



The Project:

Mission: Possible

Our customer wanted to increase this product line from a 100 to a 150-position connector. This was an incredible challenge given the intricate thin-walled features, tight centerline spacing and significant increase in flow length. The previous molding vendor was unable to efficiently mold product that consistently met print specifications, as they fought the common molding adage of having “either no-fills or flash.”

If Matrix Tool was not able to solve this challenging molding and tooling puzzle, our customer would be forced to abandon the project. But if successful, this would be the first connector body of its kind in our customer’s catalog. We were eager to put our motto “Solving Your Most Difficult Molding and Tooling Challenges” to the test.

The Challenge:

This project was a perfect fit for Matrix Tool’s technical capabilities and advanced molding equipment. As anticipated, the tooling and molding complexities of this project resulted in a very narrow process window that traditional injection molding machines (IMM) typically struggle with. This often results in additional, yet unnecessary, conditioning loops in an attempt to increase the process window. We knew our technical expertise regarding high precision tool conditioning and advanced processing techniques of our specialized IMM’s would play an integral role in the success of the project.

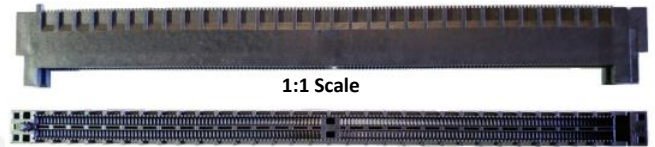
The Solution:

Our initial focus was to sample and provide feedback on the practicality of consistently molding a complex 150-position, double-row, end gated connector body. After sampling, we quickly notified the customer that it would be possible to mold this intricate component. However, additional high precision tooling work tailored to take advantage of our exact dosing IMM’s would be required. Our degreed Plastics Engineers and Tool Conditioning staff worked with our customer’s technical liaison to incorporate both tooling and process improvements. This work resulted in Matrix Tool being able to successfully and consistently produce the 150-position part.

“Matrix is a world-class supplier with excellent technical support, technology and business processes. They are a tremendous partner to have in our supply chain.”—Mike M., Principal Plastics Engineer

The Benefits:

Our customer was able to relocate an existing tool that was unable to produce acceptable product from another molding vendor. More importantly, our customer was able to salvage a lucrative product line they otherwise would have discontinued. Since this initial success, we notified our customer that positions above 150 are now possible. As our customers continue to push the industry envelope, we appreciate the faith placed in Matrix Tool to help them achieve success, even when the challenge seems impossible.



150-Position 0.5 mm Centerline Connector

Contact Matrix Tool for your toughest manufacturing challenges!

For a quotation or additional information, contact Matrix Tool Inc.