

## About Arrows

### ***Why are arrows different prices?***

Arrow shafts are made from a variety of materials. Fibreglass, wood, aluminium, carbon fibre and carbon with aluminium core.

The cost of these different materials mean that arrow costs vary. Unfortunately it is not always possible to select the cheapest option for your shooting. The arrows selected must be compatible with the bow they are intended to be used with.

As bow technology has advanced and the power capacity of bows increased, some of those materials (such as wood, fibreglass) when the arrows are shot, are unable to absorb the stored energy in those bows of advanced technology. The arrow will break and in some instances the bow will crack or come apart if the wrong arrows are used.

Performance of the shot will also be affected by the type of material the arrow is made from. In general fibreglass arrows and wooden arrows are less accurate than those of other materials.

**Traditional style longbows** can shoot any of the arrow materials currently available, but prolonged use of carbon arrows can result in stored energy cracking the longbow. When entering competitions rules state that only wood or aluminium arrows are permitted for longbow categories.

Fibreglass arrows are also not favoured by clubs because when broken, they splinter and the splinters can get lodged into hands when retrieving arrows.

**Recurve bows** can shoot any of the arrow materials but better performance is obtained using aluminium, carbon fibre or carbon with aluminium core. **Compound bows** which can generate the highest level of stored energy, can **only** use aluminium, carbon fibre or carbon with aluminium core.

Some arrows are only sold in closely matched sets of shaft weight and degree of straightness. Less expensive options which can be bought singly, differ from one individual arrow to another.

### ***Why is this arrow a different length to that one and why does it matter?***

Arrows are different lengths for a number of reasons.

- The original manufacturer sets the shaft lengths of their specific brand. Some brands offer a shaft length up to 31 inches, others only offer up to 29 inches.
- The shaft of an arrow to be used by an individual archer should be carefully determined to produce the best shot. The length of arrow to produce the best results is calculated based on several factors. These are a combination of the arrow material, their diameter, the poundage (power) of the bow used to shoot them and the draw length of the archer.

Eg. If an archer's draw length is 31 inches then arrow shaft brands produced up to 29 inches will never offer a suitable match.

Eg. If the bow being used is 60lbs draw weight, then an arrow designed for a bow with 20lb draw weight will not be suitable

An experienced retailer knows what these combinations should be and checks them against the specifications put out by manufacturers.

If an archer wants to produce a good and accurate shot then the arrow shaft and length selected, is important.