Documented cost savings

Reduced downtime for replacing bearings on conveyor with DODGE® E-Z KLEEN® bearings

The challenge

A customer had a conveyor in a washdown environment where they were using 1 ½" standard-duty pillow block bearings. The existing bearings had to be replaced on-average twice a year, resulting in unscheduled downtime.

The Dodge solution

We compared the existing bearings with our DODGE E-Z KLEEN bearings and were able to show an overall cost savings, which included reduced maintenance costs and the elimination of unscheduled downtime.* Best of all, the customer will need to replace our DODGE E-Z KLEEN bearings only once a year at a scheduled interval.

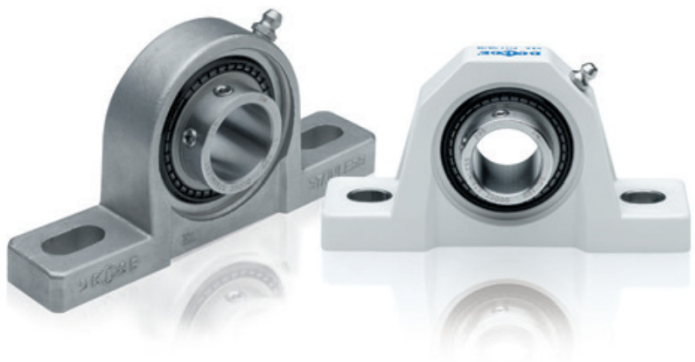
** See back page for details of data analysis.*

The savings

Using our DODGE stainless-steel housed E-Z KLEEN bearings resulted in an overall cost savings of $1,142 and reduced the company's downtime, as well as maintenance costs.

The conclusion

Since this customer's application needs were in a washdown environment, stainless-steel housed E-Z KLEEN bearings were a key factor in making this solution successful. The DODGE E-Z KLEEN bearings reduced the customer's total cost of ownership by providing a bearing that needed to be replaced only once a year.



Annual operating cost

Existing bearing

Dodge E-Z Kleen

Total savings of $1,141 USD

Step 1

For each product that was analyzed, ABB asked the following questions:

- What was the amount of time required to perform each of the following activities?
  - Lock out conveyor drive and belt
  - Remove the existing drive
  - Select and purchase new components
  - Install a new drive
- What was the number of employees required for each activity?
- What was the labor rate for each activity?
- What was the cost of parts for each activity?
- What was the replacement frequency of each component?
- What were the downtime costs ($ per hour)?

Step 2

We calculated the total operating costs for the existing and proposed solutions using the following formulas:

Installation cost = [(time spent on activity/60 minutes) x (# of employees for each activity) x (labor rate) x (replacement frequency)]

Downtime Cost = [downtime cost ($ per hour) x (time spent on activity) x (replacement frequency)]

Result:

Existing or alternative total operating cost:	$ 2,331
ABB total operating cost:	$ 1,168
Savings:	$1,163

Step 3

We compared the purchase price of the existing and proposed solutions to illustrate an accurate assessment of overall costs.

Result:

Existing or alternative purchase price:	$ 70
ABB purchase price:	$ 92
Savings:	$ (22)

Step 4

Based on these calculations, we were able to discover and document a

Total DCS (documented cost savings) of: $1,141

For more information please contact:

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