

# EDT CASE STUDY

## Poly-Round® Oven Bearings

# International Snack Manufacturer

EDT Poly-Round® Plus bearings  
on a Wolverine Oven

## Problem

Ball bearings supporting oven rollers required change-out every 3 months. A typical change-out also required repairing 12 journals, at a cost of \$150 per journal.

The roller change-out required 3 personnel a total of 3 hours to complete the change, at a labor rate of \$30/hour.

Additionally, ball bearings required greasing once a week.

## Solution

The EDT Poly-Round® Plus bearings ran 15 months, required no maintenance, and no shaft wear was evident.

By eliminating shaft damage, the Poly-Round® Plus bearings significantly reduced operational expenses and downtime associated with journal repair.

When inserts need to be replaced, Poly-Round® Plus inserts will be rotated **180°** effectively doubling the bearing life.



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## COMPARE THE COSTS OF OWNERSHIP OF QF Poly-Round® Plus to a Ball Bearings ON WOLVERINE OVENS

### Cost of original ball bearing over 2 years

Based on  
replacing bearing  
and housing  
every 3 months



<b>Cost to purchase bearings per roller</b>	
TB-19TC	\$131.37
x 2 bearings per roller	<u>          x2</u>
	\$262.74
<b>Cost to install original bearing</b>	
\$30/hour labor x 1/2 hour	\$15.00
<b>Cost of lubricant: Lubriplate® Syn 1600</b>	
78¢/ounce x 0.5 ounces/per week	\$0.39
Labor: 73¢/min x 2 mins	<u>          \$1.46</u>
x 52 (once per week for 52 weeks)	<u>          x52</u>
	\$96.20
<b>Cost to change out bearing</b>	
at \$30/hour labor x 1/2 hour	\$15.00
TB-19TC \$131.37 x 2 bearings per shaft	<u>          \$262.74</u>
x 3 (Replace bearing every 3 months)	<u>          x3</u>
	\$833.22
<b>Cost to repair journals annually</b>	
Journal repair \$150 + \$270 labor per roller	\$420.00
(labor = 3 people x 3 hrs x \$30 = \$270)	
<b>Total cost of bearing set Year 1</b>	<b>\$1,627.16</b>
<b>Year 2 Cost</b>	
(Continue same costs as Year 1)	
<b>Cost of TB-19TC \$131.37 x 4 replacements</b>	
x2 bearings per roller	<u>          \$2,104.00</u>
	<u>          x2</u>
	\$4,208.00
\$30/hour labor x 1/2 hour x 8 bearings	\$120.00
Lubrication (repeat of Year 1)	\$833.22
Journal Repair: \$150 + \$270 per roller	<u>          \$420.00</u>
<b>Total Year 2 cost</b>	<b>\$3,357.22</b>
<b>Total 2-Year Cost Bearings and Journal Repair</b>	<b>\$4,984.38</b>

### Cost of QF Poly-Round® Plus oven bearing over 2 years

Based on using cast iron  
housing and replacing  
bearing every 15 months



<b>Cost to purchase bearings PER ROLLER</b>	
QF9FD7-19-LKHTV	\$299.00
QF9FD7-19-LKHTE	<u>          \$294.00</u>
	\$593.00
<b>Cost to install bearing at</b>	
\$30/hour labor x 1/2 hour	\$15.00
<b>Cost of lubricant</b>	
	\$0.00
<b>EDT Radial Poly-Round® Plus bearings are grease-less and require no lubrication</b>	
<b>Cost to change out components</b>	
at \$30/hour labor x 1/2 hour	\$15.00
QFIUDO-D	<u>          \$150.00</u>
x 0	<u>          x0</u>
	\$0.00
<b>Cost to repair damaged roller</b>	
(journal damaged eliminated)	\$0.00
<b>Total 1 year cost of EDT bearing</b>	<b>\$608.00</b>
<b>Year 2 Cost</b>	
Rotate insert 180° to utilize other half of sphere	
Flip insert	<u>          \$0.00</u>
	<u>          x0</u>
	\$0.00
\$30/hour labor x 1/2 hour x 2 flip insert	\$30.00
Lubrication	<u>          \$0.00</u>
<b>Total Year 2 Cost</b>	<b>\$30.00</b>
<b>Total 2-Year Cost Bearings and Journal Repair</b>	<b>\$638.00</b>



Original bearing and journal repair \$4984.38  
vs. EDT bearing and NO JOURNAL REPAIR \$638.00

**1 YEAR SAVINGS \$4,346.38 x 54 Rollers per Oven = \$234,704.52**

*Total 2-year savings with EDT bearings!*

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

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



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

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