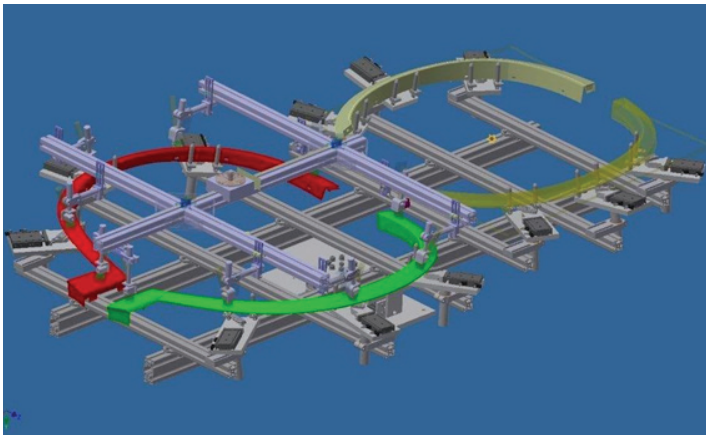
Proper polymers

Pushing the "Cutting Edge"

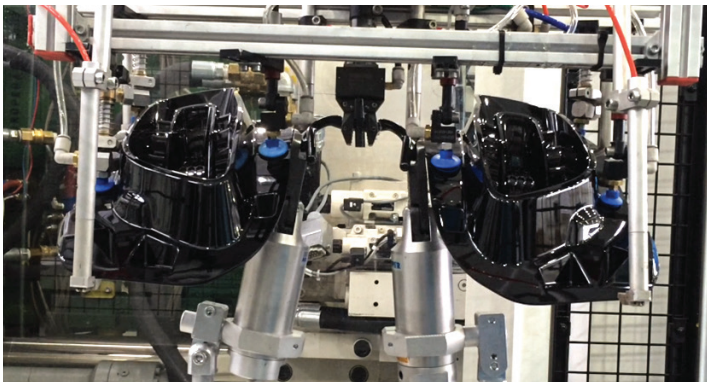
Over the past year, Proper Polymers has been working hard to improve quality and reduce cost while creating a safer environment for its associates. A key initiative for this has been changing our standards and implementing automation to eliminate the need for associates to use knives or clippers to cut gates from parts.

This effort starts up front in the product feasibility and tool design. Whenever possible, molds are designed with direct gates on the part, or are sub-gated to eliminate the need to trim gates all together. Still, there are situations where thick edge gates cannot be avoided. In these situations, Polymers is deploying sophisticated, robotically controlled "End of Arm Tooling" and/or secondary equipment to automatically remove the gates from the parts prior to the parts being conveyed to the associates.

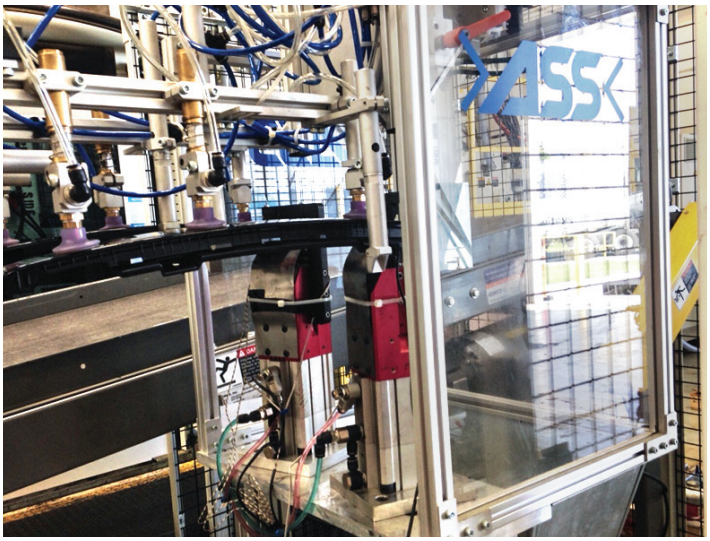
Many parts have multiple gates which would require associates to physically handle the parts and use a hand tool to remove the gates in the allotted cycle time. This adds complexity to the job for the associate. By taking this effort away from the associate, they can now focus on the quality of the part. With automated gate trimming, the gates are trimmed consistently every time, which improves the quality. Safety is always the number one consideration in everything we do. Removing sharp tools from the floor further protects our associates, as well as the parts.



Proper Polymers Anderson- 4 Cavity Wheel Arch Finisher with 12 gates total. The gate cutting is integrated into the End of Arm tooling.



Proper Polymers Pulaski - Jeep Cherokee Head Lamp Bezel- Parts are robotically removed from the mold and presented to the secondary gate trimming device.



Proper Polymers Warren - Chevy Cruze Exterior Pillar- Parts are robotically removed from the mold and presented to the secondary gate trimming device. The gates on are nearly 2 inches long and would be impossible to trim by hand otherwise.

Proper Polymers Warren

The Proper Polymers Warren expansion was complete in June. The addition has doubled the size of the plant to 25,000 sq. ft. and added 2 shipping docks. The transformation will continue on the inside of the plant with the goal of becoming a "World Class" facility.