



# VIBRA SCREW INC.

The most trusted name in dry  
solids processing.

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## CASE HISTORY



### Grede Foundry Retires Vibra Screw Bin Activator After 33 Years...Orders New One

#### Customer:

Grede LLC began operations in 1920 when Bill Grede purchased Liberty Foundry in Wauwatosa, Wisconsin. The company has grown through a series of acquisitions and now operates 20 facilities in two countries with over 5100 employees. Grede is a full service supplier with complete design, engineering, testing and manufacturing facilities. Grede uses various grades of grey and ductile iron as the raw material in its process, producing castings ranging from 1-2000 lbs, including highly complex and safety critical designs.

#### The Problem:

In 1979 the company needed to reliably discharge return sand from a 10.5 foot square bin into a batch hopper at 56 tons/hr. The batch cycle time was 1.5 minutes so maintaining a consistent full bore discharge on demand was critical to the efficient operation of the casting process.

#### The Solution:

A square to round transition was fabricated and an 8' diameter Vibra Screw Bin Activator fitted to the opening in the transition piece. The Bin Activator is flexibly hung from a mounting ring on the bin by rubber bushed forged steel hanger arms which provide the tensile strength needed to support a bin load of 90lb/ft<sup>3</sup> material while isolating the bin from the vibration generated by the Bin Activator's oil lubricated Gyrator. A molded, leak proof, endless flexible sleeve seals the gap between the vibrating Bin Activator and the stationary mounting ring.

Invented by Vibra Screw in 1960, the Bin Activator's main body is an ASME dished head, providing both strength and durability for the most severe duty applications. The oil lubricated Gyrator, also an exclusive feature of the Vibra Screw Bin Activator, is designed for decades of low maintenance service while generating the multi-ton forces needed to move heavy, flow resistant material.

#### Results:

The original 8' Vibra Screw Bin Activator has been on the job for 33 years, providing dependable flow on demand, with nothing more than routine maintenance required. Due to the abrasive effect of sand flowing at 56 tons/hr for over three decades, Grede decided to retire the original unit replacing it with an identical 8' Vibra Screw Bin Activator. To date, Grede has installed over 25 pieces of Vibra Screw equipment in its various plants

There are hundreds of Bin Activators like Grede's, still in service after 30, 40 and even 50 years. Innovative design and high quality manufacturing have kept Vibra Screw Bin Activators in service many times longer than most of its imitators have been in business.

#### THE VIBRA SCREW GUARANTEE

If your Vibra Screw equipment doesn't perform in the service for which it was sold, we'll refund your money. Ask any other equipment manufacturer to put that in writing.

**No time limits. No conditions.**

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