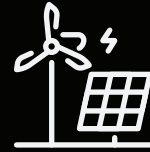


TitanCore™

Custom-Engineered Polymers for Lighter,
Stronger Components

Sectors We Serve

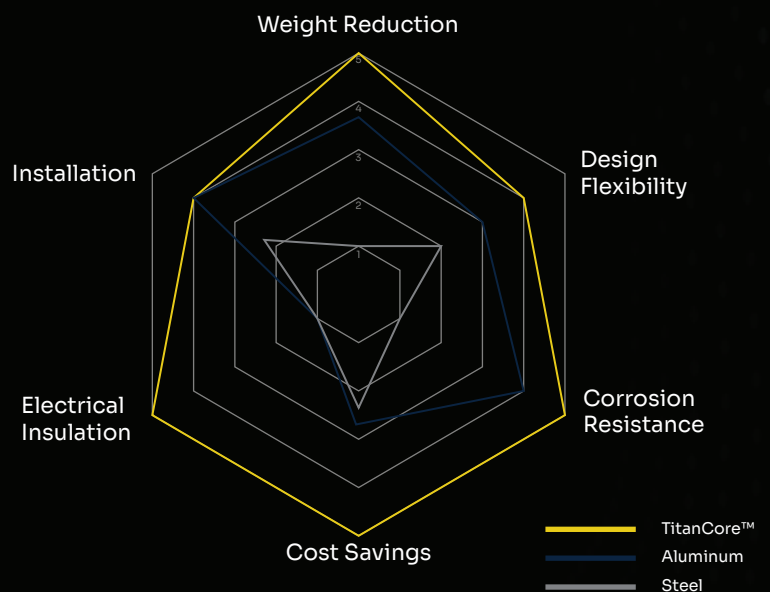


Automotive ▪ Construction ▪ Machinery ▪ Marine ▪ Renewable Energy ▪ And More

TitanCore™ vs Metal

Metal components add weight, corrode in harsh environments, and limit geometry and integration options. TitanCore™ engineered polymers cut weight, resist corrosion, simplify handling, and unlock new designs while keeping lifecycle costs competitive.

The radar chart highlights how TitanCore™ balances weight, durability, and design flexibility versus steel and aluminum.



Key Performance Advantages

- Up to **7x** lighter than steel
- **HPT-UVA** stabilizers for long-term outdoor use
- **Non-corroding** & immune to rust
- Pigment systems matched to **any specified colour**



How TitanCore™ Works With Your Components

TitanCore™ is a family of custom-engineered polymers. Our engineering team uses these materials to convert metal or commodity plastic parts into purpose-built components.

We align material selection, design, and manufacturing so each part fits its loads, environment, and chosen process, whether injection moulding or extrusion.

Choosing the Right TitanCore™ Material

TitanCore™ PX223

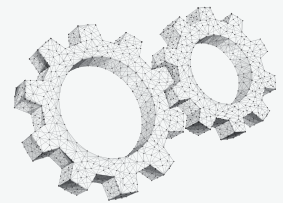
With a low-stretch, durable structure, and moderate thermal stability, TitanCore™ PX223 is ideal for components that experience frequent, high abrasion.

Products made from TitanCore™ PX223

- Gears ▪ Bearings ▪ Engine Covers ▪ Structural Fasteners ▪ Cable Ties ▪ Fishing Line
- Air Intake Manifolds ▪ Electrical Connectors ▪ Appliance Housings

Performance and Testing

Density and Weight ~1.13–1.15 g/cm ³	Tensile Strength (ISO 527) 75–85 MPa	Flammability Rating (UL94) HB, V-2 (upon request)	Wear Resistance (ASTM D3702) High Resistance
Water Absorption ~1.5–2.0%	Thermal Expansion (ISO 11359) ~80–100 × 10 ⁻⁶ /°C	Melting Point 223°C	Flexural Modulus (ISO 178) 2,000–3,200 MPa



TitanCore™ ES1000

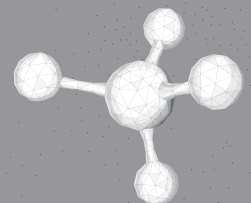
Renowned for its superior mechanical strength and thermal stability, TitanCore™ ES1000 is the go-to material for structural components and high-performance applications.

Products made from TitanCore™ ES1000

- Industrial Fasteners ▪ Rebar Chairs ▪ Cable Trays ▪ Grout Tubes ▪ Outdoor Cladding
- Electrical Enclosures ▪ Snow Retention Systems ▪ Machine Guards ▪ Valve Covers

Performance and Testing

Density and Weight ~1.14 g/cm ³	Tensile Strength (ISO 527) 80–95 MPa	Flammability Rating (UL94) HB, V-2 (upon request)	Wear Resistance (ASTM D3702) Superior Resistance
Water Absorption ~1.3–1.8%	Thermal Expansion (ISO 11359) ~70–85 × 10 ⁻⁶ /°C	Melting Point 263–340°C	Flexural Modulus (ISO 178) 2,500–3,500 MPa



TitanCore™ AQUALITE

Known for its low moisture absorption and resistance to chemicals, TitanCore™ AQUALITE offers exceptional performance in marine, automotive, and industrial environments.

Products made from TitanCore™ AQUALITE

- Fuel Vapour Lines ▪ Pneumatic Fittings ▪ Medical Device Components
- Sealing Rings and Gaskets ▪ Protective Wire Covers ▪ Chemical Storage Tank Linings

Performance and Testing

Density and Weight ~1.01–1.03 g/cm ³	Tensile Strength (ISO 527) 50–65 MPa	Flammability Rating (UL94) HB	Wear Resistance (ASTM D3702) Moderate
Water Absorption ~0.05–0.2%	Thermal Expansion (ISO 11359) ~80–100 × 10 ⁻⁶ /°C	Melting Point ~178°C	Flexural Modulus (ISO 178) 1,200–1,600 MPa



Contact Us

Ready to move your next component to TitanCore™?

Talk to our engineering team today.

info@TitanCore.ca

TitanCore™