

## Grains Per Pound

Have you ever heard the term “Grains Per Pound”? If you’re a serious 3-D shooter, you probably know exactly what this term means. However, if you’re fairly new to archery, you may not completely understand what this term refers to. Let’s take a closer look at the “Grains Per Pound” issue to determine how it works and why.

*Grains per pound* is a measurement that was designed to be a standard for safety and performance; encouraging performance, while yet limiting unsafe bow and arrow set-ups on the course or in the field.

The standard is 5 grains per pound. What this means is when you select an arrow shaft and set-up your bow, the total weight of the arrow must correspond to the peak draw weight of your bow. More specifically, this translates into “a minimum of five grains of total arrow weight per each pound of peak bow draw weight”. For example, a 60 pound bow requires a 300 grain arrow ( $60 \times 5 = 300$ ). An 80 pound bow requires a 400 grain arrow ( $80 \times 5 = 400$ ). Many bow manufacturers suggest a six grains per pound guideline for their bow set-ups and often base their warranty on a grain per pound minimum. Each manufacturer may have a different standard for their respective equipment. Regardless, these standards have been established to create a safe, reliable, yet high performance standard. The International Bowhunter Organization (IBO) has been a longtime supporter of the 5 grains per pound standard and conducts all its tournaments with a bow scale and arrow grain scale ‘weigh station’ to maintain the accuracy and integrity of this standard.

Most actual hunting set-ups utilize a heavier arrow shaft than the 5 grain per pound standard. The need for longer vanes or feathers, an 8-32 tip adapter and a stout broadhead requires a stiffer, heavier arrow shaft which often adds up to weights of 450 to 500 grains. Few hunters are capable of shooting a hunting bow at 90-100 pounds. Today the 5 grain per pound standard is widely accepted as the standard for many 3-D competitions.