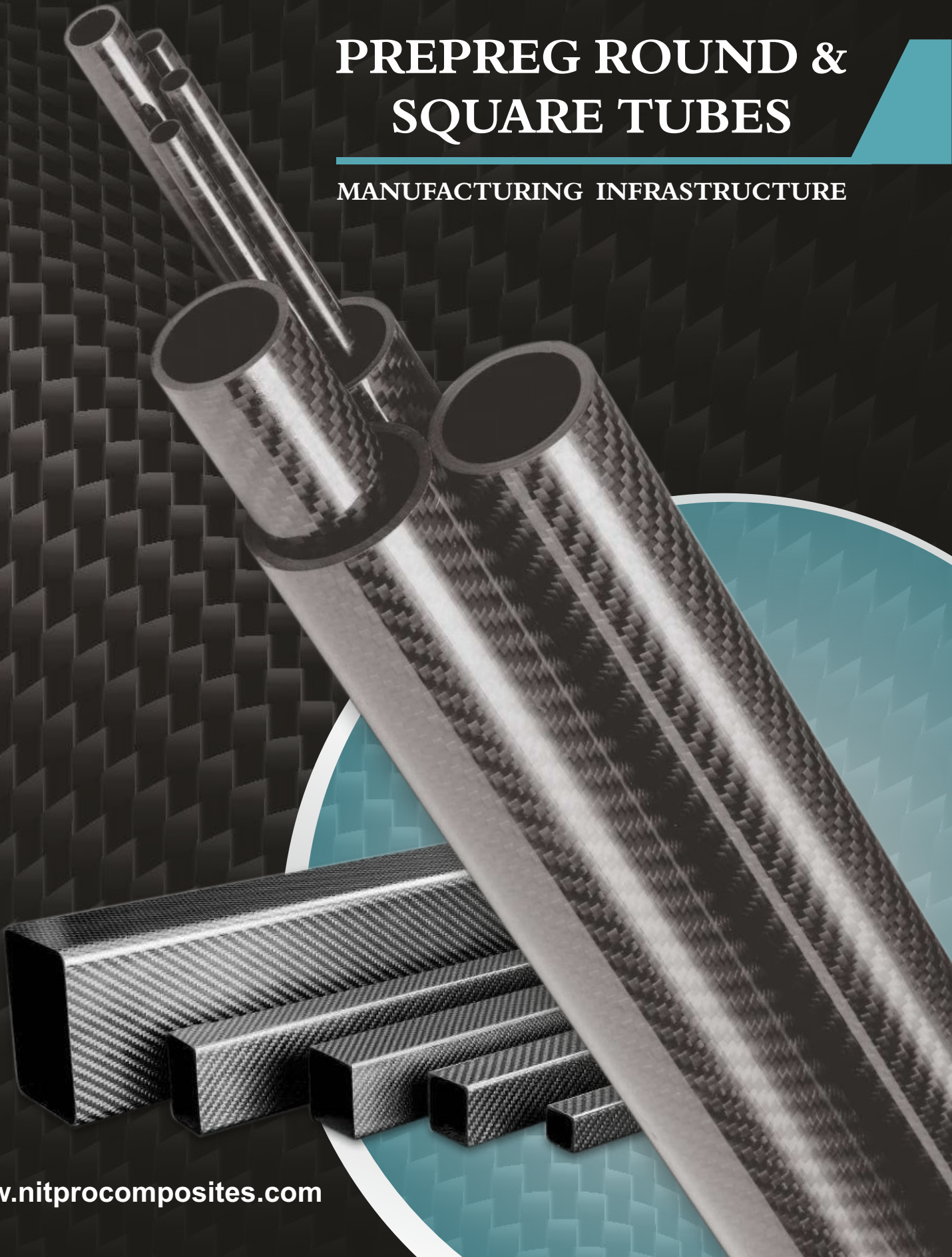


PREPREG ROUND & SQUARE TUBES

MANUFACTURING INFRASTRUCTURE



PREPREG ROUND TUBES

Prepreg is a composite material made from impregnated fibers with resin known for its high strength-to-weight ratio. NitPro Composites manufactures prepreg carbon fiber tubes using multiple layups of multidirectional and/or unidirectional prepregs, including carbon fiber, fiberglass, kevlar, and hybrids along with epoxy matrix.

