Miniature Precision Components (MPC), headquartered in Walworth, WI since 1972 is a leading designer and manufacturer of thermoplastic components, extruded tubing, and complete assemblies. The company specializes in manufacturing under-the-hood automotive parts such as oil cap assemblies, PCV valves, check valves, engine shields, and coolant components. Its customers include Ford, General Motors, Chrysler, Nissan, and Toyota.

MPC tooling engineer Mike Wohlfarth supervises new tooling for production at the company's Prairie du Chien, WI manufacturing facility. There, 40 Van Dorn and Cincinnati Milacron injection molding machines ranging from 25 to 550 tons operate 24/7 year-round. Also installed at the site are three Mold-Vac 10,000 systems. Mold-Vac units are mold evacuation systems designed to eliminate entrapped air and gas within mold cavities prior to and during the plastic injection molding cycle. The units were purchased from CAE Services (Batavia, IL). "Those who resist investing in the equipment risk the costs associated with downtime and rework as a result of unsatisfactory output. In today's very competitive global marketplace, there is no room for skepticism," adds Wohlfarth. He says the Mold-Vac units are essential in the manufacture of quality parts. "Those who resist investing in the equipment risk the costs associated with downtime and rework as a result of unsatisfactory output. In today's very competitive global marketplace, there is no room for skepticism," adds Wohlfarth. He says the Mold-Vac units extend the period of time between cleaning cycles for the injection molds. "The time saved is dramatic. In addition, the length of time between preventative maintenance has been extended as a result of using Mold-Vac systems. They also eliminate visual defects such as burns, and significantly reduce shot shorts," notes Wohlfarth.

Ease of use

While Mold-Vac systems are standalone and can be moved from machine to machine as needed, Wohlfarth and his colleagues physically hard-plumbed the Mold-Vac devices to the injection molding machines as dedicated units. "The Mold-Vac machines are definitely plug-and-play in terms of ease of installation and use," says Wohlfarth. "We needed no assistance getting them up and running and we have experienced no problems whatsoever with them. They worked as guaranteed. Our part quality would definitely decrease without the Mold-Vac systems. In addition, we would experience a drastic increase in rejects such as part burns, and we would have to clean the tools much more often," he adds.

CAE Services

Wohlfarth says MPC's relationship with CAE Services has been very positive. "CAE's staff, products, and services are excellent."