

WEILER INCREASES THROUGHPUT IN FOUNDRY CLEANING ROOM



FOUNDRY CASE STUDY

CHALLENGE: A US-based foundry that specializes in complex castings for aerospace, defense, and commercial transportation industries was struggling to keep up with increased customer demand. Their cleaning room had become the bottleneck in operations, and although they were actively recruiting, qualified operators were hard to find. With labor constraints persisting, the company looked for alternatives to increase throughput. After speaking to their distributor, Weiler was recommended as an abrasives partner that could bring expert advice and consultation to improve grinding efficiency in the cleaning room.

SOLUTION: During an onsite consultation, Weiler Abrasives Experts quickly realized there was an opportunity to improve grinding productivity and cycle times. Operators were grinding high-temperature alloys like Inconel, Waspaloy, and Hastelloy alloy, and the current abrasives cups were not removing material fast enough. The team believed the abrasive bond was too hard and not exposing new cutting grains at the correct rate.

Utilizing the Weiler Consumable Productivity (WCP) process to collect and measure data, testing was conducted by two operators who ran the current cup against a standard Weiler abrasive cup. Both the abrasives and workpieces were weighed to record product life and material removal throughout the test. After reviewing the initial test data, Weiler experts saw an opportunity to increase performance further, so they worked with product engineers to develop a custom bond formula for a follow-up test. After two more days of testing, data showed the custom Weiler cup **removed 62% more material** over the product's life and **increased grinding efficiency by 53%**.

RESULT: Switching to the Weiler cup wheel reduced operator time in the cleaning room by an estimated 998 man-hours annually, resulting in \$30,000 labor savings. The change eliminated the bottleneck in the cleaning room and shortened fulfillment lead times. It also allowed the foundry to reallocate labor to other parts of the facility to increase throughput further. Since fewer abrasives are required to complete the work, the foundry will also realize \$95,000 in annual abrasive savings. **The total impact of switching to Weiler is valued at \$125,000.**



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