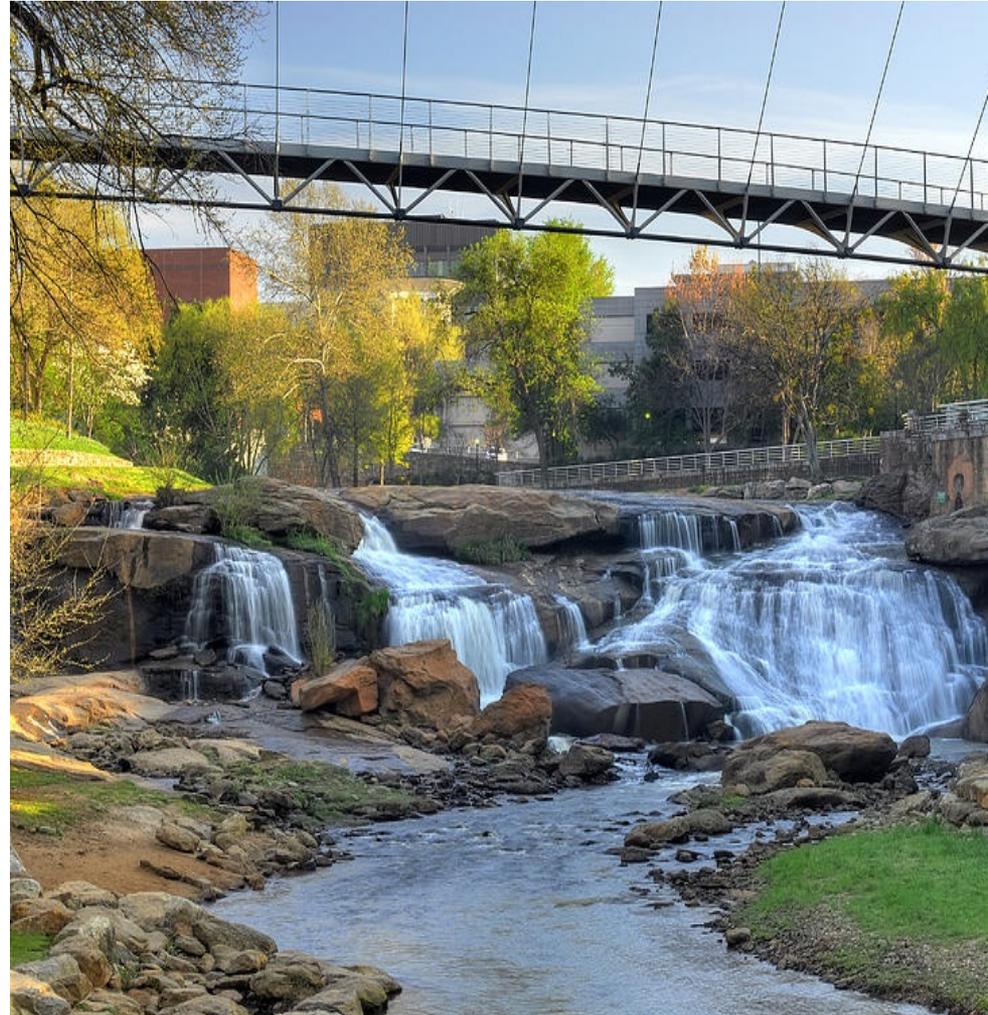
The background features three large spools of fiber. The leftmost spool is dark brown/black with a coarse, fibrous texture. The middle spool is white with a similar texture. The rightmost spool is dark and appears smoother. A large, stylized blue swoosh graphic curves across the lower right portion of the image, partially overlapping the white spool and the text.

INNEGRA
TECHNOLOGIES™
High Performance Fiber



- Headquartered in beautiful Greenville, SC
- Founded with technology acquisition in late 2011
- Privately owned
- Global patent portfolio
- Global sales and distribution of products



Innegra High Performance Specialty Yarns

Innegra S Yarns

- High-Performance Polypropylene-based Multifilament Continuous Fiber
 - Very low density
 - High toughness
- Used to increase toughness, durability, damping, and in some cases, reduce weight.



