



## Proof Carbon Fiber Barrels

First off, *choose the full "Sendero" taper* if possible. Thicker barrels are stiffer and therefore more consistently accurate than thinner tubes, that is after all the main premise when choosing a carbon fiber barrel. The carbon fiber (CF) wrap as done by Proof not only wicks the heat away from the rifling much faster, but also gets overheated noticeably more slowly. The more CF the better - the stiffer the barrel and the slower it warms, the more potentially accurate - a win-win.

"PROOF has cracked the code with high-performance carbon-fiber barrels." - Outdoor Life Magazine

*NOTE: The Proof Research Carbon Fiber "Sendero" actually measures very close to the standard M24 taper. (see product photos) This means you'll want to choose a stock that has enough meat in the forend to take it!*



***THE ONLY CARBON FIBER-WRAPPED BARREL APPROVED FOR USE BY THE U.S. MILITARY.***



This patented manufacturing process begins with full-profile, match-grade 416R stainless steel barrel blanks that are made in our firearms division. These blanks are then turned down to a significantly reduced profile greatly reducing weight. This reduced contour barrel is then filament-wrapped with high-strength, aerospace-grade carbon fibers impregnated with a high-thermal conductivity matrix resin developed by our aerospace materials division.



The aerospace-grade carbon fiber used is 10 times stronger than stainless steel and has a specific stiffness nearly 6 times greater than steel. But strength and stiffness are only part of the equation. Heat conductivity and thermal expansion are also of paramount importance when developing a match-grade, carbon fiber barrel. Our helical wrapping pattern favors the longitudinal thermal diffusivity of the carbon fibers (along the length of the barrel) allowing them to dissipate the heat emanating from the steel liner rather than insulate it. This is achieved through phonon transport in the direction of the continuous fibers and greatly reduces the mirage effect intrinsic in heavy steel barrels.

However, because our unique bonding agent contains a high-thermal pitch fiber—similar to those proven in Formula One and aerospace applications—our barrels also conduct heat very effectively through the wall (thickness) of the barrel, greatly increasing thermal conductivity and resulting in barrels that stay cooler and maintain accuracy over longer sessions of fire.

After wrapping, barrels are cured and consolidated then ground to their final contour. The end result is an aerospace-grade, high-fiber volume fraction composite barrel with less than 1% porosity suitable for the most extreme environments and capable of shot-after-shot accuracy that will impress the most veteran hunter or precision marksmen.

PROOF Research's match-grade carbon fiber barrels are stronger, lighter, as accurate as the finest precision steel barrels and will maintain their performance in the harshest conditions. PROOF didn't invent carbon fiber-wrapped barrels. They just perfected them.



- Up to 64% lighter than traditional steel barrels
- Match-grade accuracy
- Improved heat dissipation for cooler and longer lasting barrels
- No point-of-impact shift during high-volume fire
- Reduced harmonic barrel vibration
- Unprecedented durability



Barrels are available for both bolt-action and AR-style rifles, in a variety of calibers, lengths and twists. This is the BOLT ACTION page.

*Your bolt-action barrel will arrive ready for thread and chamber by your gunsmith.*

