







## Henkel Bonderite M-NT 1820

Bonderite M-NT 1820 Zirconium Oxide Based Thin Film Mixed Metal Pretreatment is the world's first nano-ceramic metal pretreatment technology for lightweight metals. The technology allows for higher percentages of aluminum vehicle structure content with added performance benefits to reductions in natural resource consumption and OE paint shop waste disposal and allows up to 100% of the body-in-white surface area to be constructed with aluminum.

Category:
Enabling
Technology

Application:

Several 2014 - 2017 Vehicle Models

Weight Savings:

Not disclosed, technology is an enabler for lightweight aluminum to be used within vehicle design.

Methodology:

**Material Optimization** 

Presented in partnership with:





