

# EDT CASE STUDY

## International Snack Manufacturer

EDT peeler bearings on Vanmark peelers

### Problem

Potato starch is highly corrosive to steel roller bearings, and leaves them heavily rusted. Additionally, the water wash-down dilutes the grease in the bearing, requiring daily re-greasing of the original bearings, and bearing change-out in 1-4 months. Typical bearing replacement takes approximately 1 hour per bearing, with 8 bearings per Vanmark machine.



### Solution

EDT peeler bearings have run 8 to 18 months without requiring any grease. Non-rusting components and no grease means no downtime and zero maintenance through the season. Typically, the QF bearing is replaced when the brushes are changed, and the sleeve and housing can be used over multiple seasons.

**EDT peeler bearings** are a 3-piece bearing assembly consisting of:

- A stainless housing with a plastic anti-rotation pin that retrofits the original cartridge
- A high performance polymer bearing sleeve that is pressed into the cartridge.
- A hardened shaft sleeve that can be threaded into place on the roller



The QF bearing material effectively withstands water, starch and abrasives and requires no grease at all. All of the components are non-rusting.



Replace polymer sleeve bearing each season, and reuse metal components.



BY TIMKEN



COMPARE THE COSTS OF OWNERSHIP OF  
**POTATO PEELER BEARINGS**  
 ON VANMARK PEELER / SCRUBBER / WASHER

**Cost of original peeler bearing**  
 over 1 year of 2 seasons

Based on bearing  
 lasting 3 months



**Year 1: Cost to purchase original bearing**

Original bearing: 1-3/16 bore cartridge **\$190.00**

Cost to install original bearing  
 Labor (1 hour at \$35/hr) + \$35.00  
 \$225.00  
 4 change-outs per year x 4  
**\$900.00**

Cost to lubricate original bearing  
 55/oz x 1 oz per day (i.e. Lubriplate LFG) \$0.55  
 Labor: 1 min @ \$35/hr + \$0.58  
 Cost per day: + \$1.13  
 x 260 (daily, 5 days/week x 52 weeks) x 260  
**\$587.60**

Total bearing cost in 1 year (2 seasons) **\$1,487.60**

**Cost of EDT peeler bearing**  
 over 1 year of 2 seasons

Based on:

- Sleeve lasting 2+ years
- Bearing lasting 6 months
- Cartridge lasting 2 years



**Year 1: Cost to purchase EDT SGH**

ZAH248H Sleeve \$280.00  
 QF247F Bearing insert + \$194.00  
 ZA237.3A Cartridge with polymer pin + \$99.00  
**\$573.00**

Cost to install original bearing  
 Labor (1 hour at \$35/hr) + \$35.00  
**\$608.00**

Replace bearing QF247F with roller change \$194.00  
 Labor (1 hour at \$35/hr) \$35.00  
**\$229.00**

Cost to lubricate EDT bearing  
 GREASE-LESS - No lubricant needed **\$0.00**

Total bearing cost over Season 1 **\$837.00**

**Year 1 Costs** Original bearing \$1,487.60  
 EDT peeler bearing - \$837.00

**\$650.60 savings x 8 bearings per peeler = \$5,204.80 savings per peeler**

*Total first Year savings with EDT bearings!*

**Year 2: Bearing Cost**

Total bearing cost: same as Year 1 **\$1,487.60**

**Year 2: EDT SGH Bearing Cost**

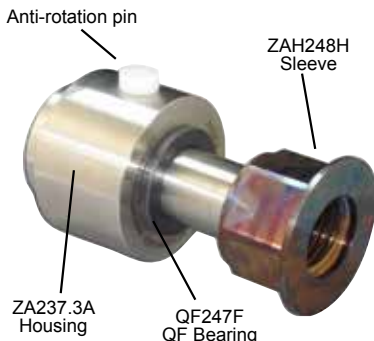
Replace QF bearing: \$194 + labor (\$35) = \$229.00  
 Every 6 months x 2  
**\$458.00**

**Year 2 Costs** Original bearing \$1,487.60  
 EDT peeler bearing - \$458.00

**\$1,029.60 savings x 8 bearings per peeler = \$8,236.80 savings per peeler**

*Total second Year savings with EDT bearings!*

Assembly P/N EDT SGH



**Plus significantly reduced maintenance scheduling and downtime!**

The above illustration is based on average plant conditions. Individual results can vary based on installation and maintenance practices, and environmental conditions.



For a Cost Of Ownership analysis of your application, contact an EDT sales representative today

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