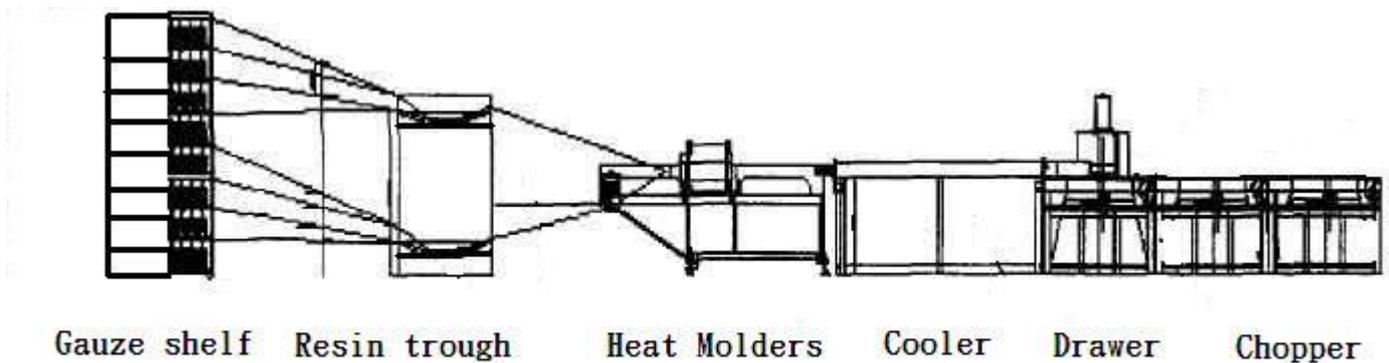


INTREPID CARBON SPOKE

1. Weights: The specific weight of steel spokes is $7.8\text{G}/\text{CM}^3$; the specific weight of carbon spokes is $1.6\text{G}/\text{CM}^3$, the specific weight for Aluminum on both ends of carbon spokes, $2.7\text{G}/\text{CM}^3$, must be lighter than that of steel spokes or any other metallic spokes.

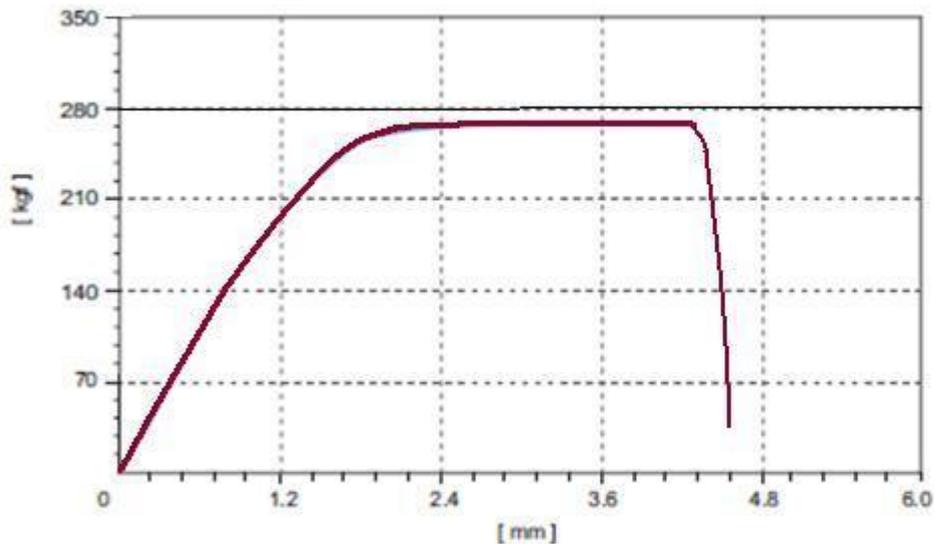
BRAND.	TYPE.	Material	Weight
INTREPID	2mm CARBON SPOKE	Toray T700 Carbon Fiber	164g(64pcX306mm)
INTREPID	2mm CARBON SPOKE	Toray T700 Carbon Fiber	146g(64pcX264mm)

2. Material properties: Carbon Spoke "INTREPID CARBON SPOKE" is equipped with TORAY T700 Carbon Fiber with four beams and 12k gauzes and resin drawn into a 2.0mm carbon spoke through heat molders. Because of the immediate molding of UD gauze beams, Carbon Spoke "INTREPID CARBON SPOKE" could maintain the unique tension of carbon fibre as well as the fatigue durability.



Carbon Spokes Machine

3. Strength: General lightweight metallic wires with tension and deformation around 280Kg-F will begin to extend and then break.



The relational graph of the tension and deformation for light steel spokes

4. INTREPID CARBON SPOKE and aluminum parts are joined with glue. The currently set and also the lowest adhesive strength is 300Kg-F. Every carbon spoke has gone through one minute tensile testing under 250Kg-F, which guarantees the strength quality of every carbon spoke.
5. Driving Force: Carbon Spokes is characterized with low malleability. Thus, the driving force will be transmitted more efficiently to rims, which will not consume any driving force even when the steel wires extend or deform. That's because carbon spokes are light, which makes the inertia on the inertia wheel concentrate on the rim and tires so as to drive and increase the speed when the wheel is rotating at high speed.
6. Material fatigue and aging: When general metallic material is on a fatigue test, there'll be structural fatigue causing cracks and fracture when it's being tested to a certain hour or number of times. If we do the same test on carbon fiber material, it can stand the trials of time ten times longer and will not cause any fatigue damage compared to the metallic material.