

GSS 114 BASIC RIFLE BARRELING

Prerequisite: Basic Machine Shop or experience. This 5 day class will include threading, chambering, headspacing, fitting and crowning barrels for common types of modern bolt-action rifles. Please no old military style rifles such as Mausers or Enfields. You may email the instructor at: jfloyd@lassencollege.edu (1 unit)

TOOL LIST

- Dial caliper
- Depth micrometer set 0-2" (optional)
- Feeler gauge, tapered leaf
- Cleaning rod and patches
- Lathe tool bits (two 5/16" HSS tool bits)
- 6" steel rule
- 60 Degree center gauge
- # 3 or # 4 center drill
- A few assorted open end wrenches (7/16, 9/16, 1/2, 5/8,) or large adjustable wrench
- Some live ammo for the caliber of your rifle
- Safety glasses with side shield
- A receiver mandrel and bolt mandrel for your receiver (optional)
- Protractor
- Small calculator
- Allen wrench set to 3/8"
- Needle file set
- 5 – Shop rags
- 2" paint brush
- Emery strips, 1/2" wide, at least 3' feet long or sandpaper (240, 320, & 400 grit)
- 8"-10" smooth mill file with handle
- Action and Barrel to install

MATERIALS LIST

You should bring at least one pre-turned barrel blank (select a contour that you want) and a bolt-action receiver. Just in case you finish before the five-day class is over you may wish to bring another barrel and action to get started on. Please bring only bolt-action receivers for barreling.

We will have you preparing the actions by facing off the front of the action to square it up as well as lapping the locking lugs and possibly welding and re-drilling the firing pin hole. We will then have you thread, chamber, headspace and crown your barrel. There should be sufficient time to polish and blue your barreled action as well.

The school has a small selection of the most common caliber's reamers, however we strongly suggest you check ahead of time (4 weeks minimum) what is here. Often our students simply wish to use their own reamer and headspace gauges in order to have identical chambers in several firearms. Please call if you have any questions.