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I am a licensed gunsmith, and a collector (hoarder?) of military firearms. I am also a licensed ammunition manufacturer and currently load or reload for over 60 rifle and pistol cartridges.

In regards to using **7.62X54R** (***Mosin-Nagant***) brass to make reloadable cases for the **8X56R** (***Steyr-Mannlicher m95***), it is an easy proposition. I have used **S&B** brass with good results, and the **new** Winchester brass promises to be better (*the S&B cases are thinner and will not withstand much stretching before incipient or actual head separation*).

I prefer to use once-fired cases for conversions since any gross defect on the case will be manifested in the first firing. **Lee Precision** makes **8X56R dies** for the same price as their other limited production dies, so there is no need to spend a great deal of money. The Lee set includes a shell holder and loading data that you will have a hard time finding otherwise. In addition, the neck expander on newer Lee sizing dies has a very substantial taper that makes neck forming extremely simple.

Annealing Description:
Annealing of brass is accomplished by subjecting the material to various temperatures and times. The effect of annealing is to reduce or remove the residual stresses locked into the brass part that were introduced during cold working of the metal as for example during the drawing and forming phase of the tube stock. *Here are two common ways of annealing brass cases:* 1. *Place an inch or so of water in a tray, stand the cartridge case upright in the water. Heat the case's neck with a propane torch, then quickly tip it over in the water for rapid cooling.* 2. *Hold the lower half of the case in pliers while rotating the case while over a propane flame, heating the neck area. When the case reaches temperature, it is immediately dropped into water.*

The brass should be neck annealed, with the *"color change"* extending about halfway down the case body. This is necessary to give the body enough malleability to expand upon firing to the much larger chamber of the 8X56R.

NOTE:
Do not heat the case to a cherry red. Just heat the neck and watch the "color line" run down the body.

My preferred method is to hold the case in a pair of pliers, heating the neck and rotating the case until the desired level of annealing is reached, then drop the case into a bucket of water. The water has nothing to do with annealment, it simply cools the case before enough heat travels down to the head to soften it. Soft case heads are dangerous - your first indication after firing one (*if you are still living*), is loose primer pockets .

Lube the inside of the case neck with a cotton swab coated with case lube. I find **Lee's wax-based case lube** excellent, as it can be cut to any desired consistency with water or rubbing alcohol and it does not affect your powder or primers - you don't have to worry about cleaning every trace of it out of the case. Put a bit of lube around the head end of the case as well, although very little (if any) of the outside of the case will contact the die. Run the case through the sizing die, examine it for mouth splits, and lightly chamfer the inside of the mouth. Wash the cases in a rubbing alcohol bath and set aside to dry.

NOTE:	
***Buffalo Arms* is offering .329 bullets and formed 8x56 brass at this time:**	
Item	**Price**
.329" 200 Grn. Sptz. SP	***$18.00 / Box of 50***
.329" 220 Grn. Sptz. SP	***$20.00 / Box of 50***
8X56R Hungarian Bertram-formed	***$33.00 / Box of 20***
Bullet Mould for .329	
Lee Precision now catalogs a bullet mold for the 8X56R - Lee 1-Cavity Mold 329-205-1R (329 Diameter) 205 Grain 1 Ogive Radius for 8x56mm Rimmed Hungarian. It's not a gas check design, but with sufficient care, that should not be a real problem unless the rifle has a very poor bore.	

Bullets are the major problem with the **8X56R**. They do not use a standard 8mm bullet, even though the cartridge description has the "S" bore (.323") designator. The **8X56R** uses a .329" bullet that is not in standard production anywhere, although there are a good number of custom bullet makers that can provide you with .329" - .330" bullets. Accuracy with these rifles using standard 8mm bullets is usually dismal.

I have come up with two simple solutions:
1) *Buy a **Lee Sizing Kit in .329" diameter**. Lee's product # is 90934. Buy the **Speer .338" - 200 grain Spitzer Hot-Cor bullets**. These particular Speer bullets have a softer core and thinner jacket than others I've tried. Using a liberal amount of case sizing lube, simply size the bullet down in the die according to die instructions. It takes a good press and some amount of force. DO NOT, UNDER ANY CIRCUMSTANCES, FORGET TO LUBE EACH AND EVERY BULLET!! After sizing, wash the bullets in a solvent that will remove all traces of lube. These bullets generally come out at around .330" - .331"; don't worry, it's close enough. Don't worry about the die, either - it's designed to size jacketed bullets.*
2) *Buy a **Lee Sizing Kit in .329" diameter**. Lee's product # is 90934. Cast your own or buy some 200 - 225 grain .338" bullets. They need to be as pointed as possible and fairly hard - I use 8 parts wheel weights/2 parts Linotype. Lube them with the **Liquid Alox** that comes with the Lee Sizing Kit following the instructions enclosed. After they dry (read: the next day), size them as per instructions. If you want to **gas-check** the bullets, I find that I*

have better luck with the .338" checks by seating them in another pass - not while sizing the bullet. If you can get 8mm checks that will fit on the heel of your bullet, they can be attached during the sizing operation. I lube the bullets again after sizing - it's up to you.

Load the cartridges in the usual fashion, using 48 grains of any 4350. Keep overall cartridge length at 3.0" as the Steyr is very finicky about **OAL** and bullet type. Spitzers are important - the rifle will often completely refuse to strip short rounds or blunt bullets from the magazine. After fire forming the cases, it is of the utmost importance that you resize the brass as little as possible. Back off your sizing die so that it sizes only most of the neck - just enough to hold the bullets in place firmly. These rifles headspace on the cartridge rim and often have absolutely HUGE chambers. Full-length resizing every time is guaranteed to cause head separations in only 3-4 loadings at most. Cases made from the **7.62X54R** are a little bit shorter than the 8X56R brass, but since the cartridge headspaces on the rim and has no identifiable shoulder, this is of no consequence.

New brass is available from Bertram in Australia. I know that **Midway USA** carries it; I think that the **Old Western Scrounger** also has it. It's excellent brass, it's just expensive as hell. The same precautions about resizing fired cases apply to the Bertram brass as well - or maybe more so, considering its expense.

The following load data is completely safe in my 95, which has a slightly dark but strong bore. I have not chronographed it, as my Chrony took a hit from shrapnel peeled from a bullet by a ported barrel. I really need to get it fixed.

Load Recipes:
1) ***Speer 200 Hot-Cor Spitzer****, resized to .330", 50.0 grains of any 4350, Winchester LR primer.*
2) *Cast gas-checked 225 resized to .330", 45.0 grains of any 4350, Winchester LR primer.*
3) *Cast gas-checked 225 resized to .330", 56.0 grains (or as much as you can get in the case and still seat the bullet) of Accurate 8700, Winchester LR primer. This is a very low-pressure loading and is great for the cast bullets.*

I can write a book on modifying stuff to allow you to trim the Bertram brass (*I doubt that the S&B or Winchester will ever grow enough to need trimming*), modifying dies, etc. - I do it all the time to allow me to reload obsolete ammo for people so that they can enjoy their old guns.