



HIGH-
PERFORMANCE
CAGE MATERIAL

XTRA  TON™

PFAS
FREE





PRODUCT OVERVIEW

Our new highlight for demanding applications: We are expanding our portfolio with an innovative, PFAS-free, high-performance PEK-based material. The material was developed for demanding applications—including those in medical technology—and combines outstanding sterilization resistance, high chemical resistance, and excellent temperature stability. Thanks to its optimized friction and wear properties, this material is ideally suited for high-precision applications requiring a long service life.



OUR MOTIVATION

The development of this cage material is driven by upcoming PFAS regulations:

- The goal of PFAS regulation is to limit or completely prevent uncontrolled PFAS emissions into the environment.
- The use of PFAS is to be reduced as much as possible.
- PFAS-containing cage materials are currently the state of the art for high-performance ball bearings.

Impact:

- This results in significant limitations in material selection for our customers, with a direct impact on product performance.
- Restricted selection of cage materials for high-performance ball bearings.
- Risk of future reassessments of PFAS-free materials and the associated need for reapproval by third parties



POTENTIAL APPLICATIONS

- Medical applications
 - Cardiovascular support systems (e.g. blood pumps)
 - Surgical power tools
 - Dental devices
- Industrial applications
 - Food industry applications
- Aerospace and defense





TECHNICAL SPECIFICATIONS

Property	Specification
Wear resistance	High
Temperature resistance	Tg at about 160 °C / 320 °F Operating temperature up to 260 °C / 500 °F
Chemical resistance	High chemical resistance
Hygienic resistance	Suitable for common sterilization and disinfection procedures
Service life	High
Quality standard	In accordance with GRW quality standards
Available from	Immediately available



KEY BENEFITS AT A GLANCE

Application Benefits

- Suitable for high-speed applications
- Suitable for high temperatures
- Compatible with common sterilization and disinfection methods
- High wear resistance due to suitable anti-wear additives
- Reduced friction thanks to specially formulated lubricant additives

Additional Benefits

- PFAS-free, environmentally friendly material
- Performance validated by GRW lifetime tests
- Excellent dry-running properties
- Available immediately for your applications
- Ensured supply chain within the EU



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C/O SPACES

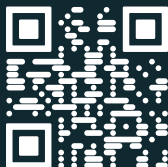
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