



Ultra Low Drag Projectiles (ULD)

For the ultimate in low drag, flat trajectory, and high wind resistance, Corbin's ULD design offers unsurpassed performance in calibers from .14 to .512. From varmint bullets to the big .50 Browning Machine Gun, the computer-aided design of the ULD gives your bullets higher retained energy, less drop, and less deflection from crosswinds than any conventional design.

Originally developed for government security agencies, the design has been successfully tested at ranges of up to 2,000 yards with specially built bench guns firing various projectiles based on the massive .50 BMG case. Time of flight, retardation and drag from both base and skin effect are drastically reduced compared to standard target designs. The gas-sealing, rebated boattail base adds another 10 to 15 percent to the improvement in accuracy, by reducing the muzzle blast laminar flow around the bullet caused by conventional boattails (which directs powder gas in front of the emerging bullet, causing turbulence directly in its path). The spoiler effect of the rebated base edge deflects gas in an annular pattern around the muzzle, rather than letting gas flow smoothly over the boattail and become focused in front of the bullet.

Because of the special length and style of the ULD bullet, certain precautions must be observed when selecting a press and die set for a given caliber and weight. The maximum caliber (diameter) of bullet that can be made in this style in the Corbin Series II (CSP-1) press is .358. The maximum diameter that can be made in the Corbin Silver Press (CSP-3) is .312. The design of the CSP-2 Mega Mite press is such that it can make up to .458 caliber, but we strongly recommend the CHP-1 Hydro-press for any caliber over .423-inch diameter in the ULD design. The use of a Quick Change punch holder can extend the size of caliber by allowing insertion and removal of longer bullets than would normally be possible without sliding the external punch out sideways.

The ejection pins for ULD bullets are smaller than comparable sizes in standard designs. The .308 ULD uses a .081 pin in Corbin hand presses, rather than the .091 standard size. In these special dies, it is very important to use the same jacket material and thickness used in designing and testing the dies. The ULD pushes the design to extremes and requires exact use of materials. You cannot expect to change materials as you might with a standard die set.

The ULD does not have a tangent ogive. The standard -S numbers and -E numbers do not apply to ULD. The ogive curve is typically 14 calibers offset by 0.015-inches from the tangent position. The long caliber nose will tend to crumple unless a heavy enough lead core is used to support it. You cannot make as wide a range of open tips or weights with the ULD as with standard designs. The ogive must be filled at least .667% from start of ogive to tip. Only a minimum of lube can be used on the ogive, to avoid lube dents. Slightly harder lead cores than usual (up to 3% antimony) will give best results. Anything harder may cause short die life and ejection problems.

The twist rate generally needs to be higher for top accuracy with these bullets as compared to standard designs in the same weight. The ULD is not a cure-all for every situation, but offers special performance in guns that are capable of shooting it. A close simulation of this design is the 10-S ogive spitzer RBT bullet, which has a somewhat wider latitude in weights and jacket selection.