BX Ballasted System Utilizes Glass-Reinforced Composite Polymer

BX Made With Ultramid® by BASF

BX Chassis utilize a heat-stabilized, weather-resistant, and 33% glass-fiber-reinforced PA6 injection molding compound (Ultramid® 8233G HS BK-106)—offering great strength, stiffness, high-temp performance, and stability.

First developed in the mid 1930’s, Glass Fiber Reinforced Plastic (GFRP) has become a staple in the building industry. Originally used for the construction of industrial parts, the architectural advantages were discovered in 1967 with the attempted destruction of Disneyland’s “House of the Future.” Having stood for 10 years, the futuristic house was made entirely of fiberglass, and when the attraction was no longer deemed necessary, it was scheduled for destruction. Amazingly, the wrecking ball merely bounced off the structure, and the possibilities for GFRP were recognized and began to grow. By 1994, nearly 600 million pounds of composite was being used in building materials.

Ultramid excels in uses where external parts are exposed to the elements—being used in applications such as tools, gears, automotive window mechanisms, electrical components, coil bobbins and heavy duty automotive rear axle cross beams (details below).

Ultramid Use Case: Rear Axle Cross Beams in Luxury Sedans
• Designed for high stressing and torque from engine-transmission unit
• Reduced the weight of the part by 50% compared to aluminum
• Improved vibration damping and long-term mechanical stability

*Products mentioned use an alternative grade of Ultramid polyamide. This material is not used by all luxury sedan manufacturers nor in all models.
High Strength
GFRP has a very high strength to weight ratio.

Lightweight
Low weights of 2 to 4 lbs. per square foot means faster installation, less structural framing, and lower shipping costs.

Resistance
Resists salty water, chemicals, and the environment—unaffected by acid rain, salts, and most chemicals.

Able to Mold Complex Shapes
Virtually any shape or form can be molded.

No Maintenance Required
Corrosion resistant, with research showing minimal loss of laminate properties after 20+ years.

Durability
Stromberg GFRP stood up to category 5 hurricane Floyd with no damage, while nearby structures were destroyed.

Tested, Certified, and Warrantied

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Engineering stamp above is for example purposes only.

25-Year Warranty
Products are guaranteed to be free of impairing defects.

Every component in the IronRidge BX Ballasted System has been tested to the limit and proven to endure.

Our rigorous approach includes unique structural features, such as multi-dimensional clamps, 360° reinforcement, and a roof-friendly design.

All of our products are fully-certified, code-compliant, listed to UL 2703, and backed by our 25-year warranty.