



BALISTIX

◀ BULLETS ▶

Where Accuracy Counts

Reloading Tips for
Balistix Bullets

RELOADING TIPS

- Do not perform any load development on a severely fouled barrel. Also do NOT shoot on a gilding metal fouled barrel with pure copper monolithic bullets.
- Ensure that the resizing button of your dies is of such a diameter that a minimum grip of 0.002"/0,05mm is achieved on the bullet.
- Should the expander button of your sizing die be too large in diameter the button can be polished to the required diameter (if you do not have the means to do this yourself please consult a competent gunsmith or engineering shop).

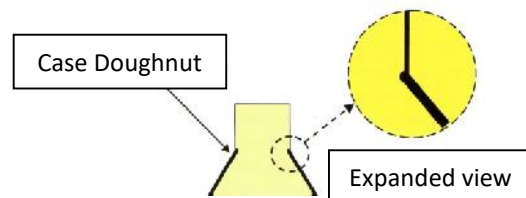
1. Resizing of Case Neck

1.1 Neck Bushing Dies: (This is the preferred method)

- Select the appropriate neck bushing to ensure a minimum grip of 0.002"/0.05mm on the projectile.

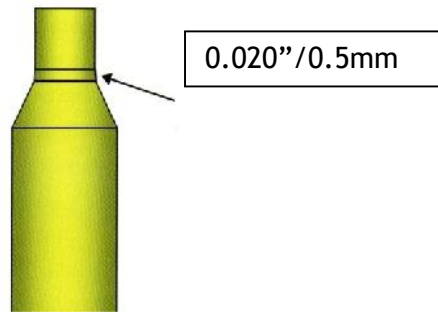
1.2 Neck Sizing Length

- Due to the known formation of the “dreaded doughnut” it is strongly advisable not to resize the 0.020"/0.5mm of the neck in front of the case shoulder.
- For the above reason it is preferred to use adjustable neck bushing dies opposed to conventional non-bushing dies.
- If the doughnut formation is so excessive that short sizing the neck with 0.020"/0,5mm does not prevent this pressure point, it is recommended to:
 - Remove the doughnut with purpose specific reloading tools.
 - Replace cases.



Note :

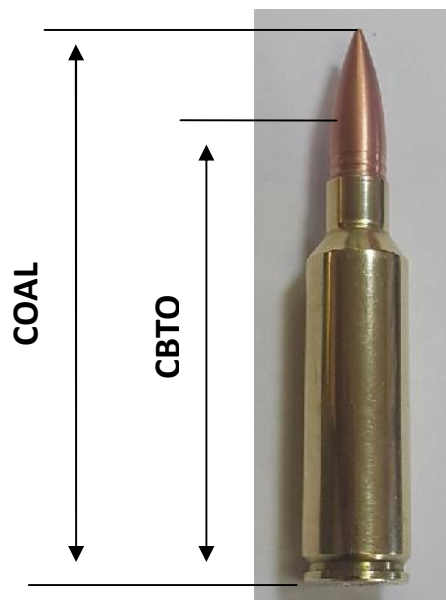
- *A doughnut formation inside the case neck will result in excessive pressure.*
- *This is true for monolithic as well as conventional bullets.*



Area of neck not to be sized

1.3 Cartridge base to ogive length (CBTO)

- Due to the possibility of minute bullet nose length differences it is strongly advised to use a Bullet Ogive Comparator when determining cartridge length.



Bullet Comparator

- The Cartridge Base To Ogive length (CBTO) is determined from the base of the case to a relative reference point on the ogive. Bullet tips may be damaged hence Cartridge Overall Length (COAL) measurement may result in inconsistent length measurements.

2. Tuning for Precision

- It is recommended to start load development with a bullet jump not less than 0.040"/1mm.
- Gradually work up your load until the correct specification velocity for your cartridge has been reached.
- Optimum barrel time theory (OBT) is recommended to determine the correct shock wave node for your rifle.
- Once the correct velocity has been reached it is time to determine the correct harmonic node of your rifle. This is achieved by altering the bullet seating depth (i.e. bullet jump distance).

3. Bullet Jump Recommendation

- Load sufficient ammunition to allow 3 shot groupings with 0.010"/0.25mm bullet length variation between each 3 rounds of ammo.
- Starting at the recommended 0.040"/1mm bullet jump, reduce bullet jump in 0.010"/0.25mm increments until you reach 0.020"/0.5mm jump.
- Now increase bullet jump from the initial 0.040"/1mm jump in increments of 0.010"/0.25mm until you reach 0.080"/2mm bullet jump.
- Note changes in grouping size between each three (3) shot groupings.
- The smallest group may theoretically be your rifle's "sweet spot".

Note:

- The rifle magazine internal length may not accept cartridge length as per procedure above. Should you wish to use the rifle's magazine then the longest possible cartridge length should be selected as the starting point and then increase jump (i.e. make cartridge shorter) in 0.010"/0.25mm increments until desired grouping is achieved.
- Load sufficient ammunition at this powder charge and seating depth and

reconfirm the desired load.

4. General

- Allow at least three (3) minutes of barrel cooling time between each shot. Failure to do so will lead to unreliable range data, especially for thin barrelled rifles.
- Please be on the lookout for the following pressure signs:
 - Hard bolt lift
 - Flattened primers
 - Cratered primers
 - Ejector imprints on case head
 - Difficult case extraction
 - Severe recoil

NOTE:

Stop shooting the load that show above signs and revert to a lower load instead!

Disclaimer

- Please familiarise yourself with the safety aspects and proper procedures for hand loading.
- Balistix Bullets cannot be held liable for unsafe reloading procedures/ practices that may lead to injuries and or damages to equipment and firearms.
- All hand loading will be done at own risk.



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