*Barrels are also available for :*

*AR Carbon Fiber Barrel*





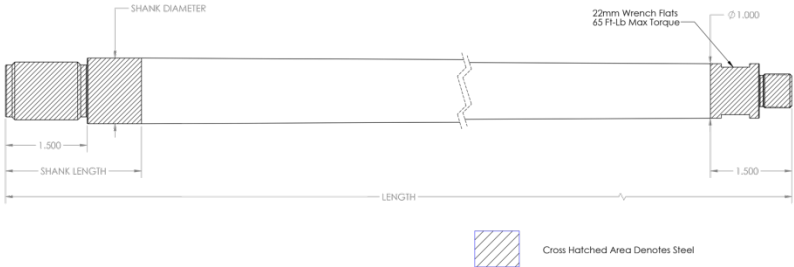
*Ruger Precision Rifle Pre-fit Barrel*



*Savage Pre-fit Barrel*

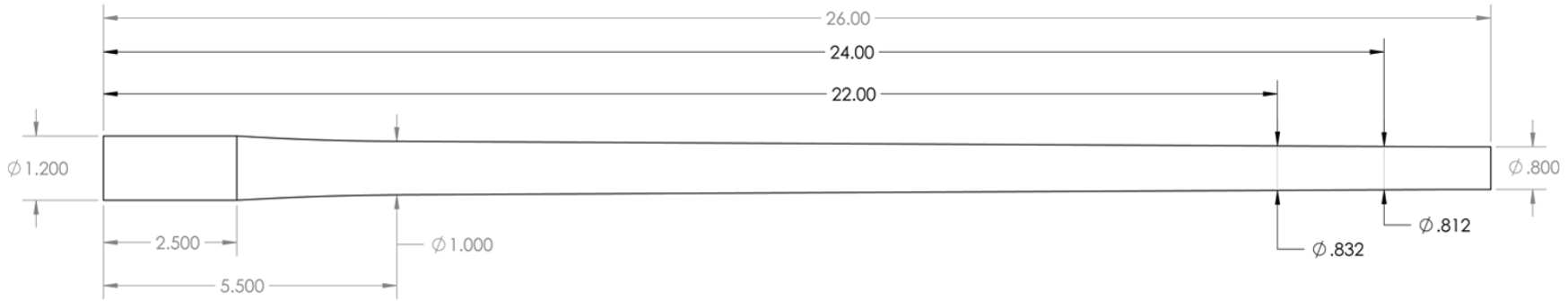


*Accuracy International Barrels*

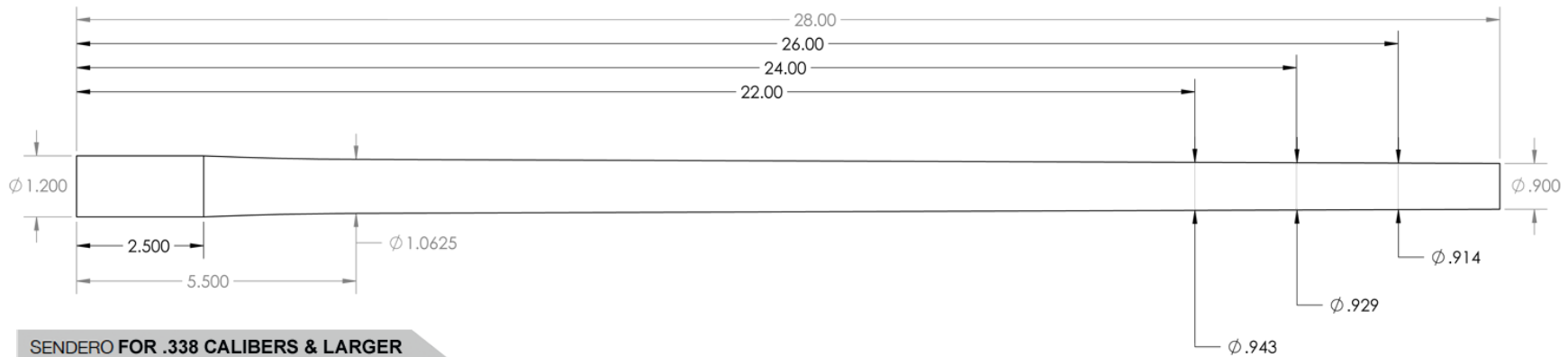


*Tikka T3*

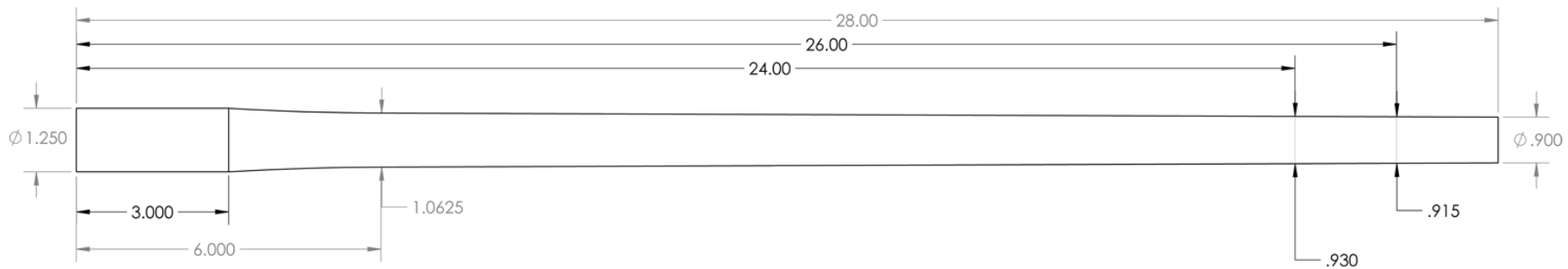
**SENDERO LIGHT**



**SENDERO**



**SENDERO FOR .338 CALIBERS & LARGER**



## Proof Research Barrel Comparison

Important Notes:

- 1. Proof Research "CF Sendaro" is approximately the same taper as the steel M24 taper. (1.2" shank tapers to ~0.9" at the muzzle)
- 2. Proof Research leaves a 1" to 2" X 0.62" protrusion on the muzzle to protect the rifling during shipment. This will be cut to create your muzzle crown during installation.

