



Precision impact extrusion expertise

Give your business a competitive edge. Our impact extrusion process quickly produces near-net-shape parts from aluminum or steel. High-quality impacts reduce material costs, minimize machining times, and increase component strength. We are a trusted resource with decades of experience producing complex, highly technical, and difficult-to-manufacture components. We offer an extensive array of finishing services to integrate with your requirements.



Learn more at:
thunderbird-metals.com



Aluminum and steel impact extrusions



Extensive experience producing technical, high-precision, and difficult-to-manufacture extrusions of a wide range of sizes and shapes.

High precision for complex parts



Specialized processes to meet tolerances for size, concentricity, straightness, surface finish, and strength.

Value-added services beyond near-net shape



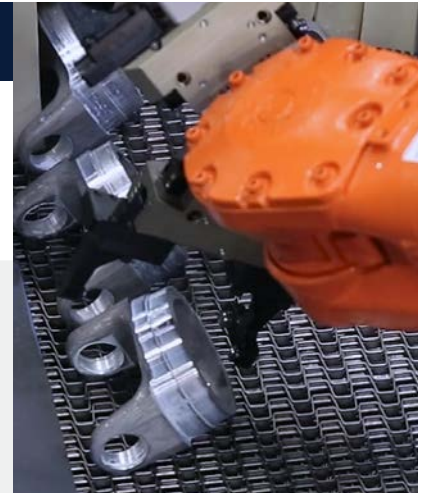
To complement our extrusions, we offer in-house secondary services for completely finished parts.

[performance under pressure]

Cost-effective aluminum and steel impact extrusions

Our single-stroke impacting lowers component costs and creates stronger parts that are customized for your application. We build our impact tools in-house, allowing us to produce extruded parts to match your exact specifications.

- ISO 9001, IATF 16949, ITAR, DOT, TC
- Aluminum impacts from simple to complex shapes
- In-house, fully equipped tool and die shop
- Cold-forged steel impacts, blanks, and machined parts
- Robotic work cells for high-volume applications
- High-speed slug cutting up to 10-inch diameter



Technical competency for superb tolerance integrity

Whether your parts require reverse impacting, forward impacting, or combination impacting, we consistently produce even the most difficult-to-manufacture products. Our engineering team works closely with sales to ensure all requirements are met.

- Aluminum part sizes from .75 to 7 inches
- Steel part sizes from 1.75 to 4 inches OD (outside diameter)
- Aluminum part tolerances reaching +/- .002 inches
- Steel part tolerances reaching +/- .005 inches
- 54 presses with strokes up to 40 inches
- Horizontal and vertical presses with tonnages up to 3,300 tons
- Production rates of up to 2,000 per hour



Finishing options beyond near-net shape

We can produce an entirely completed part using additional value-added secondary operations that include CNC machining and turning solutions, heat treating, and partnerships with outside vendors for coating, finishing, and painting.

- Heat-treating ovens, including anneal, solution (T4), and artificial age (T6)
- Annealing, grain refinement, stress relieving, and tempering
- 83 machining centers, including CNC lathes and mills
- Rotary transfer equipment
- Multiple wire and conventional EDMs.
- Spray-type parts washers for aluminum parts

