



Performance Through Carbon Chemistry

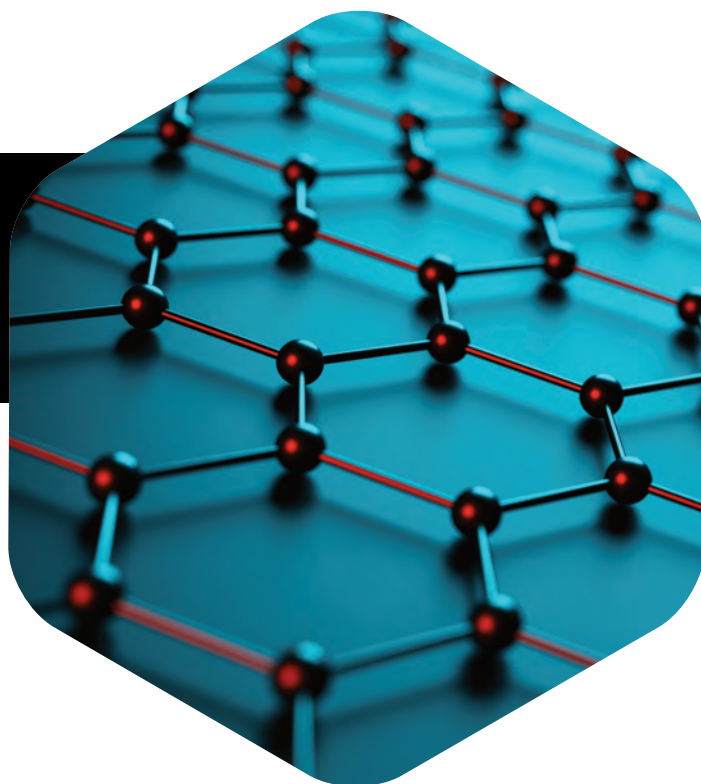
UNLEASHING THE POWER OF



GRAPHENEBLACK SMC™
A NanoXplore Product

Stronger, Lighter, Higher Quality Parts Using GrapheneBlack SMC™

- ✓ Significant light-weighting compared to conventional SMC
- ✓ Significant increase in mechanical strength and safety factors
- ✓ Superior surface quality: reduced surface waviness
- ✓ Improved moisture and humidity absorption
- ✓ Improved cracking resistance
- ✓ Enhanced UV tolerance



NanoXplore Inc. graphene and graphene-enhanced composite products passed the stringent qualification process for the transportation market. The alliance with **Molding Products LLC** introduces graphene-enhanced composite products into exterior and battery enclosures parts of the passenger vehicle market as well as heavy commercial vehicles and buses.

By combining NanoXplore's proprietary graphene technology with Molding Products' SMC formulation expertise, both companies can deliver significant weight savings with superior properties for the end-user's application.



STRENGTH



LIGHT-WEIGHTING



PROCESSABILITY



UV RESISTANCE

Significant benefits when designing new components:

