

COMPRESSING THE BAT BARREL HELPS PRODUCE POWER

The fact that softball bats (either metal or carbon fiber) are “hollow”, adds power to your swing via a spring like action from the barrel adding power to your hits. This phenomenon is referred to as the “Trampoline Effect”, causing the ball to gain energy when hit from a springing barrel creating a greater exit speed. On the other hand, the wooden bat is solid and absorbs more energy without transferring it to the ball and consequently moving the ball slower than does a hollow bat. MLB baseball uses a solid bat and high COR/compression baseball to create the exit-speed. Senior softball uses a “limited flight” softball and a hollow bat to do the same.

As seniors, we are fortunate to be able to use bats that trampoline the ball to the outfield regaining some of our youthful power. The trampolining of the bat-barrel adds to all the hand and body forces you have built up in your swing process. The hollow senior softball bat’s barrel compression is more elastic than solid bats and reforms quickly.

To take full advantage of the trampoline effect use a flat lead arm wrist at contact by not bending the lead wrist back toward the elbow in a hinging action. A bent wrist reduces the trampoline effect. Consequently, a flat lead arm wrist at contact keeps the bat-barrel flush with the incoming pitch allowing for the full trampoline effect (see insert).

Extending both arms fully after contact results in a throwing like action with the bat, and then releasing the top hand for a fluid follow thru around your body. In addition, by keeping your hands inside of the ball when going to the ball and allowing the bat-barrel to lag behind your hands will also support trampoline, resulting in increased ball-exit speed. It’s also a good way to hit those inside pitches directly on the barrel and keeping them in fair territory.

The characteristics of all softball bats and balls are regulated by softball associations making sure the bats and balls are compliant with their standards that will promote safety and at the same time allowing the game to be fun. Barrel compression is measured by a device in how many psi it takes to compress the bat barrel a certain distance. If the force to compress the barrel is below what the association’s specifies, then the bat no longer complies with standards for performance and will be removed from play.

With a higher compression bat-barrel you’ll find that the walls of the barrel are stiffer or more rigid and much harder for a senior to compress for an effective trampoline. Senior bats start in the neighborhood of about 200-210lbs compression. As the bat is used and begins to break-in and the compression gets down to about 175psi is when the bat is at its best and is game ready.

The very strong/younger senior hitter can compress those higher compression bat readings which can carry the ball a long way. However, if the bat-barrel compresses too easily it may be maxed out by the stronger player and not as effective. On the other hand, the softer barrel can help the weaker hitter be a better hitter. A bat with a lower compression value means the

barrel walls are more flexible or elastic. It is believed that a more elastic barrel wall will produce faster exit speeds at lower swing speeds.

In summary, spend the time experimenting with bat-barrel compression to find the one that fits your strength and hitting style that will work best for your overall game.

Happy hitting,

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