

# NET-SHAPED PRECISION-FORGED GEARS



**MERITOR**

## Net-Shaped Forged Gear Teeth

Meritor is a global leader in the design and manufacture of precision-forged gears. These net-shaped gear teeth offer significant advantages over cut-tooth gears such as:

- Increased strength, providing longer life and improved power density
- Improved quality, consistency and reliability
- Modular feature and packaging flexibility

Meritor's precision-forged gears are used in the majority of Class 5 through Class 8 commercial vehicles manufactured in North America and worldwide for a wide range of demanding applications, including:

- On-highway linehaul
- Bus and coach
- Logging
- Fire and emergency
- Military
- Construction, agricultural, mining and many more vocational applications
- Automotive, sport-utility vehicles and pick-up trucks

With more than 100 years of industrial and commercial vehicle axle manufacturing expertise, Meritor is a proven gear solutions provider. By partnering with Meritor, your company will enjoy economies of scale, proven process design methodology and the flexibility to accommodate your application needs.

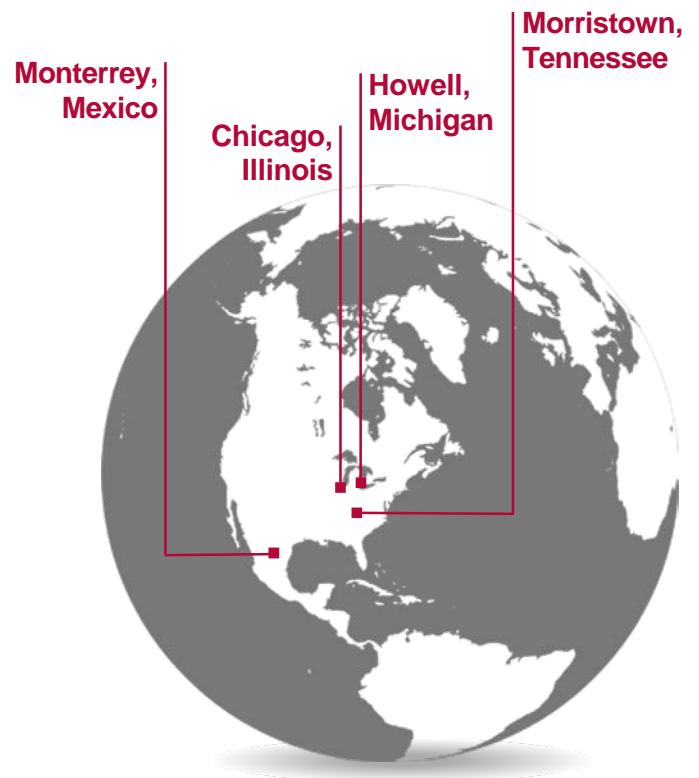
## Features and Benefits

- **Proprietary Meritor net-shaped tooth form, which eliminates tooth machining**
- **Hot-forged controlled grain flow resulting in increased impact strength and longer life**
- **Increased power density simplifies packaging**
- **Parametric design modularity and precision quality**
- **Improved durability and increased impact resistance**
- **Customized for your specific application needs**



## Manufacturing Capabilities

- Leverage high-volume purchases of bar material cut to precision billet length
- State-of-the-art CNC controls on induction heating equipment
- Mechanical and hydraulic forging presses
  - Press size range: 1,000 tons to 4,400 tons
- Fully internal and on-site heat treat
  - Carburize, quench and temper
- Machining
  - Full CNC turning, broaching, shaping and hard turning in cellular and traditional layouts
  - Automation, including in-cell robotic deburring
- Tooling
  - Designed and manufactured in-house
  - EDM and 5 Axis CNC Die Milling
  - Forging process simulation
- Materials
  - SBQ: 4140, 4120, 4184 and many others
- Automated in-line inspection



## Manufacturing Facilities

Product Sizes	
Bevel Gears	<ul style="list-style-type: none"> <li>■ 2"-9" OD</li> <li>■ Up to 13" high</li> <li>■ Up to 50 lbs.</li> </ul>
Forged Gear Quality	<ul style="list-style-type: none"> <li>■ AGMA classes 8-9</li> <li>■ DIN classes 8-9</li> </ul>
Splines	Internal or external
Tooth Profile	Unrestricted

