

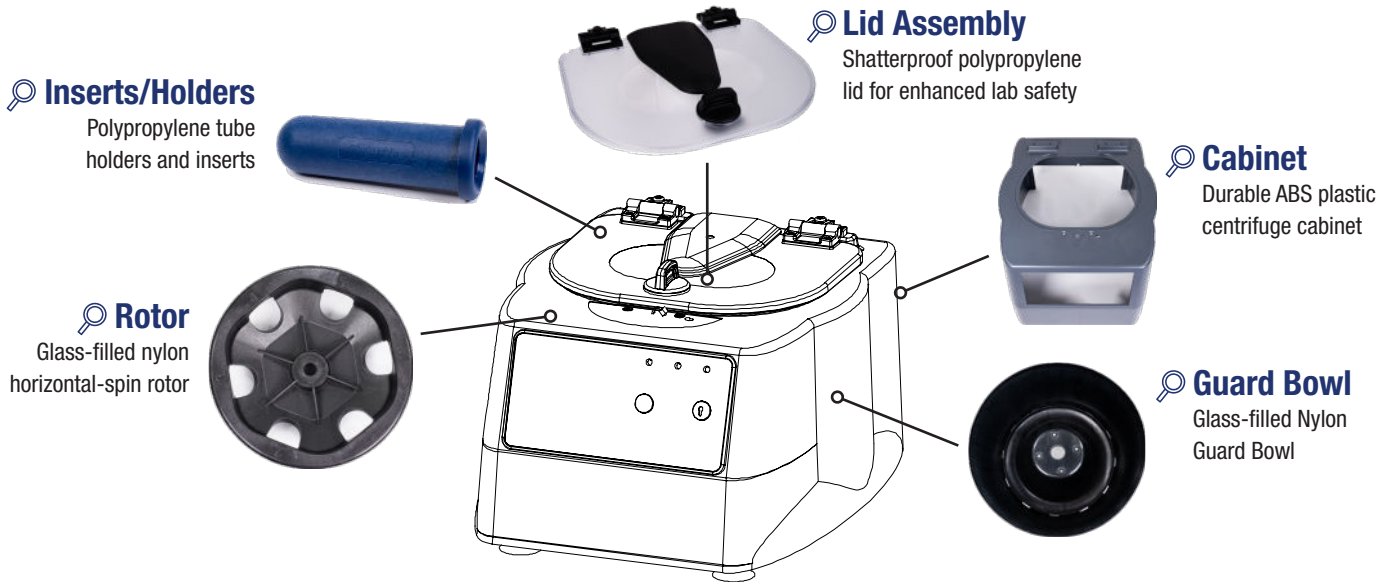
Streamlining Centrifuge Production with Injection Molding Technology

❖ Situation

The 642E is Drucker Diagnostics' flagship centrifuge and a worldwide best-seller for offsite testing and pre-analytic sample processing. To address the high demand for its production, we sought out a solution to maintain the 642E's affordability and reliability while ensuring its performance as a workhorse in the clinical laboratory. After recognizing the limitations of traditional metal parts and the need for continual innovation, we decided to explore the adoption of injection-molded plastics that are engineered specifically for medical applications.

❖ Approach

By assessing which parts could be made in-house, Drucker Diagnostics leveraged injection molding to expand our production capabilities. We transitioned from metal to injection-molded plastic to manufacture a variety of centrifuge accessories and structural components, resulting in improved performance and durability over their metal counterparts. This approach allowed us to produce 70% of the 642E's parts internally, including but not limited to the centrifuge cabinet, guard bowl, lid, front panel, and tube inserts.



❖ Results

As a result of our strategic implementation of injection molding, Drucker Diagnostics is now able to produce more than 40,000 642E centrifuges and 2.9 million parts annually. By vertically integrating our production processes, we have achieved more efficient assembly times and minimized the impact supply chain variability has on production. In many cases, orders can be fulfilled within the same day or next day. This transition to in-house injection molding allows us to continue offering stateside solutions at a competitive price point.

70% of parts are made and designed in-house	2.9 million parts made annually using multiple presses	Materials List: <ul style="list-style-type: none"> • Nylon • ABS and PC-ABS • Santoprene • Polyethylene • Polyethylene Styrene • Delrin • Polycarbonate • Xeony • Ultem • Peek
40,000+ 642E centrifuges manufactured annually		