Less
SMC
material

Avg.
15%
Light-weighting
potential

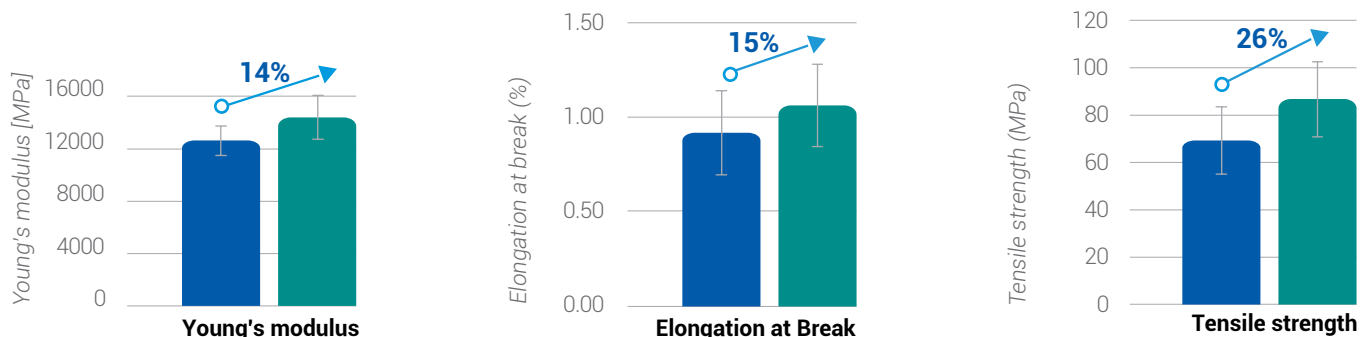
Sustainability &
Reduced
Emissions

Enhanced
Class A

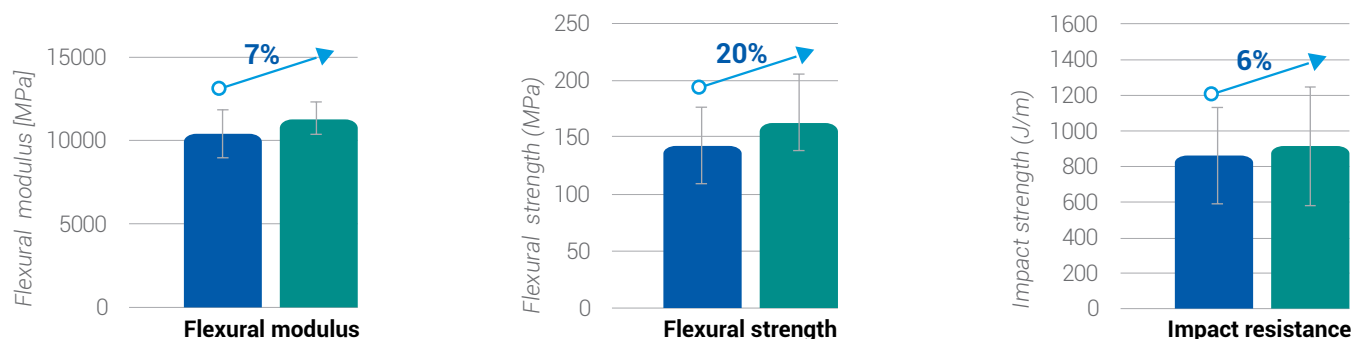
Surface Finish

Increase
EV vehicle range
& Fuel economy

Better
In-mold Flow



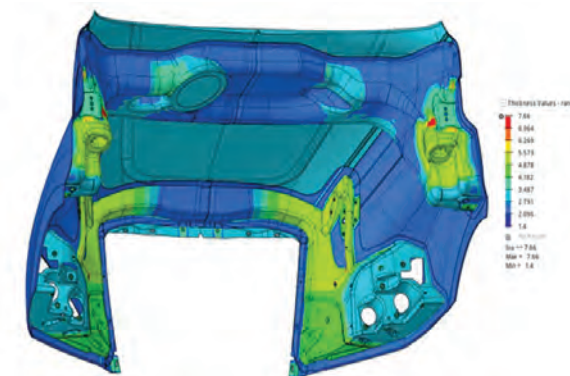
Across the Board Improvements in Mechanical Strength



The data above shows that GrapheneBlack delivers significant improvements in mechanical properties that were measured and validated in all surface directions.

Based on these strength improvements, the graphic below represents a finite element analyses that predicts the projected weight savings and design safety factor on an individual component. This light-weighting benefit can be expanded to more exterior or structural components to yield a large weight savings per vehicle.

- ✓ An FEA analysis was performed using a hood model
- ✓ Criteria for a typical truck hood design was considered including modal frequencies (mass & stiffness based), strength, & stiffness
- ✓ Confirmed safety factor increases by 24% at a thinner profile



Materials	Thickness	Thickness high stress area	Mass (Kg)	SF (6.5G down)	SF (4G Fore_Aft)	SF (5.5G Cross_car)
Conventional SMC	3mm	As mapped	55.15	1.7	1.6	1.6
SMC_Graphene	2.5mm	As mapped (properties 3mm)	46.17	2.1	2.0	2.0

ABOUT NANOXPLORE TSX: GRA | OTCQX: NNXPF

NanoXplore is a graphene company: a manufacturer and supplier of high-volume graphene powder for use in industrial markets. The company provides standard and custom graphene-enhanced plastic and composite products to customers in transportation, packaging, pipe, energy, and other industrial sectors. NanoXplore is headquartered in Montreal, Quebec with manufacturing facilities across North America and Europe.



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