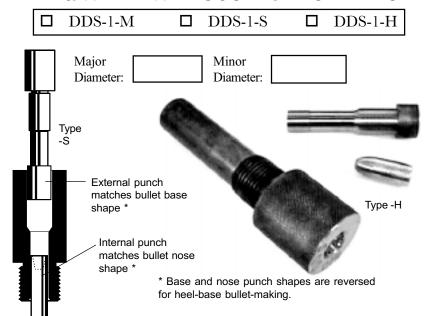
## **CORBIN** DDS-1

## **Dual Diameter Sizer Die**



The DDS-1 Dual Diameter Sizer reduces the forward portion of a bullet so that it rides atop the rifling, while leaving the base at full engagement diameter. It can also be used, in a reversed nose/base punch design, for making heel-type bullets.

The internal punch is machined to fit the nose of the bullet. It can be changed to handle various shapes of bullets, in the caliber of the die. The base or external punch is the same shape as the bullet base (flat, cup, hollow, RBT, Base Guard, etc.) to maintain the shape during the sizing operation.

You can adjust the length of bullet shank to be reduced, simply by setting the external punch to different positions relative to the end-of-stroke position of the die. This lets you experiment to find the perfect amount of rifling engagement for best accuracy and minimum bore friction.

## The DDS-1 die may be used for several purposes:

Create bullets that will chamber easily in tight-throated barrels, by creating a kind of "free-bore" on the bullet itself. This is often used for dangerous game bullets, where sticking a bullet against the rifling could prevent the action from closing at a critical moment.

Make 'heel-type" bullet by using the die backward, to reduce the base section instead of the nose, replicating early handgun cartridges or modern rimfire rounds. This requires punches designed in reverse order, so the nose is external, and the base is internal. A hollow heel can also be made. The bullet is first formed in a LSWC-1 die, then the dual diameter created.

Produce airgun pellets that have a very small engagment band at the base, for efficient use of the air pressure with minimal bore friction, yet are aligned perfectly by the bore-riding shank section. First create the straight, full-diameter pellet in a LSWC-1 or combination of the CSW-1 and CS-1 dies. Then reduce all but the very edge of the base (skirt) in the DDS-1.

Reduce the pressure and friction, and obtain higher velocities, with any jacketed or lead bullet, while maintaining superior accuracy.

The usual reduction is twice the depth or rifling. This typically results in .008 inch reductions from full diameter in modern cartridge arms. For instance, a DDS-1 die for .308 caliber usually reduces the forward portion of the shank to .300 inches. A bore-riding .224 bullet would have the front portion reduced to .216 inches. If you do not specify otherwise, this is the reduction that will be used.

The finished bullet must match the internal punch of the DDS-1 die to avoid deforming the tip. The DDS-1 can be substituted for a LT-1 lead tip forming die in many cases, since the pressure required to reduce the bullet forward portion is normally enough to reform the lead tip as well.

Lubricate the bullet with Corbin Swage Lube by lightly rolling it between thumb and forefinger as you pick it up, with a drop of lube on your fingertip. Push the bullet into the DDS-1 die, adjusting the punch closer to the die and testing to see where the reduction ends, until you have the desired amount of "rotating band" left at the back of the bullet. With airgun pellets and low pressure loadings, the band can be very tiny. With higher velocities, the band should be increased in length to prevent skidding across the rifling during acceleration. Anything from half the bullet shank length to a fraction of a caliber length has been used with good success in different applications.