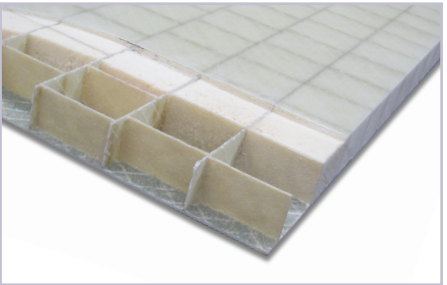
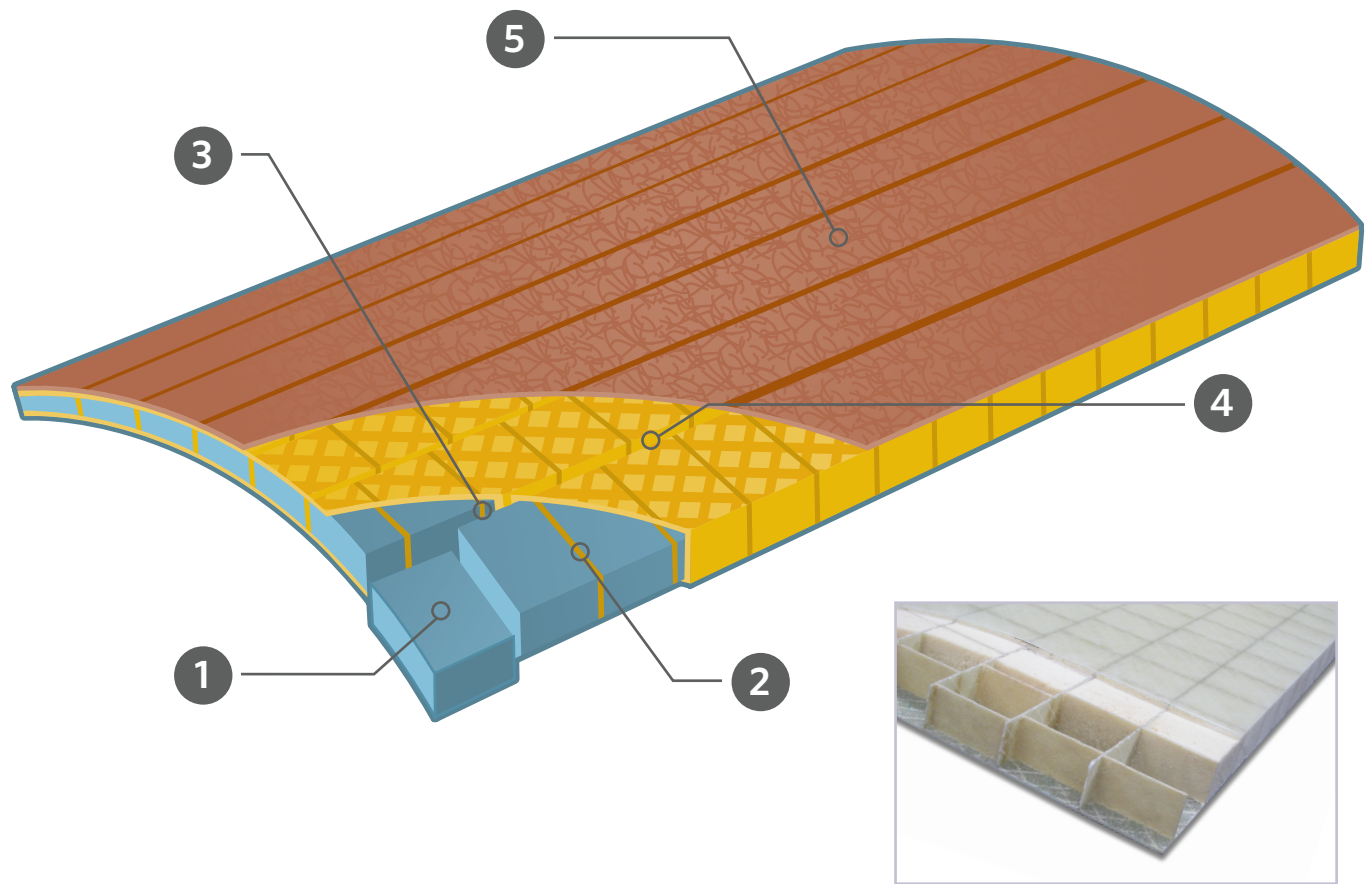


### TYCOR: A Fiberglass Core

TYCOR gives designers a cost advantage compared to balsa and structural foam. The fiber-reinforced pre-form core is designed for vacuum infusion. It is comprised of fiberglass webs which develop nearly all the core's mechanical properties upon infusing and helps prevent resin race tracking even in contoured shapes. Fine cell foam minimizes excess resin absorption and provides increased durability during handling and processing.