Factory Sendero



0.830" @ 26"

Proof Research M24



0.905" @ 26"

Proof Research Carbon "Sendero"

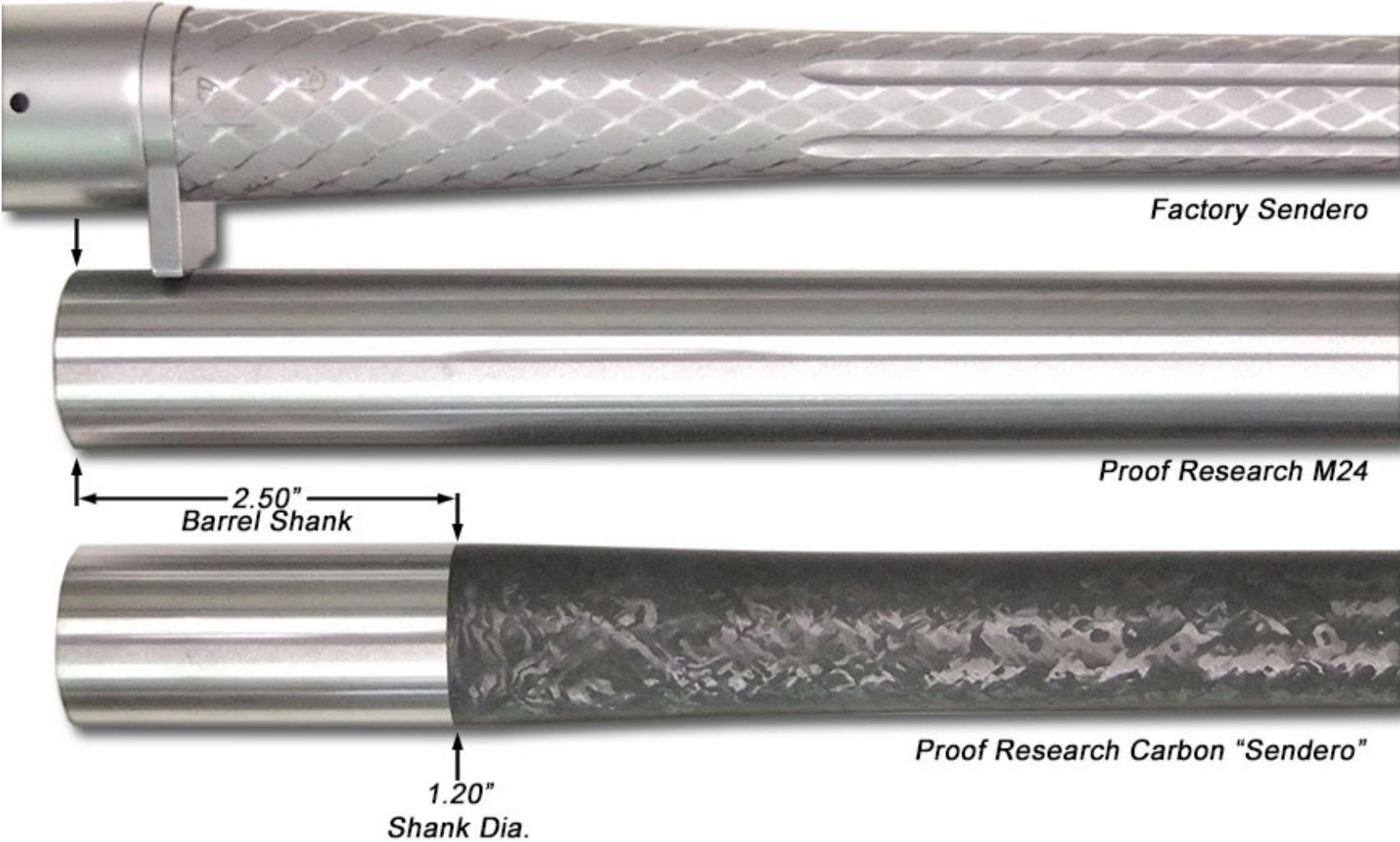


0.914" @ 26"





Proof Research Barrel Shank Comparison





Inventory and prices subject to change.

CF Blank - \$900 USD Retail price – RPS price \$1100 CAD (varies up and down with exchange rate)

Other barrels – please contact us

Call 780.668.3395 or Email: [Sales@rpsinternational.com](mailto:Sales@rpsinternational.com)