Xtreme Machining Hitting the Mark With New Bullet Design

Robert Zelenky is the owner of Xtreme Machining, a custom machine shop specializing in building quality rifles for the serious shooter. Located in Grassflat, PA, Xtreme Machining is always pushing the envelope on what they can get a serious shooting gun to do. “All of our guns are built to the highest standards and precision as though we were building it for ourselves.” Robert Zelenky

Xtreme Machining also has the capabilities of using their machining equipment for jobs other than gun building and that is exactly how Robert came to design his latest innovation in the small arms industry, a new bore rider bullet.

The newly designed bullet, “338 Xtreme”, was not only a patentable idea but was a successful product in the end. Being hindered by the amount of pressure in the bullet chamber, he had to redesign. With the new bullet, his guns were able to shoot 300 to 400 feet per second faster than previous bullet designs. With this increase in speed, most people would think there would be an increase in recoil. But, with the new design there was a drop in recoil. In fact, his son, who is 13 years old, is able to shoot the gun with no problems.

SBDC ROLE
Robert was referred to the Bucknell SBDC and Engineering Development Services (EDS) by Corry Riley of the Clarion SBDC. Recognizing the additional technical expertise at EDS in product development, engineering design, and prototyping, he requested assistance from Bucknell’s SBDC.

When he came to the SBDC, he brought two-dimensional drawings of his bore rider bullet design, but had not conducted a patent search. EDS provided assistance by conducting a preliminary patent search of the USPTO database, providing significant cost savings over that of a patent attorney. Robert then requested information on acquiring a trademark for his 338 Attacker product. SBDC consultants were able to provide him with a trademark search of the USPTO database as well as guide him through the process of registering the trademark for his new product with the United States Patent and Trademark Office.

IMPACT
Adding to the success he has had in pursuing a patent for his “338 Xtreme” bullet, Robert’s gun and bullet will be featured in Special Weapons for Military and Law Enforcement Magazine. The gun is a one piece 6061 T6 Aluminum stock machined using his in house CNC machine. Robert is pursuing an international patent for a 266 grain, 338 caliber bullet.

The assistance rendered by Engineering Development Services has translated into valuable economic gains for the client. Introduced this spring, 50 units of his rifle have been ordered at approximately $4000 a piece plus the cost of bullets. These guns and bullets will be used by competition shooters as well as military and law enforcement. The “338 Xtreme” with its new bullet design is accurate to distances beyond 2500 yards!