Give us your complex, multi-step, and integrated manufacturing challenges. Our engineering and processing experts will enhance your product and business performance. As many of our long-term customers say — Value Engineering at U.S. Axle assures improved delivery, performance, reliability, and competitive costs.

**Tubes and Cylinders**
High-precision, fine-surface finishes, concentricities, and deep geometries.

**General use**
Hydraulic Cylinders, Rock Drills, Drill Rods, Oil and Gas applications.
Large, highly finished threads and undercutting.
Welded assembly.
Deep hole drilling, trepanning, thin wall honing.

- **Lengths**: up to 80” (2050 mm)
- **Inner diameters**: 1/4” (6 mm) – 12” (305 mm)

**Flanged Axles**
Large diameter flanges for tough applications.

**General use**
Off-Highway, Construction, Forestry, and Agricultural vehicles.
Precision finished bearing journals and seal diameters.
Deep case induction hardened strength where critical.

- **Lengths**: up to 62” (1580 mm)
- **Diameters**: up to 24” (610 mm)
Our value engineering assures improved delivery, performance, reliability, and competitive costs.

**Straight Axles, Pins, and Shafts**
Engineered to withstand tough drivetrain applications.

- **General use**
  - Off-Highway, Construction, Forestry, and Agricultural vehicles.
  - Specialties products: Aircraft arrestors.
  - Deep case depth induction hardened.
  - Hobbed or rolled splines and gear forms.
  - Precision finished bearing journals and seal diameters.
- **Lengths**
  - 8” (203 mm) – 140” (3556 mm)
- **Diameters**
  - 1.5” (38 mm) – 12” (304.8 mm)

**Precision Axles and Shafts**

- **General use**
  - Electric motors, pumps, printing presses, material handling.
  - Precision grinding straight and tapered diameters and lengths to high tolerances and concentricities, keyways, precision true positions and geometry requirements.
  - Quality validation and reporting.
- **Lengths**
  - 8” (203 mm) – 140” (3556 mm)
- **Diameters**
  - 2” (50 mm) – 12” (304.8 mm)
  - Micro finishes to 16 micro (.5)

**Challenge us**
If you have big ideas for the growth of your business, start with U.S. Axle — we take pride in our ability to produce challenging precision axles, shafts, and cylinders for our industry. Focused on performance, reliability, and value, U.S. Axle creates purpose-built solutions to help your company compete in the market.

Collaboration with U.S. Axle leads to long-lasting, mutually beneficial relationships for our customers — because we offer unmatched, personalized service and technical assistance.