

Bolt Action Precision Barreling

You will be truing and barreling a bolt action rifle in this course. You may choose to start with an existing rifle or obtain just the action.

It is very important that you email me so that we may talk about your build. Let me know which caliber you intend on chambering. I will advise twist rate and other pertinent info. The school has many chamber reamers that we can use, if the caliber that you would like to do is not in their inventory you are welcome to bring your own reamer or rent one.

Note: This is an advanced course and reasonable machine experience is required. You will be indicating to .0002", threading and chambering a barrel on a lathe. You will also be using a milling machine, surface grinder and other machinery. We will be on a tight schedule with lots to get done.

The parts that you will need include:

-Complete action suitable for the caliber that you desire. Acceptable actions: Remington 700, Weatherby 1500, Tikka T3, Howa Mini, CZ 550, CZ 527, Savage 110 and others. Message Instructor for approval of action type. Note: You need to confirm that the bolt face and action length are suitable for the cartridge length.

-A good quality barrel blank with the proper bore, twist, length and contour. The blank must be 1.200"-1.250" at the breech end and. You can look at the barrel contour chart of your favorite maker and determine what will work for the stock or chassis that it will eventually be going in.

-Quality Recoil lug .200"-.330" thick (For applicable actions)

-Trigger. I would suggest Trigger Tech or Timney.

-Talley picatinny scope rail for the action length that you are using. Ask them to open the base for 8-40 screws. For Tikka Area 419.

-If you are threading the muzzle then the intended device must have a minimum of 5/8-24 threads.

-5/16-24 TPI bolt knob if desired

-Factory loaded match ammunition for test firing and initial grouping.

Basic Tool List:

6" Dial Caliper

6" Steel Ruler

Depth Micrometer (Will have available to borrow)

0-1" Micrometer (Will have available to borrow)

1"-2" Micrometer (Will have available to borrow)

Lathe Tools - For Turning, Threading, Crowning (I would look at Arthur R Warner Co.)

Small carbide boring bar

Hex Key set- Standard

File- Smooth cut
9/64 Carbide Endmill

Royal 8-40 Taper Tap
Edge Finder
60 Degree Thread Gauge Fish Tail
Thread Pitch Gauge Set
Feeler Gauge Set
Reamer and Headspace Gauges if using your own

Standard Punches

Ball Peen Hammer

.001" Dial Indicator

.0001" Test Indicator (Can use a .0005" but the .0001" is preferred)

Noga style Indicator Base

Safety glasses

Dykem

Cleaning Rod and cleaning equipment

Range Rod or gage pins suitable for your bore diameter

The school has a couple of chassis and a scope that we can use for test firing. If you have a stock or chassis that you intend to use, please bring it. You can also bring your scope, rings and any range equipment needed.

Keep in mind that I will be bringing some of my tools for the class to use and the school has their tools. Don't worry about purchasing all the required tools if your budget will not allow it. I am sure that we can make it work.

Please contact me with any questions that you may have. Email is best.

I'm looking forward to the class.

-Len Fagan

faganl8321@montgomery.edu