Portfolio

Jon Klinger 2023

CATERPILLAR

- Manufacturing Techniques Used:
 - Sheet metal, braising, thermoforming, rubber/metal extrusion, weldments, injection molding
- Industry first:
 - Sealed frameless Polycarbonate door
 - Statistical and Finite Element Analysis
- Prototype Project Management:
 - Managed 13 machines and 2 individuals
 - Managed organization for testbeds
 - Managed Prototype Builds







Manufacturing Techniques Used:

Injection Molding, Blow Molding, Sonic Welding, Overmolding,
Silicone, Stamping, Progressive Die, Wire Weldment

• Training:

- Class A Surfacing
- Predictive Analysis
 - Ansys
 - MoldFlow





- Manufacturing Techniques Used:
 - Pipe bending, Lathe turning, Weldments, Injection Molding, Thermoforming
- Training:
 - o GD&T
 - Design
 - Supplier Quality
- Mentored Younger Engineers
 - o Class A Surface Modeling
 - SAP
 - GD&T



- Manufacturing Techniques Used:
 - Injection Molding, Stamping, "Kiss Cut" Stamping, Overmolding
 - Casting
- Advanced Surfacing for Industrial Design Integration
 - Plastic components
 - Accessory backwards compatibility
 - Size minimums for buttons maintained in minimal space claim
- First NFPA (1802)Rated Radio
 - Heat and immersion cycles that outperform IP ratings
- Drawings
 - Utilized MDB (Model Based Dimensioning) methodology to simplify 2D-Drawing process
 - Practical GD&T usage daily



