

# Reloading Issues

Part 1

## **Reloading Issues**

- As they say:
- Murphy's Law: "Anything that can go wrong will go wrong."
- When you hurry, you're more apt to make mistakes.
- Oscar Wilde: "Experience is the name we give to our mistakes."
- So, What To Do?



# Reloading Issue #1

Part 1 – Issue #1

# Issue: 4 or 5 rounds out of 100 will not chamber in my pistol

This is a pretty common problem with handgun rounds.

The root cause is inconsistency, and it can be caused by the components, improperly set dies, and/or sloppy technique.

The following factors can contribute to the issue, especially when several are combined.

# Issue: 4 or 5 rounds out of 100 will not chamber in my pistol

### Case Wall Thickness and Bullet Diameter Variation

- I measured a sampling of 100 mixed .45 ACP cases from several different manufacturers and the results were surprising.
- The wall thickness averaged about 0.010", but I found cases as thin as 0.008" and as thick as 0.013" (US military cases were the thinnest, and Federal and Norma were the thickest).

# Issue: 4 or 5 rounds out of 100 will not chamber in my pistol

#### **Case Wall Thickness and Bullet Diameter Variation**

While the sizing die will temporarily shrink and uniform the outside diameter of the cases regardless of wall thickness, the expander die and the bullet itself will re-expand the case from the inside, causing the loaded rounds' outside diameters to vary.

When I loaded ten (10) cases using perfectly identical bullets, and measured the outside diameter of the completed rounds, I would see a difference of 0.010" from the smallest to the largest caused entirely by brass thickness variation.

#### Issue: 4 or 5 rounds out of 100 will not chamber in my pistol

### **Case Length**

> Believe it or not, the length of the case can ultimately affect a round's ability to chamber. Case length affects the amount that the case is belled (see below) and also the crimp.



A properly belled case mouth can help top solve chambering problems

#### Issue: 4 or 5 rounds out of 100 will not chamber in my pistol

#### **Insufficient Case Belling**

- Many reloaders intentionally set the expander die to flare the case mouth as little as possible. Assuming that it will work the brass less, and result in longer case life.
- This may or may not be true, but it can result in some pretty bad ammo. The result is in crushed cases and shaved (cast lead) bullets.
- Even if no damage, insufficiently belled cases require more force to seat the bullet, and can end up with bulges or bullets that seated off-center - either of which can result in ammo that will not gage/chamber.

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### **How to Prevent**

Pre-Sort Your Brass - Measure the length and thickness of your cases, note which headstamps trend to the long and thick end of the spectrum, sort them out, and reserve them for use with jacketed bullets.

Use Good Bullets -Good bullets are consistent bullets.Properly Flare the Cases



# Reloading Issue #2

Part 1 – Issue #2

#### **Issue:**

## Making Brass Cases Last Longer!

## ANNEALING

- Helps to restore the ductility of the brass, which makes it more malleable and less likely to crack or split.
- This means that annealed brass cases can be used more times before they need to be replaced, which can save reloaders time and money.

## AGS BRASS CASE ANNEALER



## AGS BRASS CASE ANNEALER







## Reloading Issue #3

Part 1 – Issue #3

## Primer Pocket Swager

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## Reloading Issue #4

- Part 1 Issue #4
- Load Data & Manuals
- Speakers:
  - Dale Cameron
  - Carl Lantz

### **Issue: Load Data & Manuals**

#### Dale Cameron:

- One of the advantages of having several reloading manuals is finding some powders (especially older powder) loads, or just finding load data.
- For instance the Hodgdon manual I have shows only Hodgdon powder loads.
- Another issue with some manuals is that they show the maximum load only and you're supposed to reduce it by 10% and work your way up.

### **Issue: Load Data & Manuals**

## Dale Cameron:

 Loading light loads in your semiautomatic pistol may require a lighter recoil spring.
 Presentation of Different Manuals along with Carl Lantz



# Reloading Issue Q&A

Part 1 – Issue Q&A
Moderator: Steve Ulichney



THANK YOU FOR YOUR PARTICIPATION WITH THE CMP RELOADING GROUP.





