

## Stick Tech Pack 2021

# MYTH BUSTING

Carbon is the most important thing in a stick, right?

#### Wrong.

Two sticks showing the same carbon percentage will not perform the same. Period. There are wildly varying carbon grades, there are also differing weaves and levels within these, each of which will offer their own performance characteristics and benefits. As a result, you will see differing levels in all our sticks and this is reflected in our prices. We use premium grade carbon in all our sticks, at the very top we use 24k, this is then followed by 12K, 8K and 3K.

#### WHAT DOES THIS MEAN?

The 'K' refers to the number of carbon fibre rovings (strands) that are wound together to create 'tows'. The tows are then interwoven in to the carbon fibre fabrics to create sheets. For example, 24k carbon fibre features 24,000 individual filaments in a tow, with 12K featuring 12,000 individual filaments etc. We're proud to state clearly what we put in our sticks. No secrets. So, before you start trying to compare one stick against another make sure you have all the information and know exactly what you're being told. Just because something states 70% carbon doesn't mean it's 70% of the premium stuff...there's a big difference between 18ct and 24ct Gold!

# TECH LAB

### CARBON 24K

This is a 24K spread tow carbon fibre which offers exceptional strength and stiffness compared to biaxial carbon fibres. Triaxial fabrics are composed of three sets of parallel yarns corresponding to three directions: 0°, -60° and +60°, resulting in a material that demonstrates quasi-isotropic properties. The end result is a stick with a significant increase in torsional rigidity to offer maximum strength, power output and ultra-lightweight.

## CARBON 8K

A biaxial carbon fibre designed to offer high strength and dissipating of impact forces. The unidirectional carbon roving is aligned at the zero angle with unwoven carbon and then bonded together in sheet form. This process helps to increase the stiffness and realise maximum potential power output.

# WITH GLASS FIBRE REINFORCEMENT MULBERRY

Our Mulberry wood is carefully selected for its durability, consistency and flexibility. The wood is then combined with glassfibre for added reinforcement to provide excellent entry level sticks.

### CARBON 12K

A 12K spread tow carbon fibre which sees the raw carbon fibre undergo an unbundling process aligning the fibres precisely on their axis which enables than to vastly improve performance compared to unbundled materials. This results in a stick that can maximise performance from its raw materials.

## CARBON 3K

Our 3K biaxial carbon fibre offers excellent all-round performance and works perfectly in our TK 3 Series where a balance is needed between performance and affordability.

# TECH LAB

#### INTEGRATED DAMPENING SYSTEM (IDS)

Included in the handle within the structure of the stick is an enhanced piezoelectric fibre cell which converts vibration waves firstly to an electrical signal which is then dissipated as heat energy, all of which is undetectable to the player. By using IDS, we are able to produce sticks with extreme stiffness without the need to compromise on touch and feel.

#### NANO POLYMER REINFORCEMENT (NPR)

A self-assembling group of co-polymers are linked together and then spread throughout the structure of the stick to increase the laminate strength. In conventional constructions, glassfibre is needed to improve the feel and therefore add weight. By adding the NPR to the epoxy, we are able to significantly increase the impact strength and at the same time offer sticks with much greater feel despite their ultra-high stiffness.

### REACTIVE LIQUID POLYMER (RLP)

A special formulation resin, Reactive Liquid Polymer, is used in the construction of all our TK 3 models. Carboxyl Terminated Butadiene Acrylonitrile (CTBN) is used to co-polymerise the epoxy resin to form a dispersed phase of particles. These particles provide a noticeable enhancement of the fibre matrix to improve the strength, durability and performance of the stick against regular composite constructions.

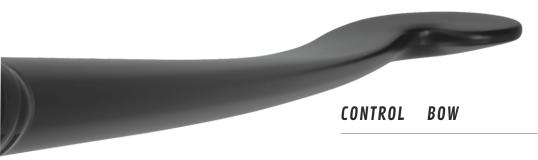






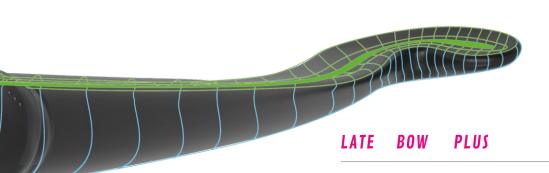
#### **BOW PROFILES**

Our range of profiles have been designed to meet the needs of the current and fast-paced game, whilst also acknowledging that every player has their own preference and requirements. Whether you're an amazing drag flicker, 3D skill extraordinaire, midfield dynamo or classical developing player, we have a profile to suit you.



Featuring a sweeping profile, it is designed to offer all round assistance to a 360-degree skill set. Perfect for those players looking for an all-rounder.

Bow Peak: 24mm Bow Position: 235mm



First introduced in 2002, the original groove is back! Our full Control Wing Technology (CWT) makes a return in 2021 with an updated LATE BOW profile. A thinner shaft profile and head shape further enhances fast dynamic skills.

Bow Peak: 24.5mm Bow Position: 220mm Groove Depth: 3mm



A sweeping profile with a late placement of the bow offers high level assistance to dribbling, aerial passing skills and drag flicking. A thinner shaft profile and head shape further enhances fast dynamic game play.

Bow Peak: 24.5mm
Bow Position: 220mm



Our most aggressive and extreme placement of the bow offers the perfect shape for the modern player looking to perfect 3D skills or nail those flicks. A thinner shaft profile and head shape offers the maximum assistance in aggressive playability.

Bow Peak: 25mm
Bow Position: 200mm

