

# Material solutions for high speed food packaging equipment



## TRENDS

Today's high-speed packaging lines generate more wear, heat and pressure. Materials used in packaging equipment must also withstand the increased CIP and SIP respective constraints required under current regulatory standards.

## QEPP ANSWERS

Quadrant EPP offers plastics with improved wear resistance and dimensional stability over a wide temperature range. Quadrant's plastics also withstand chemicals such as alkaline or acid agents used in the various cleaning processes.

## CUSTOMER BENEFITS

This means less downtime and less maintenance, adding up to improved performance and cost savings. And of course, our plastics have a food contact compliant composition under North American and European regulations.

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®

## TECHTRON® HPV PPS Paper box packaging mould

**Challenges:** A packager needed a mould to form the paper box in its equipment for liquids. The mould needed high mechanical strength to resist the compression forces and dimensional stability under load and temperature. Wear resistance, low weight and chemical resistance during CIP cleaning were also required.

**Solution:** TECHTRON HPV PPS was chosen due to its better wear resistance over PEEK or aluminium. The plastic has excellent dimensional stability under load, with no moisture pickup and a low CLTE.

**Benefits:** Costs were reduced due to lower maintenance requirements. There are no corrosion problems as with aluminium moulds, even when harsh chemical cleaners and sterilisation processes are applied. Low weight and in-use noise level, food contact compliance, excellent hygiene, safety in use and ergonomical handling during maintenance are all part of the package.

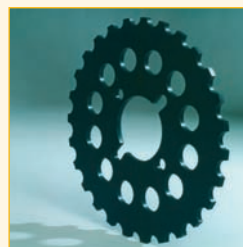


## TIVAR® 1000 Conveyor stars

**Challenges:** Bottling and canning lines require sliding elements with good sliding and wear properties. The material has to be non-sensitive to impact and must withstand chemical cleaners.

**Solution:** Conveyor stars made of TIVAR 1000 meet all criteria for applications in filling lines. TIVAR 1000 offers excellent sliding properties and high wear resistance. Its impact strength protects bottles/cans and conveyor lines. A very good chemical resistance extends its lifetime and reduces downtimes.

**Benefits:** Filling, transportation and packaging lines profit from the excellent sliding and wear properties of TIVAR 1000. Line operators appreciate its good working temperature range and noise absorption.



In food packing high speeds are essential to keep up with ever-faster production lines. Machines need to stand up to strong acid cleaners and the sterilization procedures used in techniques such as aseptic filling. CIP and SIP are more and more common procedures. As machines are growing in size there is a move toward custom made solutions. Most of our plastics show low moisture pick, hence offering good material solutions for wet environments. Great wear resistance and hence a longer life time reduce downtime and maintenance costs, key elements in remaining competitive. Chemical resistance, food contact compliance, colour-coding (offering visual detectability of broken plastics parts in foodstuffs) and wear and load bearing capability, 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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