

West Ohio Tool Success Spotlight

Chip Maker Drills the Impossible Holes

Client Industry: Semiconductor Manufacturing

Part Production: Semiconductor Chips

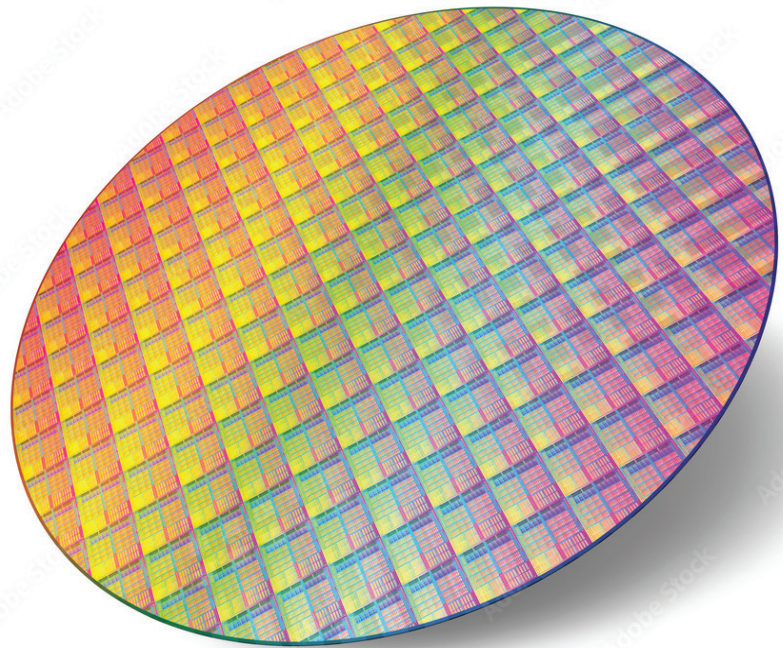
Material: Ceramic

Challenge: A southwestern U.S. manufacturer of semiconductor chips was unable to effectively drill its ceramic wafers. The technical ceramic material is extremely hard and brittle, requiring extremely high cutting forces when machining. As a result, the workpiece characteristics combined with the required machining parameters often led to scrapped parts and/or tool breakage. After trying several other tool makers' PCD drills that failed to successfully drill a single hole, the manufacturer turned to West Ohio Tool for help.

Solution: EdgeX4 PCD drills

West Ohio Tool consulted extensively with the manufacturer to understand the challenges it faced and engineered a custom polycrystalline (PCD) grade and geometry EdgeX4 Full Nib PCD drill. This design also allowed the drill to be resharpened which allowed for lower cost over the life of the drill. In addition to working closely with the customer through the research and development process, West Ohio Tool also closely supported the manufacturer throughout the development process to refine and optimize the design.

Results: The West Ohio Tool EdgeX4 PCD drill successfully drilled multiple holes where other tool makers' designs were unable to generate even one hole successfully. Essentially, West Ohio Tool achieved the impossible, and the manufacturer quickly partnered with West Ohio Tool and has doubled its original order of the custom EdgeX4 PCD drills each year since.



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EDGE X4[™]

Contact us today to find out how West Ohio Tool can help you #GainTheEdge.

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