



We use and recommend barrels by Total Solutions Engineering, the following is courtesy of their website www.tsengineering.com.au

All new barrels should be properly run-in. The procedure involves frequent cleaning for the first 50 shots or so and is accomplished as follows:

Clean the barrel thoroughly with Sweets, leaving it in the barrel for no more than 15 minutes, after each individual shot for the first 5 shots.

Clean the barrel thoroughly with Sweets, leaving it in the barrel for no more than 15 minutes, after firing 3-shot groups for 5 groups.

After patching out the Sweets, clean again after each group with a good powder solvent. Clean the barrel thoroughly with Sweets, leaving it in the barrel for no more than 15 minutes, after firing 5-shot groups for 5 groups.

After patching out the Sweets, clean again after each group with a good powder solvent.

If the barrel is cleaning easily and there is little or no fouling, proceed to clean at the end of every range. Powder fouling should be removed first with a good solvent, then copper fouling removed with Sweets, patching out after each solvent, then powder solvent should again be applied.

Cleaning Procedures

Due to the individuality of rifle barrels and those cleaning them, cleaning procedures can vary considerably. These cleaning procedures can be effective in most cases but it is difficult to measure this effectiveness.

Copper fouling can generally be seen as a copper wash at the muzzle and shown by chemical reaction with copper solvents (ie Sweets shows as a blue colour if copper is present). Powder fouling is a far more insidious problem in so far as it is hard to detect. Some barrels may tolerate far greater levels of fouling than others before accuracy is noticeably affected.

The major problem we have today is powder fouling. To ensure that it does not affect the rifle's performance, the following cleaning instructions have been developed, once the barrel is properly run in.

At the end of every range and preferably while the barrel is hot, using any good powder solvent, pass a solvent patch once through the bore and clean out just prior to shooting the next range.

At the end of the day, pass a powder solvent patch through the bore and leave for at least 30 minutes. Dry the bore out, clean thoroughly with Sweets, leaving it in for no more than 15 minutes. Dry the bore, apply more powder solvent and leave overnight. Patch out the barrel until the patches come out clean. Make sure the chamber is clean and dry. Apply a light oil to a patch, pass it once up the bore and the rifle can then be stored.

To gain maximum effect, it is essential to apply the solvent while the barrel is hot and the fouling is soft.

Prior to any further shooting the bore is to be cleaned. The size of the patch must be such that it is firm in the bore.

Some evidence of copper fouling will nearly always be evident in a barrel and is normally only very minor. These traces of copper in a barrel have no effect on accuracy.

Copper fouling is best removed with Sweets, but it should only be used following removal of powder fouling with a powder solvent. Patch out again with powder solvent after removing the Sweets.