Innegra H Yarns

- Hybrid Yarns:
 - Innegra S + High Modulus Fiber
 - Carbon
 - Glass
 - Basalt
 - p-Aramid
- Commingled to provide uniform filament distribution



Why use Innegra?

Safety

- Increase impact resistance
- Increase damage tolerance
- Reduce catastrophic failure
- Safer parts

Value

- Cost effective
- Extend part life
- Lightweight
- Tough
- Vibration Dampening

Versatility

- Bio-stable
- Chemical resistant
- Ductile
- Hydrophobic
- Low temp stable
- Moldable
- Recyclable

Let the benefits of Innegra™ fiber set you apart.

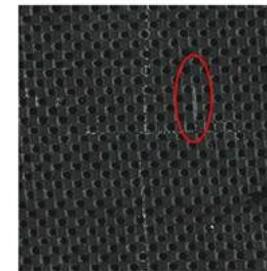
Improved Impact Resistance

12mm Carbon

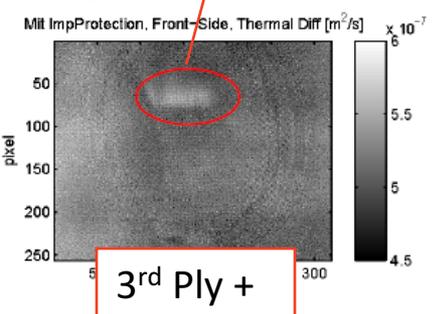
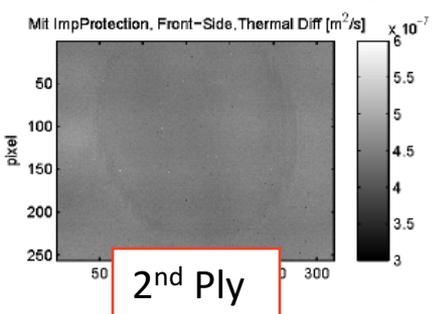
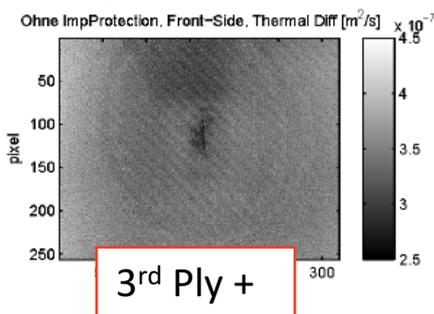
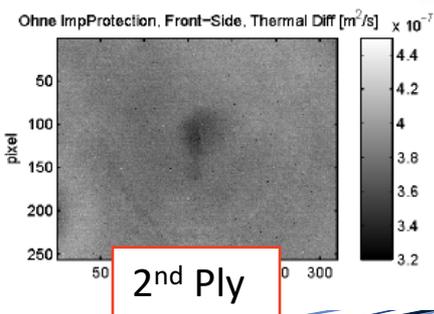
- 400 J Impact
- 3k carbon twill / epoxy prepreg
- 40mm crack at surface
- Thermography NDE: crack propagation into at least 4 layers

12mm Carbon – Innegra

- 400 J Impact
- 3k carbon PW + Innegra PW / epoxy infusion
- 8mm crack at surface, dent
- Thermography NDE: No damage observed from 2nd ply down



Interpretation of feature uncertain



Working through IACMI

- Primary interest: teaming on projects where Innegra fiber attributes can help contribute to project goals
 - Improving impact resistance / changing failure mode
 - Wind
 - Compressed gas storage
 - Transportation
- Growth project opportunities in improving fiber for composites applications
 - Fiber sizing chemistry tailoring for new resin systems
 - Thermoplastic composites