



# Polymer Bullet Balls



**MAKE ULTRA-LIGHT bullets** with normal jacket lengths! (You can use almost any jacket length to make lighter bullets with or without lead tip. With Corbin's Bullet Balls, you can separate the LENGTH and WEIGHT of bullets, use a jacket that normally is too long and build a stable light-weight bullet with the weight forward.

**SHIFT THE CENTER OF GRAVITY** of your bullets at will! You can stabilize bullets that otherwise would tumble, by putting the polymer ball in the BOTTOM of the jacket, shifting the weight forward so a normal rifling twist rate stabilizes a long, but light, bullet.



**PROTECT THE TIP of your bullet** from deforming in the magazine, during chambering, or in flight by using a small size poly ball at the tip. **INSURE FEEDING** in auto-loaders by using a larger poly ball at the tip, trapped by the jacket edge (just past the mid-point on the diameter). The ball tip can even be set to turn, like a ball bearing!

**IMPROVE EXPANSION for defense rounds** by inserting a bullet ball over a deep hollow cavity. This seals the cavity, which can be left air-filled for pneumatic expansion or can be filled with swage lube

to promote hydraulic expansion. The ball acts like a piston, compressing the air or other filler on impact, and forcing the bullet to expand. Conventional hollow point bullets can plug with cloth or other material on initial impact, converting the hollow point into a solid and causing expansion failure. A bullet ball in the tip side-steps this problem and maintains uniform expansion shot to shot.

### Determining the proper diameter ball:

For hollow points, the ball diameter is normally the size of the hollow point cavity. Hollow cavity diameters at the open end are normally about 30 to 50% of the caliber. Select the ball diameter that is nearest to the HP so it will fit inside. For weight and balance adjustment, the ball normally fits inside the bullet jacket. The diameter depends on the wall thickness of the jacket at the position you intend to use the ball. Because the material is somewhat flexible, and will expand under pressure, the fit does not have to be exact.

So long as the ball can be pressed into the jacket under mild force, or dropped in and expanded during seating it will work for this purpose. To assure that the ball is perfectly centered, the ball should be a close fit. But if it is smaller than the ID of the jacket, it can still be perfectly centered by using a core with a 45-degree conical cavity in one end. This is easily made by using a 45-degree pointed punch in the core swage, to create the core. This cavity automatically centers the ball and maintains its position as the assembly is seated.

### FIVE SIZES cover all calibers from 22 to 458, in packages of 1000:

Diameter	inch	mm	Grains/lead	Cu/in	Color	Purposes	Price/1000
1/8-in	.1250	3.1750	2.933	.00102265	white	tips in 22 to 270 caliber, .....	\$25.
3/16-in	.1875	4.7625	9.898	.00345146	green	filler in 22, 6mm, tips up to 284 caliber .....	30.
1/4-in	.2500	6.3500	23.463	.00818123	yellow	filler in 7mm to 8mm, tip for 38/9mm .....	35.
5/16-in	.3125	7.9375	45.826	.01597897	blue	filler in 38/9mm, tip for 40-45 caliber .....	40.
3/8-in	.3750	9.5250	79.187	.02761165	red	filler in 40-45 caliber, big tip for 458-up .....	45.

Grains/lead indicates weight of an equivalent amount of soft lead core material, or the approximate reduction in weight achieved by using a bullet ball (weight of ball ranges from less than 1/2 grain to about 2 grains).