

# Scrap-Removal System Simplifies Foundry's Production

Case IH Corp. is one of America's oldest and largest manufacturers. The Racine, WI-based company was the first builder of steam engines for agricultural use. Today, with several domestic and international manufacturing facilities in operation, Case IH is recognized as a global leader in the manufacture of agricultural and construction equipment.

In keeping with that tradition, the Case IH Foundry Plant at Racine has produced castings for transmission, axle, and PTO housings for 97 years. These components are used to house tractor-drive assemblies in Case IH agricultural and construction equipment. Throughout the organization, Case IH production managers are challenged to maintain quality excellence. The company's use of reliable and durable production equipment is one way they do this. And while much of it is proprietary, all of it must be kept in top running condition.

One piece of equipment that has never failed at the Racine plant is its internal conveying system. The Model 850 transporter by Vibro Industries of Port Royal, PA, is used to remove scrap gray iron waste fragments from the axle-housing grinding machine. Before the transporter was installed, scrap was removed by hand, a labor-intensive and costly process. According to Russ Milner, a journeyman millwright with over 30 years experience and responsibility for maintaining Racine's equipment, the fact that the transporter has performed flawlessly is especially impressive considering the harsh working conditions and lengthy run times.



***A worker at the Case IH plant in Racine, WI, operates an axle-housing grinder. Scrap from the process is removed by a mechanical transporter.***

"Our Model 850 runs eight hours per day, five days per week during production," he says. Unlike machining and stamping applications at the plant, grinding operations expose the transporter to minute airborne iron particles. This grit can find its way into sleeve and bearing compartments inside machine tools, wearing down performance and reducing machine life. But in spite of this abrasive environment, says Milner, "Our Model 850 has operated without fail ever since it was installed seven years ago."

The principle behind the Vibro Transporter is its pneumatic cylinder design that operates on low air pressure to move trays back and forth at high speed. This causes scrap material to steadily and quietly advance in one direction. On the slow-accelerated forward stroke, material is transported forward. During the rapid return-

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Published on Industrial Maintenance & Plant Operation (<http://www.impomag.com>)

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stroke, material remains stationary, thus ensuring constant movement in one direction.

Recently, the axle-housing grinder was taken off-line for maintenance. At the same time, the transporter was shut down for the first time since its installation and returned to Vibro for refurbishing. The company will warrant the refurbished unit for another two years, the same warranty it provides for new models. Milner says that because of this combination of service, reliability and efficiency, he highly recommends the transporter for use in any similar type of operation.

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**Source URL (retrieved on 09/17/2014 - 1:59am):**

<http://www.impomag.com/articles/2004/07/scrap-removal-system-simplifies-foundrys-production>