

## Future of Lightweighting Entry

# Lightweighting Solutions

## NEXMET™ Family of Steels

PRODUCT COMPARISON

	NEXMET 1000	NEXMET 1200
Yield Strength (MPa), avg.	710	1090
Tensile Strength (MPa), avg.	1010	1220
Tensile Elongation (%), avg.	21	15
Hole Expansion Ratio (%), avg.	22	31



## AK Steel

## NEXMET 3rd Generation

Lightweighting in the automotive industry is driven by the increased need for fuel economy while maintaining or improving the level of occupant safety. Many aspects of vehicle design and functionality need to be considered to meet these demands with economically viable solutions, and one very important contributor is material selection. AK Steel has recently launched NEXMET™ 1000 and 1200 Advanced High Strength Steels (AHSS) which represent a significant leap over previous state of the art Advanced High Strength Steels. NEXMET™ AHSS offers automotive designers the opportunity to design components with strength levels 1.5 to 4 times that of mild steels, with even greater formability than typical AHSS, allowing the production of complex part geometries. As a result, by using NEXMET™ AHSS, vehicle structures can be lightweighted directly through down-gauging, and indirectly through mass de-compounding. Because NEXMET™ AHSS can be made into automotive components using the OEM's existing manufacturing technology, it can be deployed without capital investment. This provides the potential to maintain a similar price point to the final consumer, as compared to alternative materials.

Presented in partnership with:



Supported by:

