BKG® Polygon™ filter
- Advanced technology for each throughput
- Hydraulic blade pressure regulation

**BKG® CrystallCut® underwater pelleting system** allows pelleting and crystallization without the need for additional energy:
- Throughput rates of 50 – 35,000 kg/hr (110 – 77,000 lb/hr)
- Patented process by BKG®
- Proven technology for large scale systems
- Hydraulic or mechanic blade pressure regulation
**High Performance for Your Production Process**

BKG® has the ability to provide engineered solutions that take your pelletizing and compounding application to its maximum level of performance.

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**Pelletizing Solutions**

**BKG® Lab-Line underwater pelletizing system** is the ideal machine for pilot-scale extrusion or laboratory environments.
- Throughput rates of 2 – 200 kg/hr (4 – 440 lb/hr)
- Compact, full-featured system
- Able to process nearly all types of polymer products processed on production lines
- Hydraulic blade pressure regulation (for standard)

**BKG® Polygon™ water filtration system** is an automated, self-cleaning, tempered water system.
- Improved water filtration level (up to 70μm)
- Large filter surface
- High energy savings during operation compared to conventional filtration systems
- Still available: water filtration through curved sieve

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**Innovative**

**BKG® pellet dryers** for drying a wide range of polymers and pellets.
- Capacities depending on customer needs
- Noise reduction < 80 dB(A) for TVE 2004 SR and larger dryers
- Throughput rates up to 30,000 kg/hr (66,100 lb/hr)
- 7 types available

**BKG®’s extensive spare parts inventory** ensures consistent product quality and optimized performance with original replacement parts.
- Die plates
- Blades and cutter hubs
- Die plate grinding tool
- Original replacement parts for all BKG® systems

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**Competent**

**BKG® water-ring pelletizing systems** offer a modern, cost-effective method of pelletizing a wide range of unfilled and filled thermoplastic polymers.
- Uniform polymer flow to die plate
- Lower inlet pressure = increased rates
- Improved pellet dryness
- Insensitive to process variations
Engineering & Technology
Our team of experienced engineers have decades of experience and have provided customers with customized advanced technology for pelletizing systems that have provided them with optimal results and increased production efficiencies. Over the course of the past several decades, we have partnered with our customers to understand what they require, which has enabled us to provide them with the most effective and efficient solution for even the most demanding applications.

Innovative Research & Development
Nordson has been at the forefront of product innovation for the extrusion and polymerization industries, largely due to an investment in capital equipment and personnel dedicated to conducting research and development testing and trials. Our teams’ numerous patents prove our dedication to continuous improvement and providing our customers with state-of-the-art technology.

Technology & Training Centers
Nordson operates two advanced technology centers, offering customers an economical alternative to using their commercial scale equipment for product and process testing, thereby reducing the amount of raw material cost and lost output from machine downtime.

The technology centers also allow for continued technological advancements, as they are used to support the creation, development and refinement of new and existing extrusion and polymerization systems.

Process Parameters: Muenster, Germany
- Material melting point: 50 – 420°C (122 – 788°F)
- Throughput rates: 1,200 kg/hr (2,645 lb/hr)
- Pellet diameter: 0.5 – 12.0 mm (0.02 – 0.47”)

Process Parameters: Hickory, North Carolina
- Material melting point: 50 – 343°C (122 – 650°F)
- Throughput rates: 340 kg/hr (750 lb/hr)
- Pellet diameter: 2.0 – 6.4 mm (0.08 – 0.250”)

Technical Support
Maximize your performance and productivity with installation and commissioning by our experienced and dedicated field service engineers based regionally throughout the world. Our experienced technicians are available to conduct on-site operation and maintenance training, which ensure consistent product quality and optimized performance.

Customer Service
Our global team maintains an inventory of original replacements parts around the world to ensure we can get replacement parts to our customers as quickly as possible, next day in most instances. With direct access to engineering records, custom parts can be designed and produced quickly to get lines back up and running.
PPS locations across the globe

Chippewa Falls, USA  
New Castle, USA  
Münster, Germany  
Youngstown, USA  
Pulaski, USA  
Hickory, USA  
Neckarsulm, Germany  
Pirmasens, Germany  
Saitama, Japan  
Shanghai, China  
Chonburi, Thailand

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