HOT MILL ROLL GRINDING
CASE STUDY

MEETING PRODUCTION DEMANDS

With this Hot Mill Roll Grinding application, our Weiler 36” x 4” x 12” Hot Press Wheel helped increase G-Ratio, improve material removal rate and boost their total cost savings.

CHALLENGE: This customer was looking to increase their Metal Removal Rate ("MRR") on hard to grind tool steels in order to reduce their overall cycle time. They experienced a large increase in production and had to grind significantly more rolls to meet production demands. In order to avoid outsourcing some of their grinding operations and significantly increase overall costs, they began looking for ways to reduce cycle time.

SOLUTION: To address this need, the Weiler Industrial Grinding Products Technology Team developed a grinding wheel, pairing a proprietary abrasive blend with advanced bond technology. This unique wheel design resulted in a wheel that was able to cut faster and last longer.

RESULT: Weiler’s Roll Grinding Technology allowed the customer to cut cycle times and in-turn meet production demands without having to outsource a portion of their grinding operations. Utilizing the Weiler Process Solutions tool, the Weiler team was able to document best practices and identify the following improvements:

- **G-Ratio**: 28% Increase
- **Material Removal Rate**: 56% Increase
- **Wheel Life**: 30% Increase
- **Total Annual Cost Savings**: $340,200
  - Hard Grinding Wheel Cost Savings – $79,200
  - Estimated Savings Productivity / Overhead Cost Savings – $261,000