



HVAC Manufacturer

Mate On-Site Support Leads to \$87,000 in Productivity & Quality Improvements

A key manufacturer of indoor HVAC systems experienced some turnover in its hourly and support staff employees. The company was experiencing problems with tool setup and maintenance, which led to increased consumption and quality issues.

Good operator training ensures proper tool selection, set-up and usage to produce high quality end products. Mate's Sales Engineers have in-shop, on-press expertise, so when it comes to training, our Sales Engineers can deliver effective programs to bring new operators up to speed and address other problem areas. Training is a key area that Mate provides to our customers at no additional cost. To achieve greater efficiencies, the customer asked our Sales Engineer, Lee Gray, for assistance.

Proper Training & Technical Support

After analyzing their operations, Lee believed that the problems were the result of a lack of operator training on proper use and set up. Lee developed a comprehensive training plan, initially for seven machine operators. The first part of the training focused on tool setup, use and proper die clearance. While these may seem like basic concepts, newer operators may not be as familiar or comfortable with them, so they are more likely to make mistakes.

Lee also noticed that the company was going through a large number of workholders when during parting operations. Since the parting tools were not set up properly, the punch would hit the clamps, damaging both the punch and workholders. To combat this, Lee recommended changing the parting tool to Mate's fully guided system that is specifically designed for slitting and parting applications.

The fully guided clamp clearing slitting tool is designed to overcome side load and twisting pressures of narrow punches. The clamp clearing relief is intended for close to workholder applications, allowing the clamp to pass

between the upper and lower units. The result is that there is no need to reposition the clamps, saving time and improving quality.

Lee covered tool maintenance in another phase of the training program. He first observed an abnormal amount of grinding wheel consumption. Upon reviewing the sharpened tools, he noticed that they were of poor quality. Investigating further, Lee discovered that they were using the wrong grit of wheel that caused the issues and recommended changing to the proper grit.

Impressive Results

The on site training program was first delivered to 7 operators. Most customers see a minimum of 5% productivity improvement and 3% reduction in tooling costs. At 2,080 hours X 7 operators at a shop labor rate of \$50 per hour, the productivity improvement yielded a gain of \$36,400, while the tooling savings netted an additional \$7,150. Total savings for the initial training program: \$43,550.

By using grinding wheels with incorrect grit, the company went through 104 wheels per year; at a cost of \$519 per wheel, the annual spend was \$53,976. Using the proper grit wheels, the consumption dropped to 30 wheels per year. The proper wheels also cost less at \$429 each, so the annual cost dropped by \$41,106 to \$12,870 per year, a 76% decrease.

Finally, switching to the fully guided clamp clearing slitting tool resolved the workholder damage problem. Prior to the switch, the company spent \$5,570 per year on workholders; after the spend dropped 50% to \$2,785.

Impressed with the results, the company continues to have Lee train new groups of operators today.

Total Combined Savings from Mate's Solutions: Over \$87,000!