



The ADI Advantage for Design Engineers

- Austempered Ductile Iron (ADI) is a recognized engineering material that is globally standardized under such organizations as ASTM, ISO, and SAE.
- ADI has for decades been widespread in such industries as heavy trucks, rail, mining, agriculture, and light vehicle.
- ADI offers a combination of mechanical properties, such as strength-to-weight ratio, that enable it to economically replace steel forgings and weldments.
- ADI offers good manufacturability, which means it offers the inherent flexibility of the iron casting process. This allows designer to put material where it is needed and to remove excess material for a truly optimized solution with **minimized costs, reduced weight, and fewer part numbers.**
- The specification of finished ADI castings means **labor savings** in-house, with less assembly and no welding.
- ADI provides uncommonly good wear resistance, especially when loaded with a normal force. This means **long part life.**
- ADI can be readily sourced domestically to allow the designer to easily interface with the producer for further part optimization and cost reduction.
- Compared with Steel, **ADI components typically cost 20% less than steel components** and is 10% less dense than steel
- Compared with Aluminum, **ADI components typically cost at least 30% less than Aluminum components** and ADI is at least 3 times stronger than aluminum
- Modern iron castings are far superior to weldments in appearance and functionality for the end user.
- ADI offers excellent as-cast machinability and routine machinability even in the hardened state.

Put the ADI Advantage to work for you!