FAQ

Q.) **What type of rifling do we do?**
A.)We only do single point cut style rifling. No button rifling and no broach cutting.

Q.) Do we lap our barrels?
A.) Yes our barrels are prelapped before rifling and finish lapped after rifling.

Q.) Do you offer other types of steel for the barrels?
A.) Yes we offer Chrome Moly (C.M. 4140) steel and Stainless Steel (S.S. 416R) for our gun barrels.

Q.) Which steel is better?
A.) For the most part neither from what we see. If we had to pick one we would lean towards the C.M. possibly lasting longer but how long a barrel last is subject to all the variables involved. Such as the type of powder being used, how it is being shot and cleaned and the types of bullets being shot thru it etc….

Q.) What is the "T" Style rifling?
A.) We call it Transitional rifling. Some will call it gain twist, progressive twist or incremental twist. We cut rifle virtually any twist into a barrel (subject to tooling etc…). We can start the twist out at 1-14 and end up at 1-7 and have it uniformly increase from the breech to muzzle. Also we can increase it very slowly say from 1-7.5 at the breech to a 1-7 at the muzzle.

Q.) What would the "T" style rifling be used for?
A.) Some say bullets with the driving bands benefit from it as it doesn't damage the driving bands as much. Also some have proven with lead bullets that just increasing the twist by as little as a .5 of an inch increase uniformly thru out the length of the barrels will help accuracy. We have the capability to provide any twist per length of barrel for the customer. We have not tested every possible combination of calibers bullets etc….we can give our recommendations on things we hear, and barrels we shoot etc…

Q.) Can a gain twist barrel be finished lapped?

A.) Some say no but we do finish lap all of our gain twist barrels. It's not a problem.

Q.) What are the benefits of the gain twist type rifling?
A. I'll quote what Pope (Pope was one of the great barrel makers from a bygone era. His barrels along with Schalk who he learned from and gives credit to and Schoyen, and Zischang made barrels for the Schutzenfest type of guns/shooting in the late 1800's to early 1900's) said around a 100 years ago first. "The advantages of the gain twist are three. 1st The twist being less at the breech, gives less friction to the bullet; it there fore starts easier and quicker, giving the powder less time to burn on in front of the chamber, which there fore fouls less than in a barrel of uniform twist at the same necessary muzzle pitch (twist). 2nd The slight change in angle of the rifling, in connection with choke bore (lapping choke into the bore of the barrel), effectually shuts off any gas escape of gas and prevents gas cutting, which is another case of imperfect delivery. 3rd It holds a muzzle loaded bullet in position much better than a uniform twist....

Now I will add some more to this. First off I feel this applies more to a lead bullet shooter than a jacketed bullet shooter but some of the why's and why nots do over lap. With a gain twist barrel the bullet cannot go to sleep. The rifling is always putting a fresh bite on the bullet as it goes down the bore of the barrel. This is why I always go back to a cut barrel being better than a button barrel. A cut barrel even with a straight twist is more uniform and consistent than a button barrel. With button rifling the button can hit a hard spot/soft spot in the steel and it will slow the button down. The button could speed back up and do the twist it's suppose to be doing but either way you end up with a non uniform twist and if the twist keeps getting slower towards the muzzle these two things are a accuracy killer and lead consistency problems/fliers etc...I feel even a slight gain twist will help accuracy wise and not hurt a jacketed bullet shooter as well. For the most part I would say there is no velocity gain in a gain twist barrel with the same load. What has been conveyed to us and it goes back to Popes 1st point is that shooters have noticed that they can run a slightly heavier powder charge vs. a shooter with a straight twist barrel. As the bullet is starting easier into the rifling my only guess is the pressure isn't spiking as fast or is delaying the pressure

curve. Hence forth they can get more velocity out of the gain twist barrel. I feel pressure is pressure and that the twist doesn't have anything to do with pressure for the most part but my only guess is that the gain twist like I said earlier is delaying the pressure curve. So you don't see problems as early like hard bolt lift etc...Also it's noted that even now a days our military in some 20mm and the 30mm barrels like on the A10 Warthog ground attack aircraft have gain twist type rifling in the barrels.

