American Axle’s Power Take Off Unit Housing (PTU) are mechanical gearboxes attached to the transmissions to transmit torque from the engine to the rear axle. American Axle utilized a new lightweighting methodology which involved developing a new design based on structural optimization, manufacturing requirements and results for solidification validation all at one.

**American Axle**

**Power Take Off Unit Housing**

American Axle’s Power Take Off Unit Housing (PTU) are mechanical gearboxes attached to the transmissions to transmit torque from the engine to the rear axle. American Axle utilized a new lightweighting methodology which involved developing a new design based on structural optimization, manufacturing requirements and results for solidification validation all at one.

- **Category:** Module
- **Application:** 2016 General Motors Equinox
- **Weight Savings:** 17% lighter after structural optimization
- **Methodology:** Topology Optimization