

# BKG® TVE WR Dryer

## Advanced drying technology for challenging applications

No matter which end-product you are going for, you need a pellet with specific characteristics.

One of the most important is the exact amount of residual moisture so your pellet is not exposed to hydrolytic or thermal degradation, which can compromise the mechanical features of your end product significantly. The Nordson BKG® centrifugal dryers are the state-of-the-art technology; achieving minimum residual moisture, while being highly energy-efficient.

With decades of experience in drying pellets, Nordson has developed the BKG® TVE WR Dryer. It does not only dry your pellet exactly according to your needs, it is also meeting another challenge within polymer processing - abrasive materials.

## Engineered Polymers

Lightweight polymers with high tensile and flexural strength and dimensional stability, have become mandatory within the industry.

In comparison to steel and aluminum, carbon or glass fiber reinforced compounds offer a much higher strength-to-weight ratio. This makes them an attractive alternative to classic polymers for many applications, like automotive, sports and mechanical engineering.

## Challenge for man and machine

Abrasive additives like glass or carbon fiber place high demands on materials and properties. Critical parts have to be exchanged in short time intervals, resulting in high spare parts costs. Furthermore, processing highly abrasive materials will lead to higher maintenance efforts and therefore costly downtime.



## Constant improvement for your process

The BKG® TVE WR dryer is designed to process highly abrasive polymers while meeting the demands on precision, quality and reliability in the most cost-efficient way.

## Benefits of the new design:

- Mechanical wear protection
- Wear protection through flow optimization
- Decrease of maintenance times
- Reduction of wear part costs

## Your overall savings

**Up to 70% reduction of maintenance time**

**Up to 40% reduction of wear parts cost**

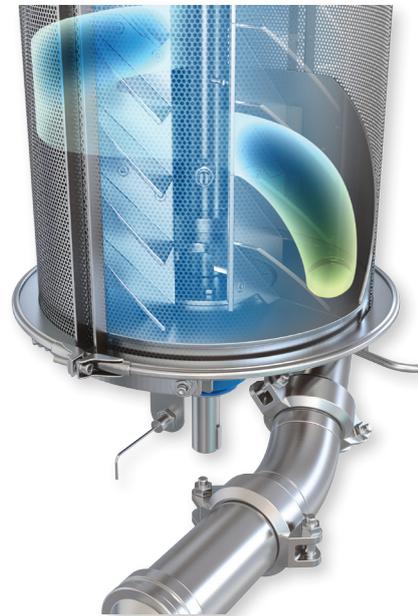
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## Flow optimized design

When processing abrasive materials, speed and flow behavior of the pellets are key factors. The dryer inlet is designed according to extended flow simulations and enters the dryer housing from below, reducing the impact on the dryer rotor and other critical wear parts significantly.

## Decrease of maintenance times

The dryer is designed to make all parts that are especially exposed to the abrasive material are easily accessible to conduct maintenance.



Assembly Group	Maintenance Time (OLD)	Maintenance Time (NEW)
Pellet inlet	12h	1h
Pellet outlet	6h	3h
Rotor	10h	No disassembly of rotor necessary to change the wear parts

These maintenance times were gathered in field tests.

## Mechanical wear protection

- Reversible two-part perforated plate, which can be turned to evenly distribute the stress on critical parts
- Baffle plate to protect the parts, most exposed to the pellet flow
- Countersunk screws, outside the pellet flow
- Casted materials and wear resistant coatings

## Technical Information

Technical Data	TVE 2004 WR	TVE 6002 WR
Throughput - kg/hr (lb/hr)	< 2,700 (6,000)	< 5,000 (11,000)
Water quantity - m <sup>3</sup> /hr (gpm)	40 (176)	60 (264)
Air flow - m <sup>3</sup> /hr (cfm)	1,800 (1,059)	1,800 (1,059)
Motor kW	5,5	7,5
Noise reduction	Yes	Yes
Cleaning systems	Optional	Optional

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