of the steel plates.

June 2017



## **GRAPHALLOY® Keeps Dryer Oven Chains Rolling**

Keeping their gypsum board dryer oven running was a problem for a manufacturer of construction materials until they redesigned the chain guide to include self-lubricating GRAPHALLOY® cam followers.

The oven has a drag chain conveying system - with a speed of eight feet per minute - to move the gypsum wall boards through the oven. The temperature in the oven is 550 °F. The drag chain was kept on track by chain guides made of carbon steel plates. Over time, the chain guides would wear down, fall onto the gypsum wall boards, destroy the product and shut down the oven.

The manufacturer wanted to design a chain guide system that would not wear down and certainly not fall into the product. They needed something to support the chain. The manufacturer considered using standard cam followers but was concerned that they wouldn't survive the oven's high temperature. In addition, they wanted to avoid using grease to minimize frequent maintenance.

They contacted engineers at Graphite Metallizing Corporation to help with the new design. Self-lubricating GRAPHALLOY Bronze Grade Cam Followers Type 1217 were proposed. The manufacturer then developed a chain guide system that had the chains roll over the cam followers instead

After testing this solution for ten months, the board manufacturer declared it a success. They converted their entire oven to GRAPHALLOY. These cam followers have now been in operation for over one year without the need for replacement. The manufacturer also saved time and money on reduced maintenance because they no longer need to grease their bearings.

