



ALTERNATIVE DESIGN

MANUFACTURING & SUPPLY, INC.

Proven Products. Creative Solutions.



What We Do:

- Custom metal fabrication
- Extensive sheet metal background
- Design/develop custom products
- Specialize in the design and manufacture of laboratory animal housing and commercial poultry equipment
- Commercial construction projects

Alternative Design Manufacturing & Supply

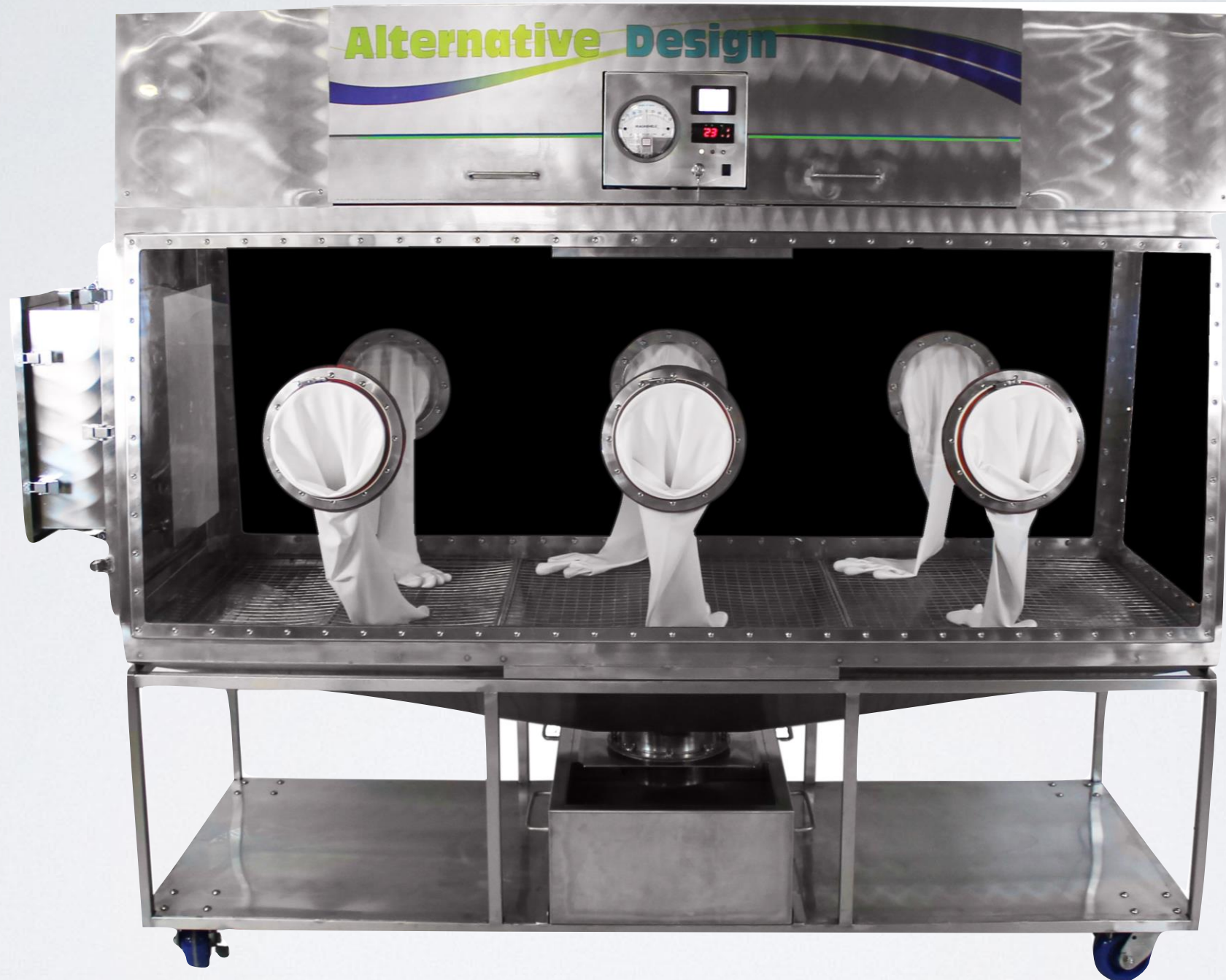
Siloam Springs, AR 72761

800-320-2459

www.alternativedesign.com



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Product Example – Glove Port Isolator



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Product Example – Skid Steer Grapple