Infused TYCOR with foam removed

- 1 Fine-cell, low density, flexible PU foam minimizes resin absorption
- 2 Structural T-Webs—Chopped or continuous filament glass mat, permeable for infusion (optional bi-directional core shown)
- 3 Inherent interconnected channels stabilize webbing and enhance resin flow through core

- 4 Structural L-Webs—Highly efficient, helically wound, E-Glass roving provides continuous through-thickness (z) reinforcement
- 5 Glass surface veil maintains underlying roving alignment while providing excellent contourability and durability



METYX USA, INC.

2504 Lowell Road  
Gastonia, NC 28054  
USA

Phone: +1 (704) 824-1030  
Fax: +1 (704) 824-1031

ISTANBUL FACTORY

Orhanlı Mah.  
Gulsum Sok. No:14  
34956 Tuzla Istanbul / TURKEY

Phone: +90 216 394 32 60  
Fax: +90 216 394 32 58

MANISA FACTORY

MOSB 1. Kısım  
Malazgirt Cad. No:2  
45030 Manisa / TURKEY

Phone: +90 236 302 04 04  
Fax: +90 236 302 04 05

HUNGARY FACTORY

7400 Kaposvár,  
Dombóvári út  
3657/93. hrsz. HUNGARY

Phone: +36 82 510 126  
Fax: +36 25 510 127



www.metyxusa.com | info@metyxusa.com

## METYX Composites®

METYX manufactures and supplies an extensive range of multiaxial, RTM and woven fabric technical textile reinforcements from its four 'state of the art' production facilities in Turkey, Hungary and the US, which all operate under ISO 9001, ISO 14001 and OHSAS accreditations. In addition to wind energy, other key industries using METYX products include: marine, automotive, transportation, infrastructure, building and construction, sport and leisure.

METYX has invested in both production equipment and highly skilled staff to offer customers added value products, custom solutions, technical support and a highly responsive, reliable logistical supply service.

### Your 'Solution Partner'

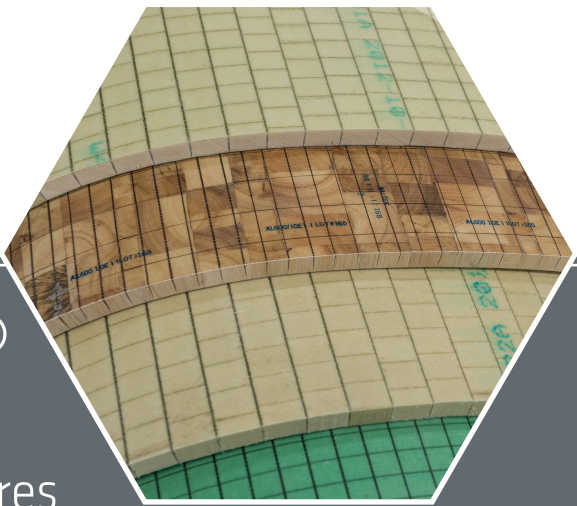
METYX offers its customer exceptional service, quality and logistical support, with technical expertise which can help to reduce costs and add real value to a business.

### Our Vision

"Our vision has always been to deliver a range of high quality products and services which give our customers a competitive advantage. We are totally committed to meeting the individual needs of our customers with tailor made solutions that add real value."

Marine  
Industrial  
Transportation  
Infrastructure

TYCOR®  
Fiber Reinforced Cores





## A New Approach: Optimized Core Performance

Our TYCOR® engineered core materials optimize weight, stiffness and strength in infused applications enabling structures that can be made lighter, cheaper and more reliably than old generation core materials.



### Higher Strength

TYCOR delivers the highest strength per weight per dollar

### Higher Quality

Ease of core placement and infusion uniformity reduce resin filled gaps and facing porosity

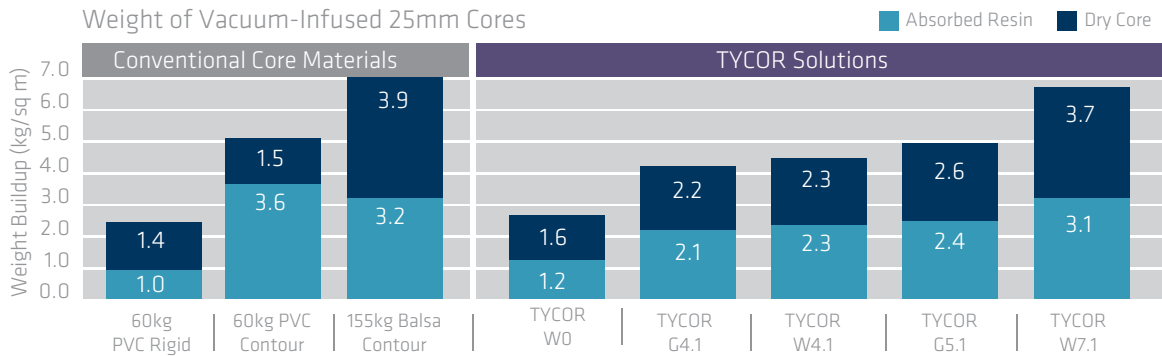
### Lower Weight

TYCOR offers the lowest infused weight due to its efficient composite structure and minimal resin pickup



