

ROCHESTER ABRASIVES INDUSTRIES (RAI) DEVELOPS A CUSTOMIZED HOLLOW GRINDING SOLUTION TO INCREASE PRODUCTIVITY AND RELIABILITY

CUTLERY GRINDING - HOLLOW GRINDING APPLICATION

Blade Type: Pocket knife 3" grind length

Material: BG 42

Hardness: 62 RC

Thickness: .095"

Wheel Grade: TA 702 H9

Equipment: Hollow Grinder

CHALLENGE

The customer's main problem was a productivity issue: the company needed to find a solution that would greatly increase the productivity and durability of the grinding process without incurring a significant increase in production costs. In addition, the customer was facing a very tight timeline to meet production demands.

Additional challenges included:

- Limited capacity with the capability to make only 100 pieces per hour.
- Current process and quality were not consistent. The client experienced intermittent burning due to poor wheel performance on the tough to grind material; in addition, the reject rate ran into double-digit percentages.
- Production forecasts were calling for even greater demand, and the company was considering acquiring more equipment to meet such demand.

PROJECT OBJECTIVES

The initial objective was to stabilize the process and eliminate rework and rejects. The testing of RAI's TA bonded wheels delivered some great results. The wheels cut the material better than the original and allowed the client to double its pull speeds. This reduced the company's cycle times tremendously. In addition, when all the testing was completed the process settled in at a strong 220 pieces per hour with a reject rate of less than 1%, which eliminated the need for new equipment. RAI proved once again that it can customize a solution based on its long-term customers' needs, and that it can quickly, efficiently, and economically solve a mission-critical business challenge.

SOLUTION

RAI offered the TA bonded abrasive wheel. This formula was a custom designed product specifically for this application. The great thing about TA bond is its complete flexibility with tough to grind materials. It is an open structured bond system with complete flexibility from very soft to hard structure characteristics. This allows customers to apply such a solution to a variety of specific production needs.

ABOUT ROCHESTER ABRASIVES INDUSTRIES

Rochester Abrasives Industries (RAI) is a leader in providing high-quality, cutting-edge grinding wheels, grinding segments, and abrasive products for many industries including cutlery and industrial knives. RAI's 20+ year track record of providing innovative, reliable products and unmatched customer service has helped establish the company as a leader in the domestic and international marketplace. We offer standard pre-made products as well as custom formulations and product solutions. We not only focus on the needs of today, we also proactively help customers plan for tomorrow. For more information about RAI, visit www.rochesterabrasives.com or call 800.724.9874 or 585.429.5240.