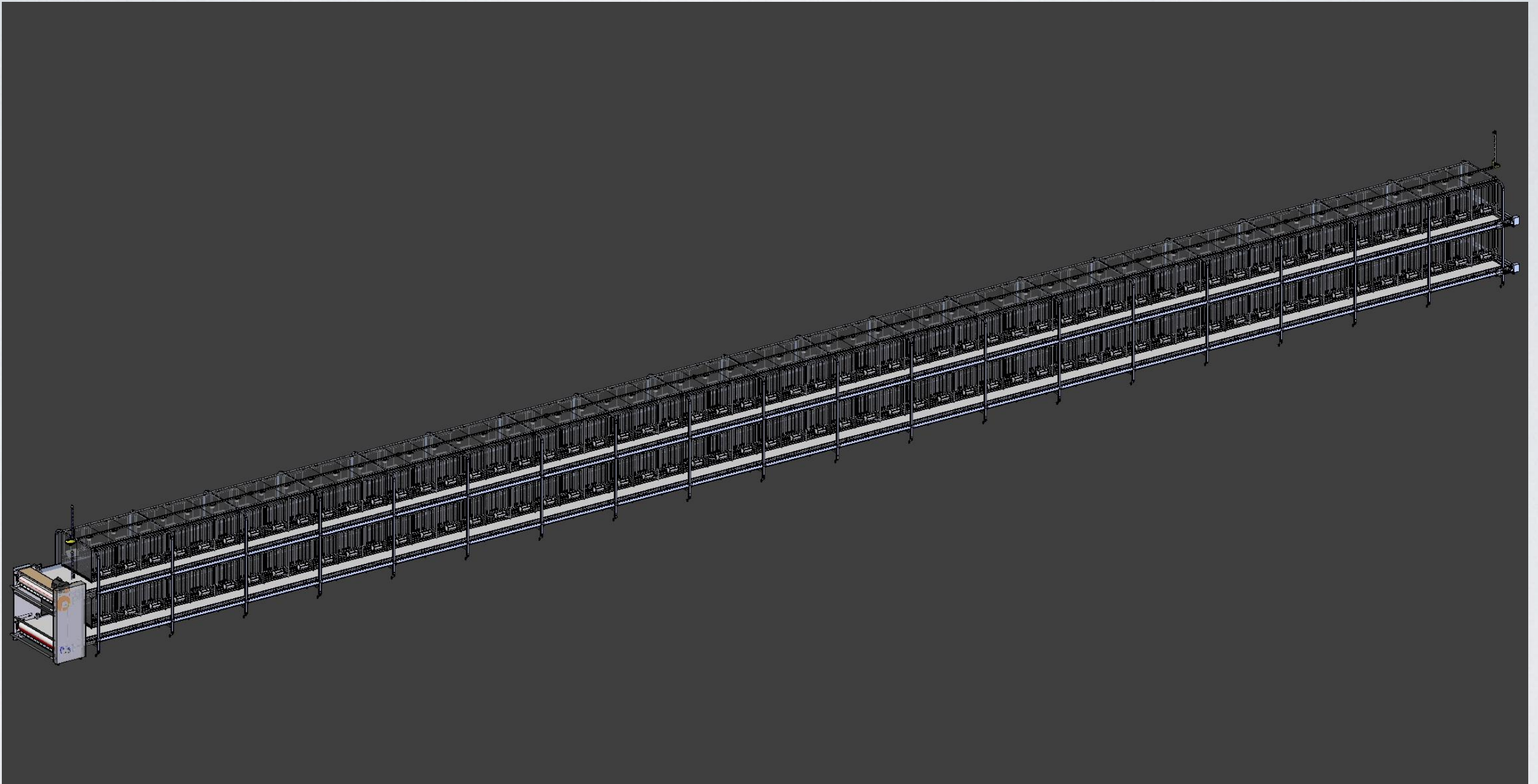
Product Example – Egg Buggy



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Product Example – Molded Plastic Products



Product Example – Poultry Row



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Product Example – Pedestrian Flyover



