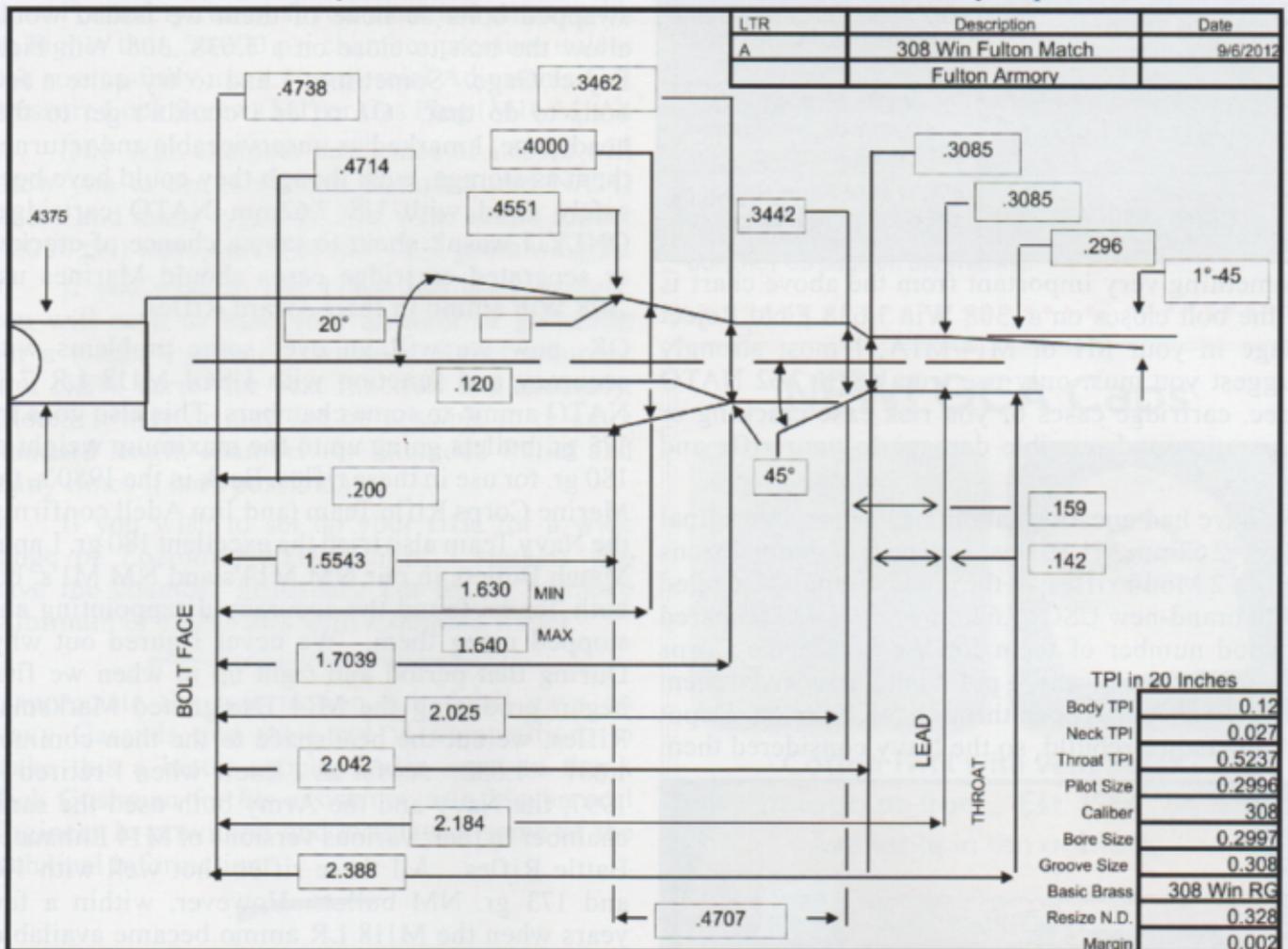


I don't know why, but many brand new .308 Win. barrels have a .078" port that is only correct for .30-06 ammo and will not reliably function in .308 Win or 7.62. The Navy specified .106" as the gas port size on the M1's they converted to 7.62 NATO. I don't know exactly why they did that, though I think it was to help ensure their rifles would work in any conditions worldwide. I've found that using a Number 41 drill bit to open up the gas port to .096" diameter allows plenty of gas pressure into the gas system to reliably operate an M1 in almost any use.

Minimum Chamber Headspace for the cartridge in .308 Win is 1.630," while in 7.62 NATO it is 1.6355". Those additional 3 1/2 thousandths of an inch are not due to the U.S. made 7.62 NATO case being longer, but rather the chamber was intentionally longer to contend with heat expansion of the chamber when firing quickly and as extra room for carbon build up and foreign matter during military applications. It will also allow proper feeding of some foreign made 7.62 NATO ammo that is not made to strict U.S. Military Standards.

Having said that, back in the late 1970's and early 1980's when cutting chamber headspace to where the GO Headspace Gauge would properly close on 1.630" and hold the bolt open at 1.631," we found that such a "tight NM chamber" sometimes caused hiccups in feeding or accuracy in NM M14 rifles with 7.62mm and .308 Win NM Ammo. We found that by opening up the Minimum Headspace just a little more to 1.631" - 1.632," there were no more feeding or accuracy hiccups with the 168 gr. or 173 gr. NM projectiles/bullets. Thus, we had no malfunctions nor accuracy problems with 7.62mm NATO with projectile/bullet weights of 147 gr. through 173 gr. sizes. However, though we found no feeding problems with the maximum size 180 gr. Lapua NM projectiles/bullets in NM M14's, they did not hold as good groups and we did not know why. (More on this later.) This also held true with M1 Rifles with "newly-made" NM barrels in the same headspace chamberings. There is a major difference between the .308 Win and 7.62 NATO cartridge cases: the NATO case is thicker on the inside. This is very important when chamber



Fulton Armory General Manager Rich Hall generously shared the chamber dimensions they use on current rifles. Though different than a USGI chamber, it will aid the reader in visualizing some of the dimensions that the author discusses in the article. He adds: "The Fulton Armory .308 Match chamber was designed to accommodate chamber pressures in gas operated semi auto rifles while offering significant accuracy potential. It has a .142" throat which is .052" longer than SAAMI (normal .308 Win) and the shoulder/neck radius is shortened to .120" versus SAAMI .140". This would be considered a "tighter" neck by reloaders.