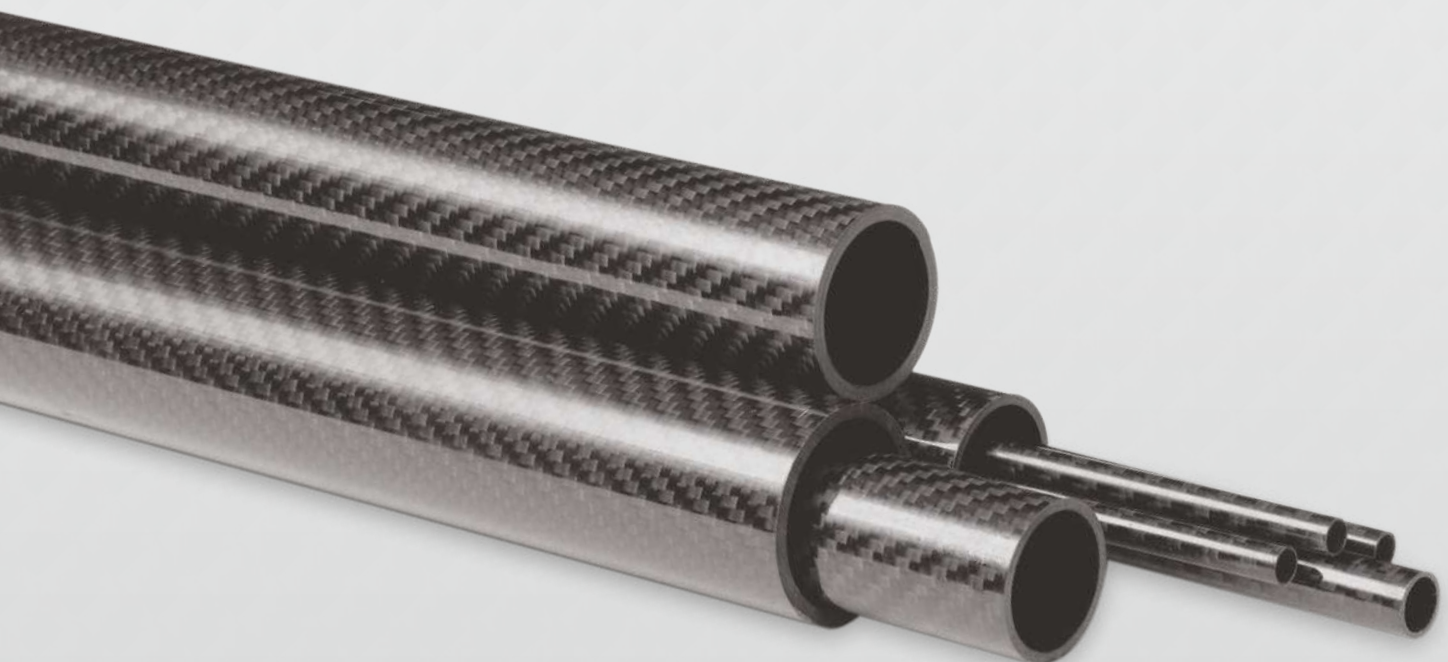
We offer roll wrapped tubes starting from 6 mm to 100 mm diameters in desired wall thickness up to 2 meters in length. The tubes are offered in different finishes like cello-wrapped gloss, smooth grinded gloss, smooth grounded matt in twill, plain weave and unidirectional weave patterns.

PREPREG ROUND TUBES		
PARAMETERS	VALUE	UNIT
Thickness of Material	0.5, 1, 2, 3 and customized	mm
Material Finish	3K glossy/matt twill/plain surface	
Glass Transition Temperature	125	°C
Surface Roughness	1	micron
Fiber Layup	0°/90°Unidirectional with 2X2/1X1 bidirectional outer	degree
Fiber Volume	65±3	%
Density	1.5	gm/cc

*Customised products can be supplied as per customer's request

Key Features

- Accurate layup for different applications
- 80/20 ratio of UD & BD carbon fibers
- Higher specific stiffness
- Easy machinability
- Fine tolerance at ID and OD
- Dimensional stability - Low CTE (Coefficient of Thermal Expansion)
- Thermally stable up to 120°C
- High chemical resistance



