

Belt Basics

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Some Terminology

Billet End: The end of the belt with the holes fitting into or onto the buckle.

Chape End: The other end of the belt holding the buckle.

Belt Keeper: The strip of leather that wraps around the chape end to hold the belt down once it passes through the buckle. Some buckles may not require a belt keeper.

Effective Length: The key measurement for making a belt...see separate handout on How to Measure a Belt

Types of Belts

There are a number of types of belts, but we're going to focus on only two of them.

*Simple Belt....*A strap of leather with a billet end and chape end. The ends can be tapered to deal with a buckle width different from the strap width. If your effective length measurement excludes the buckle, it is measured from the fold of the chape to the belt's "center hole" at the billet end. The total strap length is this effective length plus 3-4" at the chape end and 6-7" at the billet end. The additional length on the chape end is folded under the belt and used to secure the buckle and keeper to the belt.

*Ranger Belt....*Composed of three straps of leather. A base strap, a chape strap, and a billet strap. The chape and billet straps are attached on top of the base strap. The base strap is cut to the effective length of the belt. The chape and billet strap lengths depend on a variety of factors. See Al Stohlman's book "Belts Galore" for details.

Designing Your Belt

You've determined the width of your belt and the effective length. Now it's time to start constructing your belt.

- 1) Decide if you want your belt to have one or two keepers. (If you don't plan to have a keeper, follow the directions for one keeper...just in case you change your mind later.)

- 2) Determine the end of the strap for the chape end, i.e., the buckle end. The basic layout for the chape end of the belt will be a $\frac{3}{16}$ " hole centered at $\frac{1}{2}$ " from the end of the belt. A 1" gap and another $\frac{3}{16}$ " hole. If you're using two keepers, add another 1" gap and another $\frac{3}{16}$ " hole. Next comes a $\frac{1}{2}$ " gap followed by an optional oblong hole (required if using a buckle with a tongue) with a length of at least the width of the belt. If you don't include the oblong hole, you still need the space, in which case make it the width of the belt. Now repeat the original spaces and holes from the end. (The $\frac{3}{16}$ " holes are for Chicago screws to hold the two sides together.) All that equals the total length of your chape end. So, with a single keeper and a 1.5" wide belt, you would have: $\frac{1}{2}" + \frac{3}{16}" + 1" + \frac{3}{16}" + \frac{1}{2}" + 1.5" + \frac{1}{2}" + \frac{3}{16}" + 1" + \frac{3}{16}" + \frac{1}{2}" = 6.25"$. The chape end of the strap should be skived (reduced in thickness) from 6.25" in from the chape end to the end of the chape. Skiving like this reduces the bulk of the belt when this is folded over.
- 3) Now layout those holes and spaces on the chape end and punch them out. If you don't have an oblong punch, you can use a hole punch and the ends of the oblong hole and cut between the sides of the holes.
- 4) From the center of the chape end, i.e., the center of the 1.5" oblong hole or space, measure towards the billet end a distance equal to the effective length of the belt. Mark it lightly, then repeat the measurement and make the final mark if they match. This will be the hole that the individual using the belt will use immediately. This is typically referred to as the center hole of the billet. If it is used as the center hole, with the typical two holes on either side, the person will be able to adjust as he/she grows or shrinks.
- 5) Layout the remaining holes for the billet end. Typically these holes are spaced 1" apart and two holes go to the inside of the center hole and two holes go to the outside. Women will frequently prefer $\frac{3}{4}$ " spacing with 3 holes on either side of the center hole. If the wearer is more likely to expand rather than contract, you can add more holes going outward and perhaps fewer going inward.
- 6) Now add 4-5" your preference beyond the last hole to determine the end of the belt.
- 7) Punch the holes and cut the belt to length.
- 8) The chape end of the belt is frequently cut into a semi-circle either using a round end punch or a knife and a round object to make the pattern. The billet end is typically pointed. This can be achieved with an English point punch or careful measurement and knife work.

Decoration

You can tool or stamp whatever you want on the belt.

Frequently, people will want their names on the back of the belt or initials on the tip. If adding the initials to the tip, you may want to add that extra inch on the end.

For centering those names on the back of the belt, realize that they will only be centered at one size. After that they will start sliding around the body has you use those additional holes.

It's also important to know how to determine the center point for the name!

The measurement for centering the name, is from the "center hole" back to the folding point of the chape, i.e., the back of the buckle. Then of course divide that number by 2.

Lining

Depending on the use of the belt and how long it needs to last, you'll want to add a lining to the belt. If the belt is expected to frequently carry a firearm or tools, it is wise to line the belt to provide more structure. You simply glue another layer of vegtan leather (flesh side to flesh side) after your tooling is done, then sew or lace them together. If adding a lining, be sure to leave space in your decorations for the sewing or lacing.