

## APPLICATION CASE STUDY #116

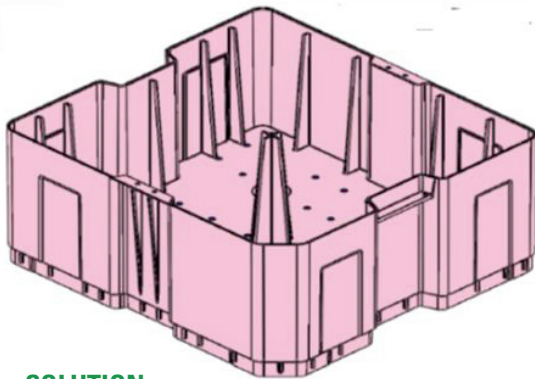
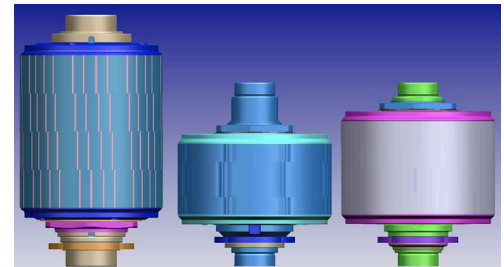
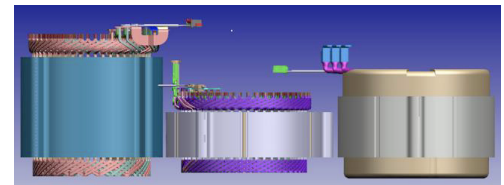
### RETURNABLE PACKAGING: CUSTOM UNIVERSAL STATOR AND ROTOR TRAY

#### APPLICATION:

A custom universal container was needed to help standardize stator and rotor packaging on several upcoming programs as well as cut down tooling costs for multiple programs.

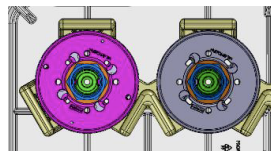
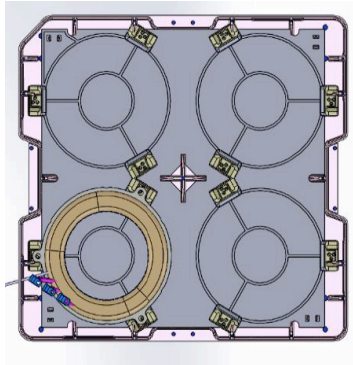
#### PROBLEM:

A tray needed to be developed that could hold 8+ different variations of stators and rotors on multiple programs. A common tray between all variations of parts would eliminate excess tooling, and would allow for common designs, common line side displays, and reusability on future programs. The tray needed flexibility to be able to hold parts with varying diameters and heights, along with protecting critical components on the parts.



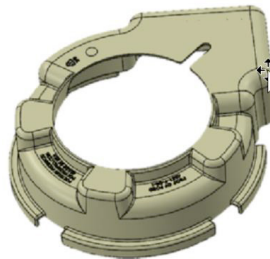
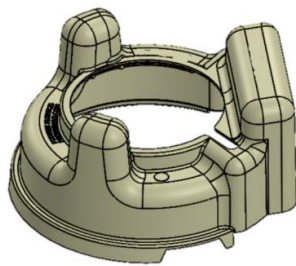
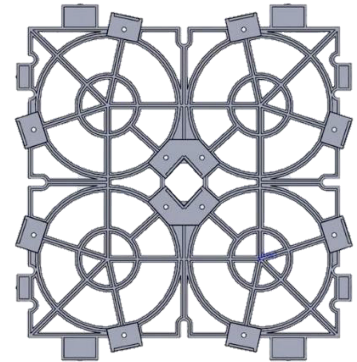
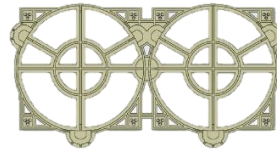
#### SOLUTION:

PolyFlex Products was able to design an injection molded tray that maximized pallet space and interior tray space to accommodate as many variations of parts as possible. The tray has a unique insert locking system to allow for different inserts to be installed inside the tray. The locking system was designed to allow easy removal of inserts so the trays can be reused in the future. PolyFlex Products also designed a unique tray lid that interacts with a flexible TPU hold down piece that protects the wiring on the stators. This new tray has saved roughly \$250,000 in tooling so far and will only continue to save money in the future.



Generic base tray to accommodate multiple varieties of stator and rotor parts.

Unique inserts for each unique part going into the tray. The insert is custom to the part with a common snap in point across all different inserts.



TPU hold down piece designed to protect wires on the stators and hold down the parts during transit.