PREPREG SQUARE TUBES

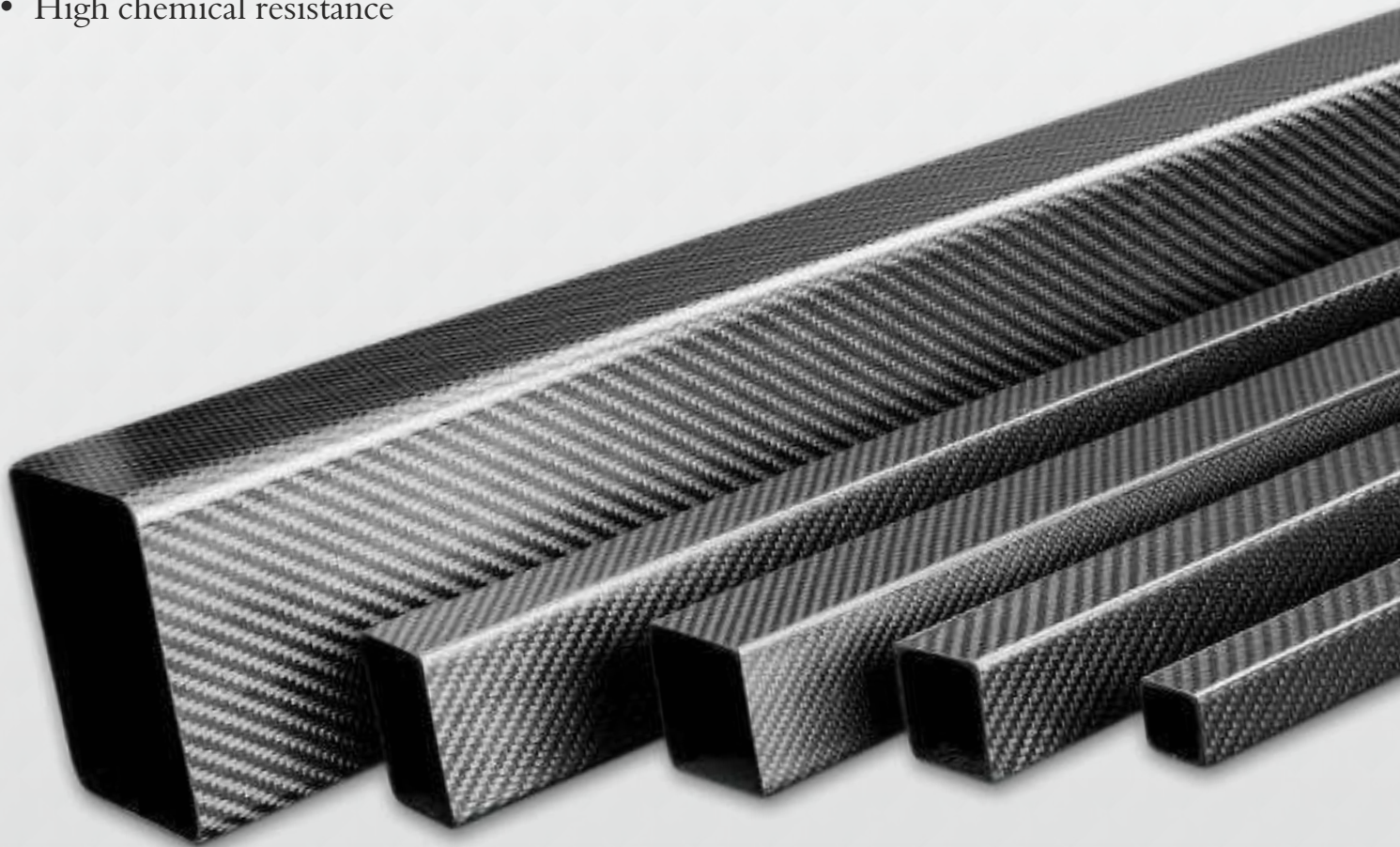
NitPro Composites manufactures carbon fiber square tubes using state-of-the-art technique of pultrusion as well as roll wrapping to ensure high quality and durability.

The pultrusion process creates continuous lengths of tubes with unidirectional properties. Roll wrapping, on the other hand involves multiple wraps of carbon fiber preregs in various weave types. The prepreg square tubes have a better areal moment of inertia which gives higher bending strength.

We manufacture prepreg square tubes in unidirectional weave with gloss and matt finish in customized dimensions.

Key Features

- High strength to weight ratio
- Dimensional stability - Low coefficient of thermal expansion
- Highly corrosion resistant
- Thermally stable up to 125°C
- Higher moment of area provides high stiffness
- High chemical resistance



PREPREG ROUND & SQUARE TUBES MANUFACTURING



OUR AESTHETIC PRODUCTS
GLOSSY/MATT TWILL/PLAIN FINISH

PREPREG ROUND & SQUARE TUBES MANUFACTURING



UNIQUE PORTFOLIO FOR PREPREG TUBES

- Advance techniques for converting prepreg into tubes
- State-of-the-art machines for all processes
- Consistent quality products as no manual process is involved
- Quality assured production to get flawless products
- Large capacity to serve a variety of industries
- Customization in prepreg layup according to the application

APPLICATIONS OF PREPREG TUBES

The roll wrapped prepreg tubes are best for applications that require high bending stiffness and low weight. We cater to industrial applications such as:

- Drones, Robotics & UAV components
- Automobile parts
- Telescopic poles
- Fishing rods, boats, yacht mast, etc.
- Medical Equipment
- Recreation & Sports Equipment



COMPOSITES PRODUCTION FACILITY



PULTRUSION

COMPRESSION MOULDING



VACUUM INFUSION

BLADDER MOLDING



PROCESS DEVELOPMENT



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To know more



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