

Merlin Bows
Technical Advice Sheet

Split Limbs or Solid?

If you are wondering why we do not offer a split limb bow, the answer is simple. Solid is best!

Limb dynamics have seen many changes over the last few years. The split limb has been advertised as the latest and most advanced limb on the market.

Contrary to the advertising these limbs are not a new innovation, as the design has been used on compound bows for 15 years.

The single most important factor is the mechanical advantage of the solid limb design, and its superior load bearing characteristics. (torsional stiffness). The power track on a cam exerts significantly more loading on one side of the bow, added together with the rake of the cable guard, creates more stress on one limb than the other in the split limb design. A perfect example of this would be for the yoke system to be removed, and attach the cable directly to the side of the wheel. This would make the split limb system almost un-shootable due to twist, through excessive loading on the side.

You will also notice how the design of the split limb has been evolving over recent years. They have been getting wider and wider, some even have clamps or brackets across the two limbs. All these changes are getting closer to a solid limb design, and before you know it, they will be joined in the middle again!

Limbs have to be matched for perfect performance. Having to match 4 limb instead of 2 can only lead to more discrepancies creaping in.

Don't be fooled.

Solid limbs are best!