Overview

Bringing unprecedented performance to the world’s most trusted material

NanoSteel is an advanced materials company specializing in the design and commercialization of new proprietary grades of advanced high strength sheet steels for vehicle lightweighting. NanoSteel partners with global automotive sheet steel producers to bring these products to market.

Technology

Proprietary approach to microstructure design

NanoSteel uses conventional steel alloying elements in novel ratios and patented structural refinement mechanisms to develop a new generation of AHSS. These steels feature nano-scale microstructures, which are the basis for their unique mechanical and physical properties.
Advanced performance without compromising ride quality or passenger safety.

NanoSteel has designed a portfolio of advanced high strength steels to meet the automotive industry’s requirements for both high strength and formability.

Higher Formability

NanoSteel sheet steel offers increased formability enabling maximum stiffness and load carrying optimization for a given component. By optimizing part geometry, the part stresses while under load are distributed as smoothly and evenly as possible allowing automotive engineers to use the thinnest material possible for a given functional load carrying requirement.

Weight Savings Impact on Fuel Economy

In a 2013 EDAG study, NanoSteel’s AHSS demonstrated the potential of reducing BIW vehicle weight by 30%. Industry standards cite that for every 10% reduction in vehicle curb weight, there is an associated 6-7% improvement in fuel economy.