Capabilities



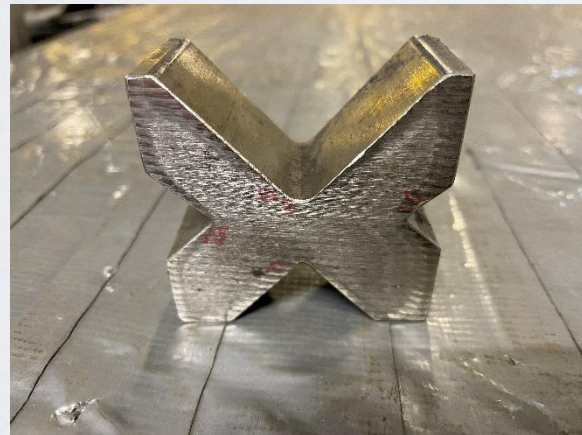
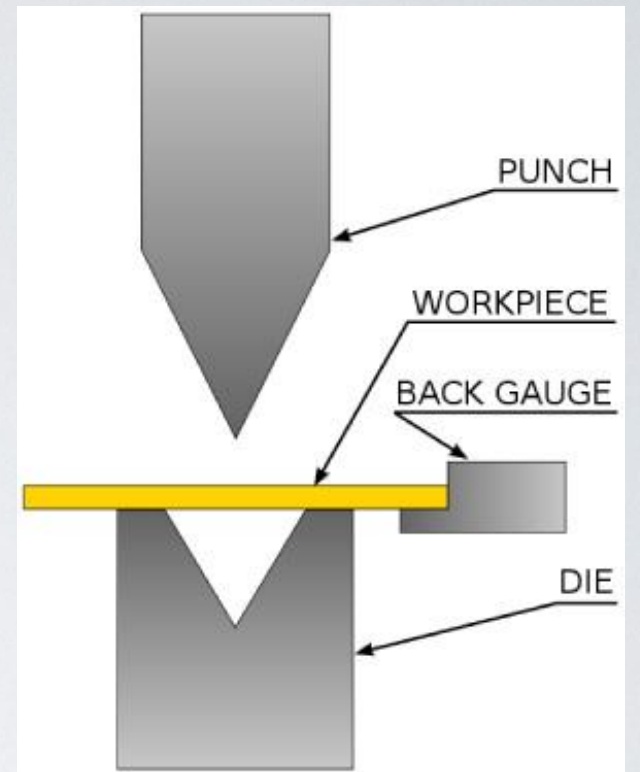
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Sheet Metal Types and Finishes



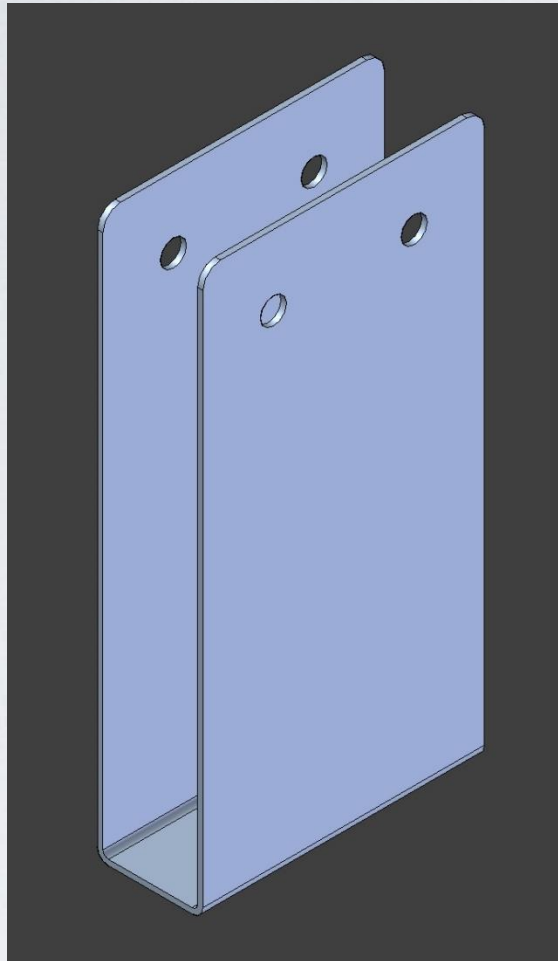
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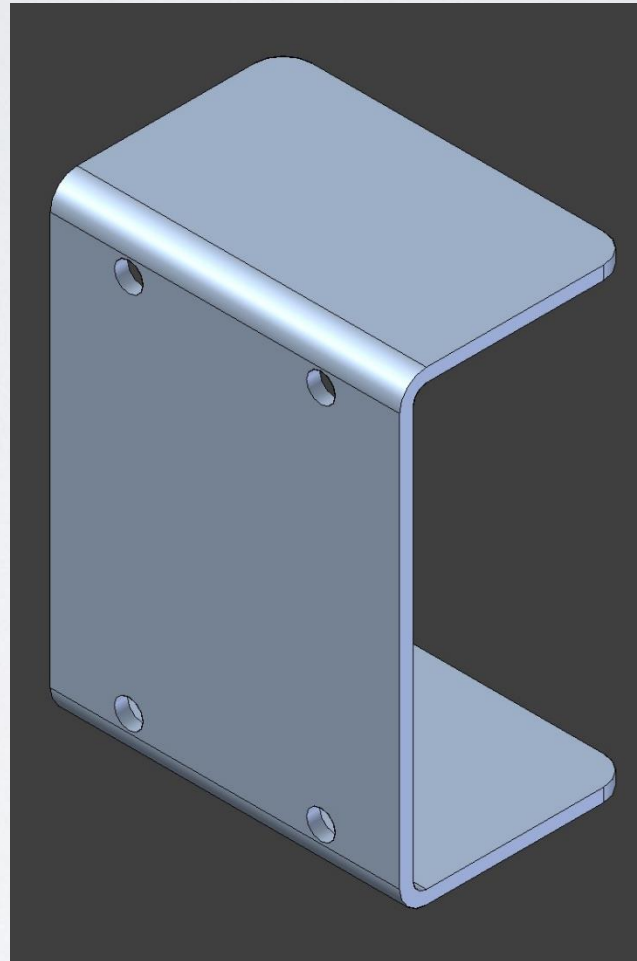
Sheet Metal Forming



