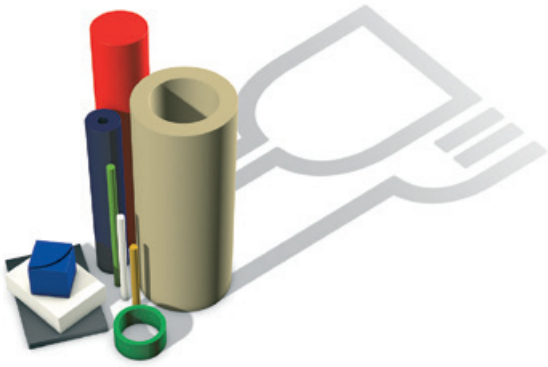
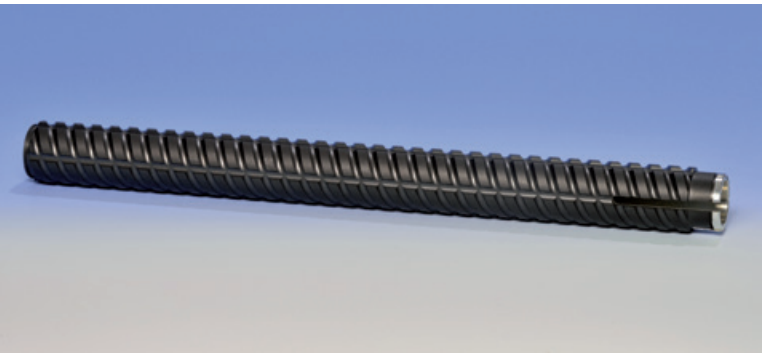
Ketron® HPV PEEK
Ball Bearing Spindle in Food & Beverage Packaging



Challenge

Enable the filling & packaging line to have quick and highly flexible changes between products, format, weights – resource efficient and at constant high speeds

Trends in consumer product variety pose great challenges to the packaging industry, e.g. lower batch sizes on the one hand and an increase of product and format changes on the other hand are required. Packaging machines have to be extremely flexible, offer a broad bandwidth of formats and quick changes between formats.



Resource & energy efficiency is the priority for manufacturers, next to safety and hygiene.

Speed and efficient components are keys to success, and “pick and place” handling systems (robots) are a good opportunity in this segment.
In this application, the robotic arm is steered by a ball circulation spindle which was made of Ketron® HPV PEEK. To perform also on new products and move higher weights, like beer boxes, the previously used standard Ketron® HPV PEEK spindle was not sufficiently rigid on it’s own.

Key requirements

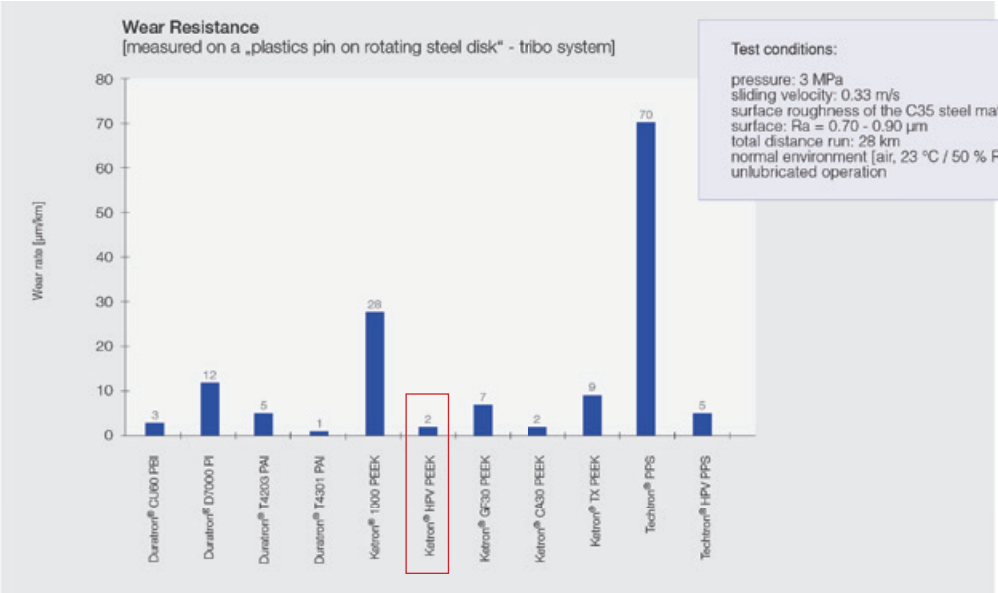
- Excellent wear resistance, provided by Ketron®PEEK
- Higher stiffness
- Light weight component material

Quadrant’s Recommendation: Ketron® HPV PEEK

In order to obtain the higher stiffness, Quadrant proposed to bond an alloy tube in the core of the Ketron® HPV PEEK spindle.
Our Ketron® HPV PEEK spindle in combination with the alloy tube brought the essential high stiffness and allowed the customer to move big loads at high speeds.

Customer Benefits

- Improved efficiency through reduced changeover cycles of packaging equipment
- Higher productivity
- Reduced equipment component costs
- Innovative equipment solutions meeting market demands – image advantage



Why Ketron® HPV PEEK

- Excellent wear and frictional behaviour
- Very good dimensional stability
- Tight tolerances
- High stiffness

Quadrant Added Values

- Quadrant's Technical Centre (TC) experience in bonding different materials (brochure available on request)
- The overall excellent technical and solutions support
- Quadrant Technical Centre capabilities in machining tight tolerances
- Industry & application expertise of the Quadrant team

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www.quadrantplastics.com
Quadrant Engineering Plastic Products Worldwide

Europe
Quadrant EPP Deutschland GmbH
Max-Planck-Straße 11
48691 Vreden
T +49[0] 2564 3010
F +49[0] 2564 3012 55
contact@qplas.com

North America
Quadrant EPP USA, Inc.
2120 Fairmont Avenue
PO Box 14235 - Reading, PA 19612-4235
T 800 366 0300 | +1 610 320 6600
F 800 366 0301 | +1 610 320 6638
americas.epp@qplas.com

Asia-Pacific
Quadrant EPP Asia Pacific Ltd
60 Ha Mei San Tsuen, Ping Shan
Yuen Long - NT Hong Kong
T +852 24702683
F +852 24789966
asia.epp@qplas.com

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Alperton Engineering Ltd
Dublin Industrial Estate,
Glasnevin, Dublin11, Ireland
www.alperton.com info@alperton.ie
Phone +353 1 8306277

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