A Revolutionary New Form of Carbon

Graphene is a two dimensional (one atom thick) allotrope of carbon possessing incredible properties across its crystals:

- Unsurpassed Strength to Weight (>200x strength of steel)
- Electrical conductivity (>1000x current carrying capacity of copper)
- Thermal conductivity (>20x thermal conductivity of copper)
- Impermeable (ideal filtration membrane with engineered nanopores)
- Anti-microbial
- Lightweight (Density = 2.23g/cm3)
- Flexible (Bending modulus < .25 nN-nm Bend radius < 1nm)
- Stretchable (20% elongation)
- Corrosion Resistant
- Transparent, yet also Opaque (blocks <3% of light/layer)





Start the Revolution: Large Sheet Graphene (LSG™)

Large area, high quality, high volume, low cost graphene sheets:

- Size: 1m²
 Quality: Large crystals (3mm 1000x the competition!)
- Repeatable monolayer process
 Volume: Scalable to billions of sheets per year
- Cost: Direct cost of <\$20 m² (>99% Cost Reduction)

We saw graphene production as an engineering problem with a manufacturing solution – and no one can offer higher quality, lower cost, large area graphene.

GENERAL GRAPHENE, LLC

The Future is Now: Graphene Sheet Reinforced Polymer (GSRP™)

- Strength Differential is <u>0.572N</u>
- Approximately <u>.036N</u> strength increase per layer.

Force	=	Tensile Strength *Area
Tensile Strength	=	Force / Area

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Force = 0.036N
Area = 0.005m (width)*0.3e-9(thick) = \sim 1.5e-12m^2
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Tensile Strength = 0.036N / 1.5e - 12m^2 = ~ 25 GPa
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Typical Carbon Fiber for Laminates: ~ 1.6 GPa



(Delta L) / L

General Graphene's GSRP is > 15 times stronger than carbon fiber, making it <u>the</u> <u>strongest composite ever tested (and significantly easier to mold than carbon fiber)</u>



General Graphene: The Value Proposition

Let's be honest: any startup that tells you it has a billion dollar valuation is full of shit.

So we won't tell you that.

Instead, we'll let you do the math. If our gross margin is >90% and our net margin is greater than 40% for a 1m² sheet of atoms you can hold in your hand, at what price per sheet and at what level of production will would we have an EBITDA that justifies a billion dollar valuation? (We could give you our spreadsheet, but that would be cheating.) And getting there is easier than you might think (we already have the orders in hand).

We can manufacture a revolutionary new material that no one else can manufacture (we know, we've talked with our competitors). Our quality is unsurpassed, and at \$20m² no one has a lower direct cost. Who said faster, better, cheaper couldn't be done?

We are 100% B2B because we understand our industrial partners' unique needs (i.e., not all graphene is created equally and every application doesn't require the same graphene) – and our commitment to helping them incorporate graphene into their products is as much about changing the world as it is self-serving.