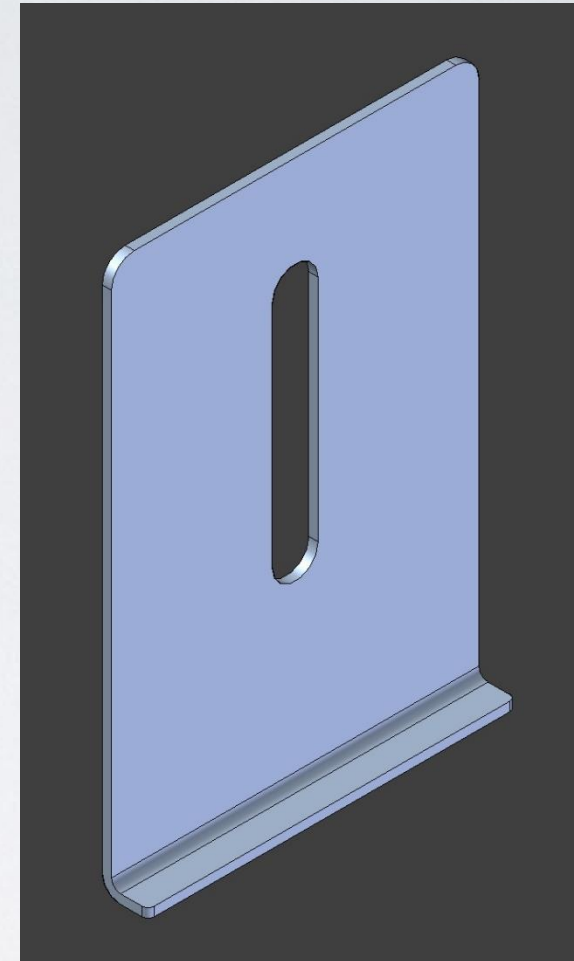
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Aspect Ratio /
Flange Depth



