



## Hanger Bearings for Conveying Granulated Sugar

### Question

We have several long screw conveyors in our plant for conveying granulated sugar from a railcar unloading system. We are using UHMW food grade hanger bearings, but we are wearing through the bearings every 10 days. The maintenance and downtime are costing us profitability. What other options do we have for hanger bearings?

### Answer

Sugar, like many bulk materials, is abrasive. Hanger bearings can be in the path of flow and wear out quickly. Trough loading, screw conveyor speed and hanger bearing material are the determining factors for wear-life.

UHMW (Ultra High Molecular Weight) hanger bearings, like you are using, are readily available and very inexpensive. The UHMW material is food grade approved and works great in non-abrasive applications. The bearings in your application have been misapplied because UHMW is a soft material and wears quickly when conveying granulated sugar.

The current bearing material of choice for many sugar applications is Melamine. Melamine provides good wear resistance to granulated sugar; however, the availability of Melamine raw materials for manufacturing hanger bearings is very limited and the cost is high.

Ceramic filled PTFE (Polytetrafluoroethylene) hanger bearings are the newest bearings on the market. The ceramic filled bearing combines excellent wear resistance found in ceramics with the dry lubrication provided by PTFE and is approved by the FDA for use in food grade applications. Ceramic filled PTFE bearings will outlast Melamine and UHMW when conveying granulated sugar and they are moderately priced.

KWS stocks UHMW and ceramic filled PTFE hanger bearings in style 226 and 216 for all CEMA standard shaft sizes. Melamine hanger bearings are made-to-order. Please call KWS and we will provide the best hanger bearing to suit your application.



UHMW Hanger Bearings are Food Grade and a Good Choice for Non-Abrasive Bulk Materials



KWS Ceramic Filled PTFE Hanger Bearings Outlast UHMW Bearings



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