The Dicastal wheel and knuckle system reduces vehicle weight by 11.55% by replacing the iron knuckle with aluminum and optimizing it for stiffness and strength. Aluminum also replaces steel for the wheel structure due to its light density and then is optimized using both A-Surface and back pocket methods.

**CITIC Dicastal CO, LTD.**

**Wheel and Knuckle**

- **Category:** Module
- **Application:** 2018 GM T1XX
- **Weight Savings:** 11.55%
- **Methodology:** Design Optimization