Cutouts Near Bends

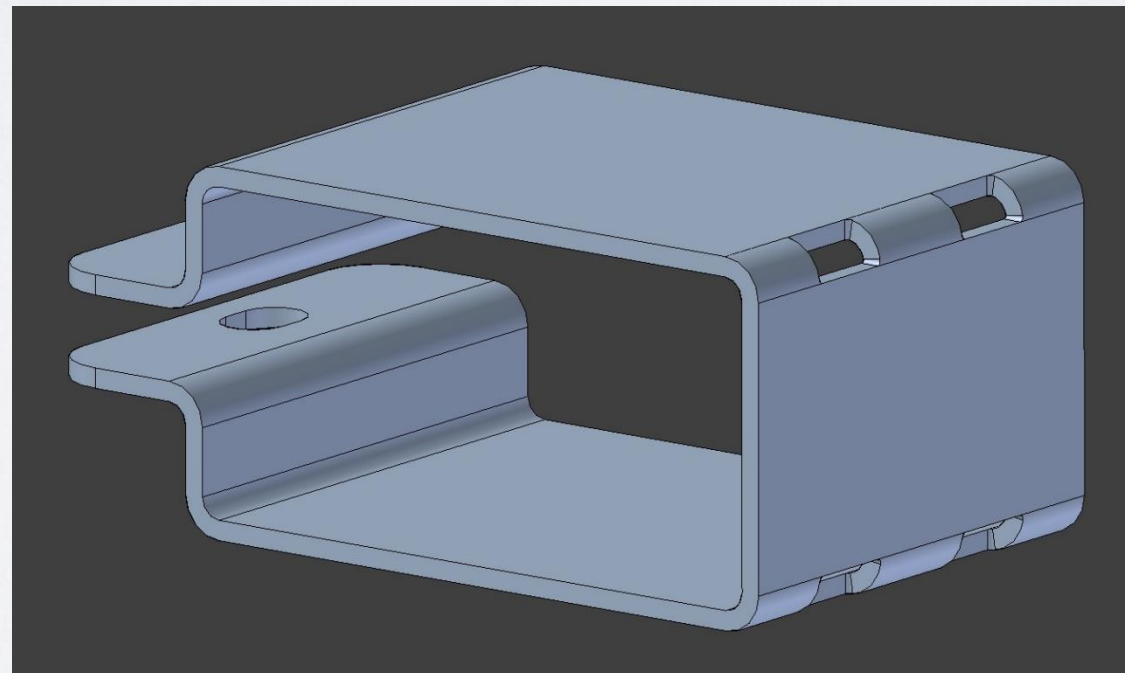
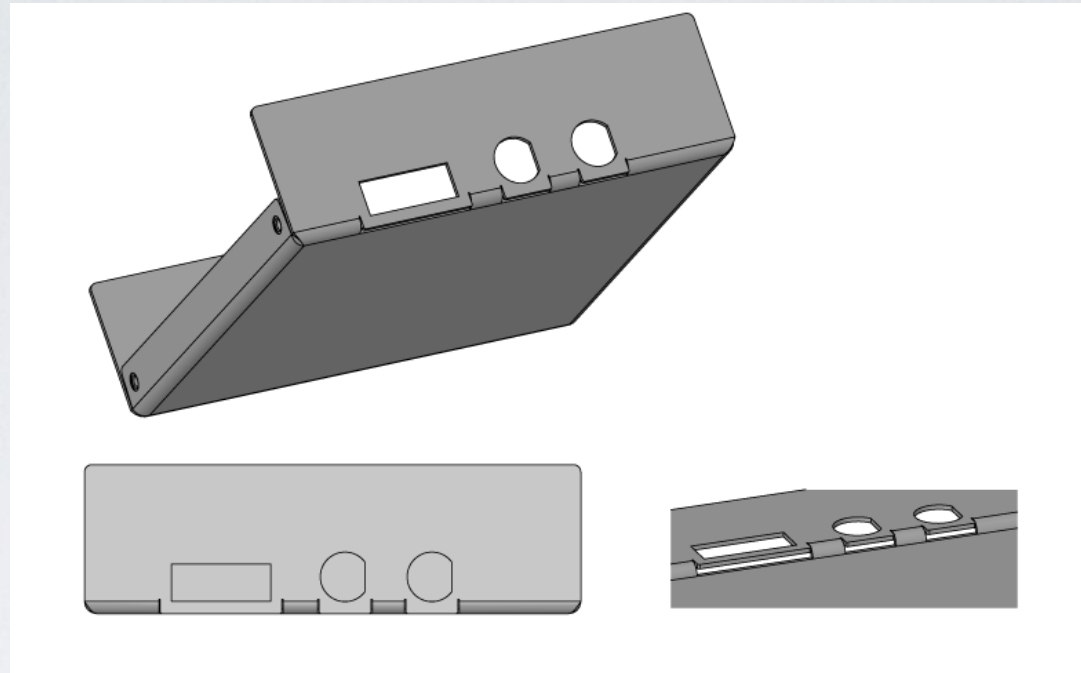


Flange Too Short

Sheet Metal Forming – Bad Part Design



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Sheet Metal Forming – Tips and Tricks

Material Selection

- Galvanized 30% more than mild steel

- Stainless steel almost 300% more than mild steel

Tolerances

- Design in wiggle room and adjustment when possible

- Be mindful of drawing tolerances and critical dimensions

- Be mindful of the process used to make the part; some are more precise than others

Welding

- More welds are not necessarily better

- Unintended side effects – stress, warping, added cost

- Consider fasteners such as bolts or rivets when possible

Working with vendors

- Convey designs/drawings/ideas as clearly as possible

- Be clear on what functions/features are important, let the experts handle the rest

- Be willing to accept suggestions and design changes in order to improve end result

- Questions are cheap, rework is not

Design Tips and Tricks



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