

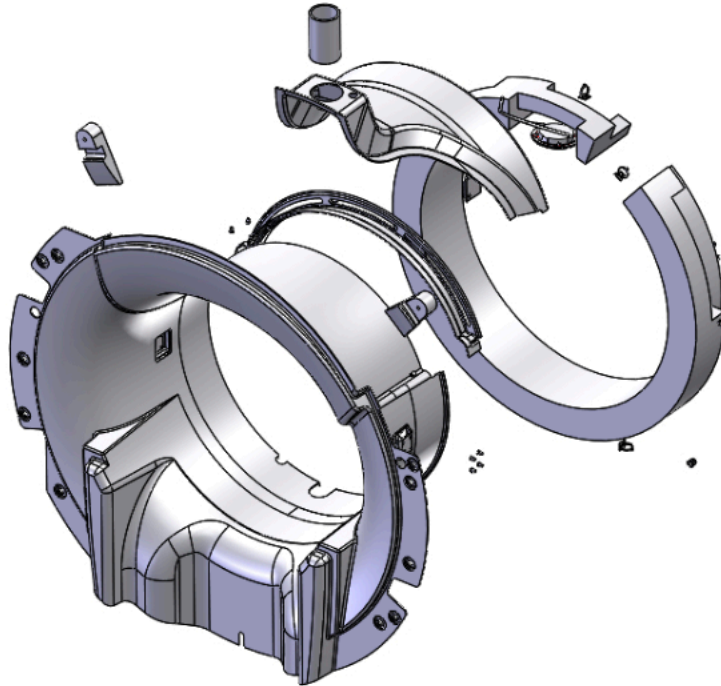
Opportunity: Medical Imaging Bore Component

Customer has requested to change from hand laid up fiberglass to a plastic solution. This component would need to be prototyped prior to building production intent tooling to ensure that customer expectations are met; including structural, aesthetic, and environmental requirements.

Current Material/Method/Structure, etc.

Initial concept design

- Fiberglass
- Hand laid in epoxy mold.
- Manual placed inserts for undercuts.
- Hand-trimmed perimeter/cutouts
- Post molding texture paint.

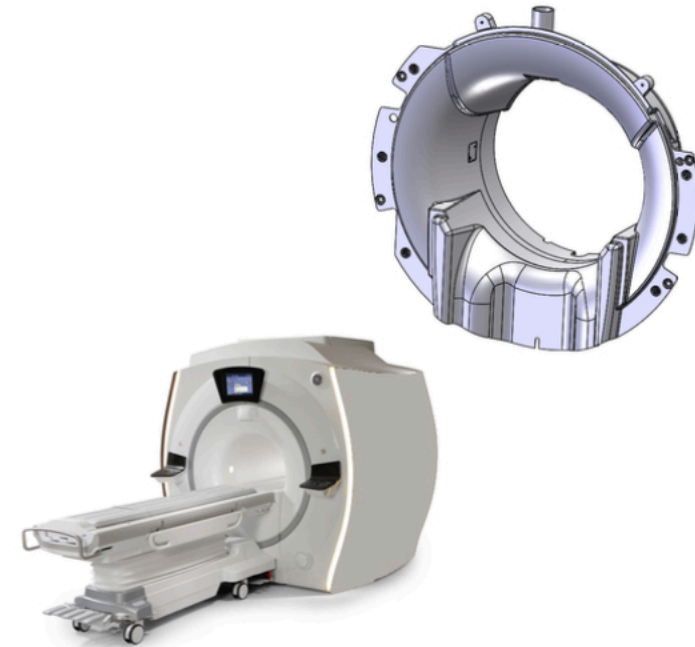


- Results:**
- Repeatable process for formed, trimmed, and assembled features...tighter tolerance.
 - Reduced cycle times resulting in lower part price.
 - Formed in color resulting in a no paint solution.
 - Formed in texture, which was historically obtained by a painting process.
 - Elimination of VOC's during processing.

NEW Material/Method/Structure, etc.>

Final design

- V0 Rated PC/ABS
- Formed in color per GE specification.
- Pressure Form mold
 - Machined using 3D file
 - Tight tolerance features
 - Upmost repeatability
- Automated mold features for undercuts.
- 5-Axis CNC trimmed perimeter/cutouts.



Opportunity: Light Tower Trailer Enclosures

Customer has requested to change from bent sheet metal to a light weight plastic solution. These components would need to be prototyped prior to building production intent tooling to ensure that customer expectations are met; including structural, aesthetic, and environmental requirements.

Current Material/Method/Structure, etc.>

Initial concept design

- Sheet metal
- Bending/welding
- Outdated design due to material limitations.
- Painting required.



- Results:**
- Repeatable process for formed and trimmed features...tighter tolerance.
 - Modern styling obtained from forming tooling.
 - Formed in color options resulting in a no paint solution.
 - High impact resistant material.
 - Elimination of rust condition.

Final design

- Durable HMWPE
- Formed in color options per Terex specifications.
- Deep draw thermoform molds.
 - Machined using 3D file
 - Tight tolerance features
 - Upmost repeatability
- 5-Axis CNC trimmed perimeter/cutouts.