Q.) Do we recommend fire lapping our barrels?
A.) No. You will not make the barrel any smoother. If you feel you are having a problem with one of our barrels best to call before you do anything out of the ordinary to it. If you fire lap one of our barrels it is yours. We cannot warranty anything that is done to it out of the ordinary. We have no control over what the shooter is doing to the barrel.

Q.) What types of cleaners do we recommend?
A.)Check out our cleaning part of our website for information on cleaning. We do not recommend things like Iosso bore paste. Why? There is no way to be sure you have removed it 100% from the barrel from cleaning. Some shooters who have used it clean they're barrel have found afterwards the barrel all of a sudden had fouling issues. We will not warranty any barrel cleaned with Iosso bore pastes. We feel the paste cleaners get imbedded into the bore and not properly cleaned out. So the next rounds fired thru the barrel and there is paste left over it will damage the bore of the barrel. If you want to use a paste type cleaner we recommend Rem. bore cleaner (I believe it is called 40x cleaner now and in the past it use to be Gold Medallion) or use JB.

Q.) Do we recommend the use of brushes?
A.) Frank has not used a brush in any of his barrels since around 1990-1991. Cleaning patches and solvent only is what we recommend. If you insist on using a brush we recommend one caliber smaller or an old worn out one and wrap a patch around the brush and push it breech to muzzle. Unscrew the brush before pulling the cleaning rod back thru the bore/over the crown. More damage is done from cleaning than physically shooting the gun.

Q.) I've been told I don't have to clean my gun. What do we think?

A.) I shoot them I clean them. Why? The biggest reason is carbon fouling. The carbon fouling will keep building up and can cause pressure issues/problems. Also as the barrel wears over time it won't hold accuracy as long between strings of firing. So you have to clean the barrel/gun. I don't recommend not cleaning at all.

Q.) Do cut rifled barrels last longer than button rifled barrels?
A.) In our opinion and many others both experienced shooters and even people who use ammunition test barrels the answer is yes.

Q.) Why do they last longer?
A.) It is because button rifling work hardens the bore. It's not to say you cannot get a button rifled barrel that will not last a long time but on average a cut rifled barrel will last longer. If I had to pick a number it would be around 15% longer. Remember there are a lot of variables that effect barrel life also.

Also cut rifled barrels have a more uniform consistent twist than a button rifled barrel. This is because sometimes as the button is being pushed and or pulled thru the bore it can slip and the end result is the uniformity of the twist is not consistent through out the length of the barrel.

Q.) Which is better 5R style rifling or conventional rifling?
A.) In terms of accuracy and barrel life we don't see a difference. There are a lot of varying opinions on this. Some say if you want hard core accuracy to go with conventional rifling. We feel in the real world there is no real difference. The more uniform your bore and groove sizes over the entire length of the barrel, the more uniform the twist and the straighter the blank the more forgiving the barrel is going to be.

Q.)Some say the 5R style rifled barrels clean easier?
A.) Maybe from a carbon fouling stand point because your patch isn't trying to get down into a 90 degree corner vs. conventional rifling. The way we clean our barrels we don't see a difference. From a copper fouling standpoint so we see no difference here.

Q.) What does the 5R stand for?
A.) The 5 stands for a 5 groove barrel and the "R" stands for Russian. Obermeyer was the first to do 5R type barrels here in the U.S.

Q.) Will the 5R style rifling help with jacket/bullet failure?
A.) Possibly. This is because the lands don't directly oppose one another. This might help distort/upset the bullet jacket less which I feel helps with bullet failure. Bullet failure is more of a problem for a long range shooter than a short range shooter.