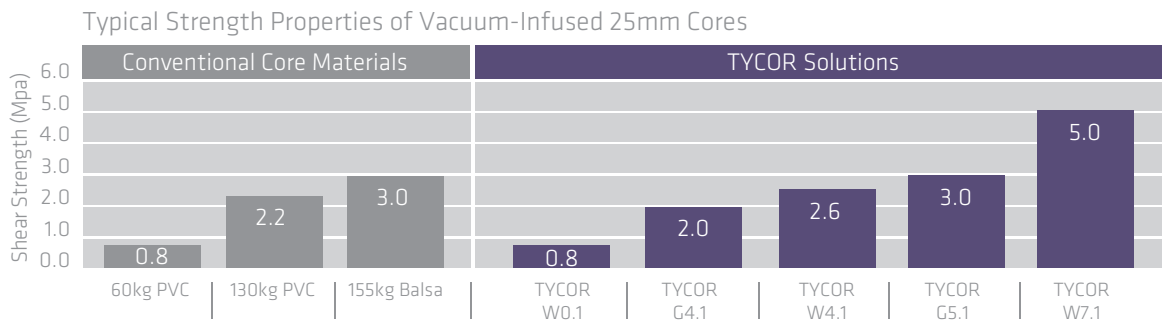
## Lower Weight

Infused TYCOR cores are significantly lighter than infused contourable coated balsa and structural foam. The unique fiber architecture of TYCOR, combined with the closed cell low density foam, significantly reduce resin absorption in molded parts.



## Breadth of Core Solutions

The TYCOR fiber-reinforced core family of products can be produced in a range of thicknesses from 12 mm to 100 mm. These sandwich designs encompass an offering of balanced and unbalanced orthotropic products which provide solutions that minimize weight and costs.

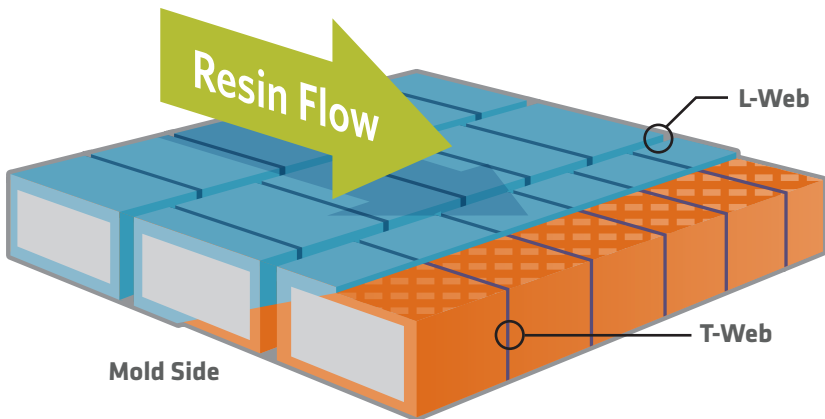


## Higher Quality Infusion

As an assembled core, TYCOR has inherent permeability that provides a better quality infusion. The dry fiber webs help wick and control resin flow through the part and hold the resin where it is designed to be, minimizing voids and dry spotting.

- Resin flow is controlled by fibers in L-webs and T-webs\*
- Permeability designed to limit the tendency to race track compared to open channels
- Webs draw resin to mold side effectively leading to full wet out

\* Optional T-Web design available for TYCOR W series only



## Optimized Core Performance

TYCOR products are engineered for demanding structural applications. Designed for closed molding, TYCOR cores employ through-thickness fiberglass webs in low-density foam and surface skin reinforcements. The fiberglass webs offer high compression and shear strength while the surface skin reinforcements offer excellent core-to-skin bond for improved toughness and durability.

METYX offers a reliable advantage, with meaningful products and solutions that optimize structured performance with TYCOR. Tailoring properties to design requirements maximizes savings in weight and cost in structural applications.



## Marine Applications

TYCOR's internal web structure creates a network of intersecting 'bulkheads' within infused panels. Each compartment is very small and filled with high density closed cell foam. If moisture enters a panel via surface laminate damage or improper installation of a thru-hull fitting, penetration is limited to the compartments immediately adjacent to the damage or fitting. TYCOR panels have been fully submerged for years with little or no weight gain.

- Tank Walls
- Fish Ladders
- Submarine Camels
- Boat Hulls and Decks

## Other Proven Applications

Industrial

- Tanks
- Containers

Transportation

- Railcars
- Bus and Truck Floors
- Walls

Infrastructure

- Bridge Decks
- Manhole Covers
- Utility Box Covers

