

## 2017 Mastercam Wildest Parts Competition Winners

Each year we eagerly await the arrival of the Wildest Parts Competition entries. Seeing what the students create and getting to know them and their instructors through their entries is one of the best parts of what we do. There are a lot of truly inspiring students out there and we can't wait to see what they'll do next. The entries are packed up and will be headed to the Association for Career and Technical Education (ACTE) CareerTech VISION conference in Nashville, TN where they will be proudly displayed in our booth. They will spend the rest of the school year traveling to other shows such as the International Technology and Engineering Educators Association (ITEEA) conference in Atlanta, GA.

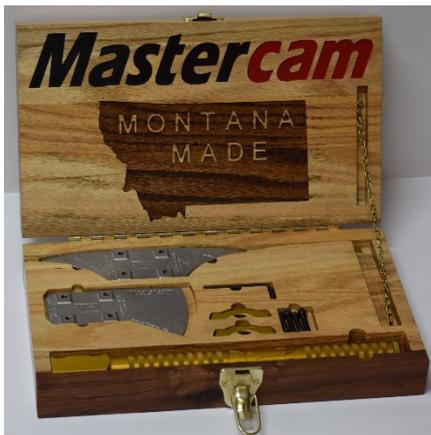
Thank you to all the entrants and to their instructors!

We will be contacting the winners shortly to arrange delivery of their prizes.

### Secondary Division

*1<sup>st</sup> Place – Survival Multitool – Grayson Weber – Capital High School – Instructor Jim Weber*

While trying to decide on what to make for the competition, Grayson, who is interested in the outdoors and loves to hunt and fish, knew that when you are deep in the backcountry, weight is an issue. You don't want to carry around a whole axe and pickaxe. So, Grayson created a system where all the heads use the same handle. Or, you don't even need a handle at all; the outdoorsman can simply find a stick big enough and attaches the head and they are good to go! This can save you from 5-7 lbs. Grayson went through 3 prototypes, but the 4<sup>th</sup> time was a charm. Making the part helped him learn a lot about not only using Mastercam, but engineering and actually building something.



*2<sup>nd</sup> Place – Master Caster – Hadley Snortland – Capital High School – Instructor Jim Weber*

Hadley made a custom 4-weight fly fishing rod, a wooden case, and a fabric sleeve for the competition. He chose this part because he loves to go fly fishing and wanted to customize one for a unique, all-around fishing rod. Hadley said he learned a lot about the amount of time that can go into a project like this one, and just how many parts of the rod needed to fit together with a high level of accuracy, especially the threads on the reel seat of the rod. The case is made from African Mahogany for the main body and Wormy Maple for the lid and cap.



*3<sup>rd</sup> Place – Multi-tool – Blake Pitzinger – Hamilton High School – Instructor Brent Holmes*

Blake decided to build a multi tool because he knew he could make it cheaper than buying one, and he wanted the challenge and fun of making his own design, and customizing it to his personal preference. He didn't like his first prototype, so he made some changes and came up with the final design. The multi tool includes features such as a bottle opener, hex wrench, clip, pry bar, and a broad head wrench. And, Blake even made his own stand that he 3D printed, after creating the solid in Mastercam, to display his tool!



## **Postsecondary Division**

*1<sup>st</sup> Place – Deep Sea AUV Camera Enclosure – Christian Ziruk – WSU – Instructor Kurt Hutchinson*

The enclosure design is intended to be implemented on an AUV (Autonomous Underwater Vehicle) for vision processing. Christian chose a cylindrical shape, due to its great mechanical advantage in handling high pressures. The criteria he was given was the design required enclosures to weigh less than 3 lbs., cost less than \$50 in material, accessibility to the inside for O-ring lubrication and camera maintenance, and corrosion resistant to withstand saltwater. After making the enclosure, Christian said next time he would like to try different toolpaths to try and speed up the machine cycle time.



*2<sup>nd</sup> Place – Beer Tap – Stephen VillaReale – Erie Community College – Instructor Nate Witkowski*

Stephen has always wanted to build a bar in his house, once he owns a house. So, this project was perfect for him to start completing that goal! At first, Stephen thought this project would be too simple. But, designing the tap was fun but very challenging. Figuring out the interior dimensions of the tap proved to be pretty hard to figure out. He learned a lot, and you can see how much by viewing his first attempt and his final attempt. Impressive!

