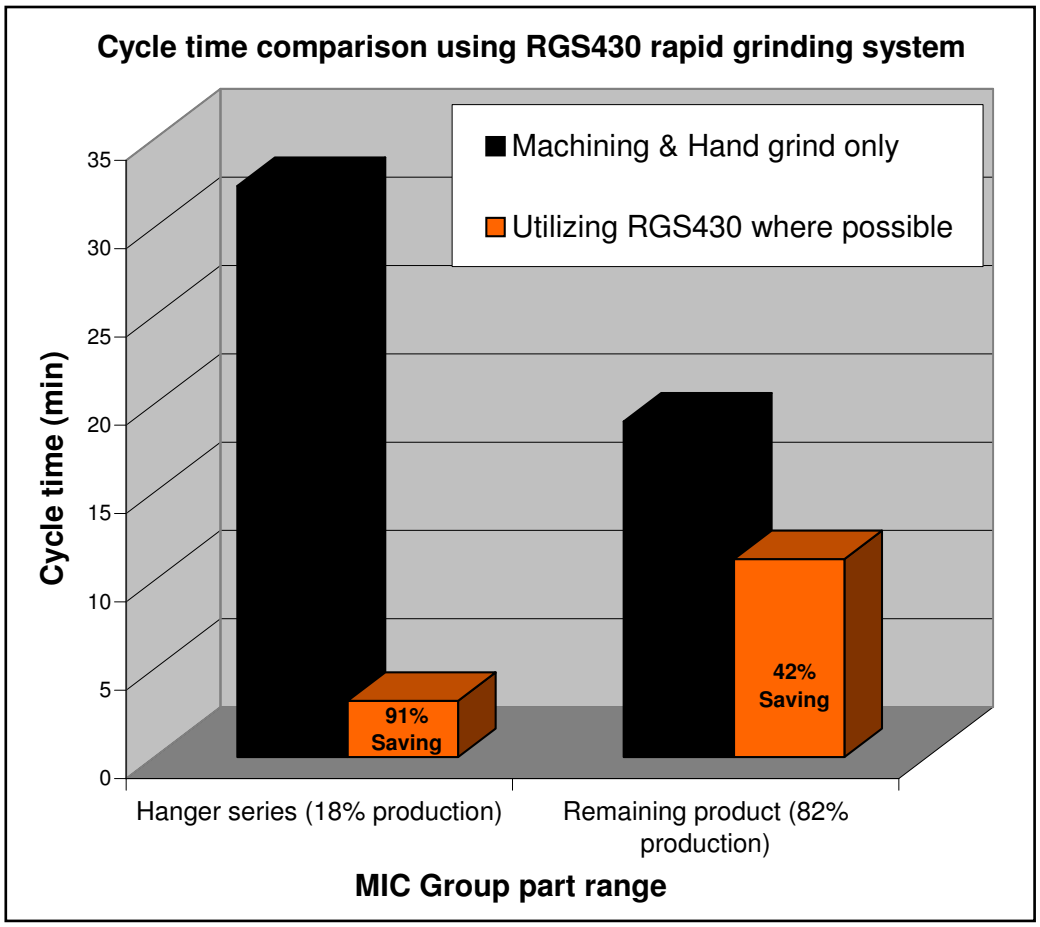
Products

RGS430 Grinder Offers Safety Benefits And a 12-Month Payback at MIC Group

MIC Group justified its recent acquisition of the RGS430 plunger grinder by AW Bell Machinery after using the machine in production trials and realizing significant savings of up to 91% in cycle time and 96% in consumable use. The receipt of the RGS430 plunge grinder complements the AW Bell Machinery MPS40 cut-off machine currently in operation at MIC Group Brenham Texas plant.

Previous gate removal methods at MIC Group consisted of bulk gate removal using conventional machining on a manual mill. Secondary hand grind was then utilized to completely finish the parts. This process was time consuming and required skilled labor, as well as high consumable cost for both end mills and grinding belts.

Tony Kline, casting development engineer for MIC Group, was tasked to compile a time study to justify the cost of acquiring the RGS430. With the AW Bell Machinery RGS430 grinder in their facility for testing, Kline was able to conduct direct comparisons on gate removal effectiveness versus existing methods within their production environment.



The results were staggering. On one particular product range an average of 91% cycle time reduction was achieved. This same range of parts also saw a 96% reduction in consumable costs, a six-month saving alone of more than US$5,000. Data gathered on MIC Group's remaining production range over the same six-month period saw an average cycle time reduction of 42%. Based on cycle time and consumable cost reduction, Kline estimates a 12-month saving of just under US$80,000 with the introduction of the AW Bell Machinery RGS430 plunge grinder. This equates to a near twelve-month return on investment.

In addition to cost benefits, MIC Group highly valued the increased capacity, improved lead time, more consistent quality and improved

safety that the RGS430 demonstrated. “One of the major safety improvement of using the RGS430 is that the parts are not being handled during grinding,” Kline said, “The production floor team love the machine!”

For AW Bell Machinery, the study confirms the results that have been well documented, but often difficult to quantify on a trial basis in the investment casting environment.

“Small and varied product runs often make it hard to conduct accurate trials in the finishing area. We can provide estimated results using our machines, but customers must know current costs before useful comparisons can be made,” Stephen Murtagh, AW Bell engineering manager said. “These results buck the trend of a number of investment casting companies of recent times who opt to choose milling operations over the rapid material rates achievable using grinding belt theory”.

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