

# Material solutions for high speed bakery processing



## TRENDS

Today's high-speed production methods generate more wear, heat and pressure on the large machines needed on the line. In order to prevent material loss there is a great demand for accurate dosing systems.

## QEPP ANSWERS

Quadrant EPP has developed materials built to face all aspects of the increasingly demanding production line, including self-lubricating solutions and with improved temperature resistance and good dimensional stability.

## CUSTOMER BENEFITS

The results are less maintenance and thus time savings due to self-lubricating materials as well as cost savings due to dimensionally stable materials which ensure accurate dosing of the dough.

We provide high performance plastic as rod, plate or tube for machining or as finished parts. With over 60 years of expertise, our unique service approach provides the platform for bringing your concept to the production line.

Let Quadrant help you build the perfect machine for your high-speed processing needs.



QUADRANT

You inspire ... we materialize®

## ERTALYTE® TX Square piston

**Challenges:** A small-breads bakery machine manufacturer needed a low weight part to press the dough out of a dosing chamber. It needed to show very good wear resistance, excellent frictional properties, very good release properties (no sticking of dough), dimensional stability, chemical resistance and high load capacity.

**Solution:** ERTALYTE TX with better wear resistance, sliding properties and dimensional stability than Polyoxymethylene (POM) or Polyamide 6.

**Benefits:** Maintenance and design cost reductions, no corrosion problems like aluminium, food contact compliance, better hygiene and safety performance along with considerable weight reduction.



## ULTEM® PEI 1000 Distribution spool

**Challenges:** The manufacturer needed a distribution spool for cookie filling. The spool also pushed the cookies out, working like a piston. The material needed to maintain good stiffness at elevated temperatures and at the same time be of low weight. Low heat conductivity and easy maintenance were other requirements.

**Solution:** ULTEM PEI 1000 exhibiting stiffness and dimensional stability at operating temperatures up to 160°C.

**Benefits:** Replaced a metal assembly that needed more time to disassemble and clean, at the same time offering lower overall costs and food contact compliance.



The bakery industry is always trying to accelerate processing speeds and improve production. Quadrant Engineering Plastic Products meets this challenge by developing low weight plastics with improved wear resistance. They can carry high loads and work without external lubrication. They are ideal corrosion resistant replacements for steel, bronze and aluminium and are highly resistant to the cleaning processes used in the bakery industry. Great wear resistance and hence a long life time reduces downtime and maintenance costs, key elements in maintaining competitiveness. Chemical and high temperature resistance, food contact compliance, high load capacity and wear resistance, these are the typical assets of Quadrant's food grades.



Learn more online at  
[www.quadrantplastics.com](http://www.quadrantplastics.com)

Quadrant has extensive product and machining resources available online. Our website is a portal to a wealth of technical data and the easiest way to engage our application specialists. Our team stands ready to help offer solutions to your toughest problems.

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