

NEWSLETTER
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CLIFFORD GUNSMITHING

RE-BLUING – Blue on the metal of a weapon is colored rusting. In the early days the process was called browning and was often done by leaving the metal outside for several weeks/months and then polishing afterward. Now days there are 2 major ways, hot and cold blue.

Hot Blue or Blue Oxide is a fast and a uniform bluing. The process entails a set of tanks, burners, stands, thermometers, and various chemicals. A Hot Bluing Room must be separated from the rest of the shop, as the fumes will rust any steel in sight. It is also very toxic and the operator must wear special equipment. In some areas a special permit is required by the government because of the chemicals.

Cold Blue is a method now used by many Gunsmiths because it is easier to work with, takes less equipment, and can be done in any shop. This method has received lots of negative comments because it is tried by many who did not know how to control the method. In fact it does so many things so remarkably well that it is threatening to revolutionize the re-bluing industry. Bob Brownell, a known expert on the subject states “It has developed, however, that in the hands of a careful craftsman not only is the finish beautiful, it is more durable and weather resistant than any other chemical or rust-type finish.” Harold MacFarland, well known gunwriter and gunbuilder says “For the production job I use the hot tank method. But, when I want a particularly fine job on either my own or customers’ guns, I use cold blue. Naturally I have to charge a little more but it is surely worth it.”

I use a special combination of chemicals for my cold blue process. The finish provides a little lighter color than a conventional hot blue but a much more durable finish which is what most gunowners want. Sometimes it is necessary to put 14-15 coats on to receive the uniform finish I want; I always put a minimum of 12 coats on. The result is a dark blue finish that shines. When I perform a cold blue project I completely disassemble the weapon, if the weapon is dirty I charge for the cleaning of the weapon.