Customer Analysis:

**Maintenance-Free Bearings for Beverage Container Trimmer Machines**

Reduced machine wash down time, grease consumption and cam wear combine to provide significant cost savings.

**INDUSTRY:** Beverage Production  
**APPLICATION:** Belvac CC-93 Trimmer  
**RBC PRODUCT:** BCF1-3/4 10CT & BCF1-1/2 10CT Bearings

**TOTAL PLANT COST SAVINGS:** $152,400

**Application Overview**

- 3 can lines, 8 trimmers per line, 250 CPM  
- Trimmer heads move the can into trimming blades for trimming  
- Bearing OD runs against trimmer cam at approximately 210 RPM  
- Trimmer bearings and cam are manually lubricated  
- BCF1-3/4 10CT mounted on ram side (2 per ram, 3 rams per trimmer)  
- BCF1-1/2 10CT mounted on cutter side (1 per tool pack, 3 tool packs per trimmer)  
- Accurate setting of the cam followers and condition of the cam are critical for achieving a uniform trim

**Features, Benefits & Results**

- Maintenance-Free cam follower bearings are lubricated for life, reducing grease usage and clean-up costs  
- Polymer tire eliminates steel-on-steel cam wear, extending cam life  
- Reduction in heat generation using polymer tire extends bearing and grease life  
- Bearing seals prevent the ingress of cutting fluids, wash down liquids and metal fines from the trimming operation into the ball bearings  
- 5.5X reported improvement in bearing life (2 months original life assumed)  
- 2X reported improvement in cam life

**Cost Reduction Overview** (Est.)

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<th>OEM Bearing Replacement and Maintenance Costs Per Month</th>
<th>RBC Bearing Replacement and Maintenance Costs Per Month</th>
<th>Reduction in Bearing and Cam Costs Per Station</th>
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<td></td>
<td>$630</td>
<td>$130</td>
<td>$6,350</td>
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**Total Cost Reduction**

$6,350 x 24 Stations  
**$152,400**

**Conclusion**

The new RBC BCF1-3/4 CT10 and BCF1-1/2 CT10 maintenance-free bearings **significantly reduce maintenance costs** over the original OEM bearing design. RBC would like to work with your plant to implement this cost savings solution.
RBC Bearings® has been producing bearings in the USA since 1919. In addition to unique custom bearings, RBC Bearings® offers a full line of industrial parts for the canning industry, including:

The RBC “Triple Threat”® of Necker Cam Follower Solutions! Which is right for your plant?
- The time-tested CRBC1-5/8 14 Long Life RBC Roller® Follower
- The proven Maintenance Free, BCF1-5/8 14 CT Ball Bearing Follower w/polymer outer
- *NEW* The Maintenance Free, BCF1-5/8 14 ST Ball Bearing Follower w/steel outer

Contact us to determine the best product for your particular operating conditions. RBC is providing engineered solutions to increase reliability for our canning industry customers!

The RBC unitized bearing solution for Standun B3 and B5 Body Makers simplifies installation and increases the hold down lever bearing life. No more loose rollers! Other features and benefits include:
- Addition of an inner ring - virtually no shaft wear - no more shaft replacements
- 3 roller paths – better load distribution - resistance to moment loads – no skewing or skidding damage
- Larger roller pitch circle – more rollers per path - lower outer ring mass - reduced inertial loads

This design is available with narrow or wide-width cam follower outers. Thrust washers included! Contact us to discuss the reduced maintenance costs and improved can quality possible!

RBC Maintenance Free Solutions for Trimmers eliminates the need for relubrication and protects the cam from wear. New, improved sealing prevents coolant and washdown fluids from damaging the bearings. RBC Maintenance Free Ball Bearing Followers BCF1-1/2 10 CT and BCF1-3/4 10 CT are upgrades for OEM C20043 (McGill® CCF11/2SB) and C20044 (McGill® CCF13/4SB).

Climax Metal Products offers a keyless locking assembly that directly replaces the single nut bushing used to mount gears in the driveline of the necker. The screws on the Climax C192 Series KLD are easily tightened with a standard torque of 150 in-lbs. Compare this with the massive wrench and 409 ft-lbs. of torque required to tighten the single nut bushing supplied by the OEM and you will immediately understand the improved safety and ease-of-use this locking device provides to can makers.

Specialty Cam Followers and Bearings for Canmakers:

**Necker Cam Followers for Can Neckers**
- RBC Roller® Cam Followers with two rows of cylindrical rollers offer superior life to Needle Roller Cam Followers.

**Necker Yoke Rollers for ANC Can Neckers**
- RBC Roller® Yoke Rollers with two rows of cylindrical rollers offer superior life to Standard Needle Roller Yoke Rollers.

**Spindle Disk Cam Followers for Rutherford Can Decorators**
- Precision Dual-Race, Roller Cam Followers for improved life.

**Spindle Disk Cam Followers for Concord Can Decorators**
- Precision Dual-Race, Roller Cam Followers for improved life. Available in versions for rotary and interposer trip systems.

**Special Bearings for Ragsdale Body Makers**
- Special Combination Roller and Spherical Plain Bearings and Cam Followers for Ragsdale Body Makers.

**Special Connecting Rod Bearings for Standun Body Makers**
- Special Spherical Plain Bearings with extended inner rings eliminate the need for spacers and simplify installation and removal.

Concord, Ragsdale, Rutherford, and Standun are brands of Stolle Machinery.