

Case Study: 400,000 square-foot world-class metal casting operation depends on the durability of its roof



**Description:** Dura-Bar, a division of Wells Manufacturing Co., is a global leader in the production of continuous cast iron bar. Ceiling temperatures can climb to 130°F in some areas of the process, so the roof is lined with evaporative coolers and HVAC piping to bring fresh cool air into the building where employees are working. In wintertime, industrial-sized air exchangers mix the hot air with cold external air and pipes carry it back into the plant. Dust collection brings even more equipment to the roof. “We’re moving a lot of air as well as iron,” says Michael Hackworthy of Wells. “The demands on this roof are extraordinary.”

**Challenges:** Years ago Wells embarked on a roof maintenance program with Waukegan Roofing Company, with full inspections conducted twice a year. Since no roofing is permitted when Dura-Bar’s manufacturing line is running, all roof replacement and repairs need to take place during the regularly scheduled plant shut down once a year. A roof area needing attention may range in size from 12,000 square feet to 54,000 square feet so the roofing crews are working around the clock during the plant closure.

**Solution:** “For 30 years the Dura-Bar facility has experienced terrific performance from its Johns Manville built-up roof – a 4GIG system,” said Bruce Diederich, Waukegan Roofing. “Through the years we’ve looked at alternatives to a built-up roof, but with the amount of mechanical equipment up there needing maintenance and repairs, the roofing materials have to stand up to extreme foot traffic,” reports Hackworthy. “We have an active bidding process for all work and Waukegan Roofing is always in the mix. Price is important, but Waukegan comes back to us with a good solution and a good price,” says Hackworthy. “We trust Bruce and his team at Waukegan Roofing and know they have our best interest at heart. They watch over our rooftop and our bottom line. You can’t ask for anything better.”

**Location:**

**Woodstock, Illinois**

**Building Representative:**

**Wells Manufacturing Company**

Michael A. Hackworthy,  
Vice President of Engineering

**Contractor:**

**Waukegan Roofing Company, Inc.**

Bruce Diederich, President  
JM Peak Advantage® Summit Club® Contractor

**Roofing System Solution: 4GIG  
20-Year Peak Advantage® Guarantee**

- ENERGY 3® Roof Insulation
- UltraFast® Pre-Assembled Fasteners
- ¾" Fesco® Roof Board
- GlasPly® Premier (4 plies)
- DynaFlex® Modified Bitumen Flashing Sheet
- JM-Approved Asphalt

