# 2017 Innovation Challenge Final Presentations

May 22

# 1ST PLACE

### G2-3 Bench

Ryan D. & Eddie N.

Mr. Langfeldt's IED- Penn H.S.

A completely redesigned bench and a jig to build the bench. This bench uses less lumber and screws to build and can be produced faster. Half of the bench is assembled on the first jig, transferred to the second jig and completed.



### 3RD PLACE

# G4-3 Bench

Hayden C. Michael F. Collin M. Jeff P. & Caroline T.

Mr. Parker's POE- Penn H.S.

A jig that can be attached to any existing table that would allow workers to simply place lumber in exact spots without the use of clamps. They also created an attachment fixture so the screw gun can only be placed in specific locations. The table top gets assembled on one side while the legs are assembled on the other and then placed together to complete the wooden bench.

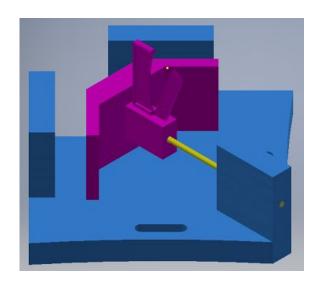


# B1-5 Bench Clamp

Sabrina K. & Shania P.

Mr. Langfeldt's IED- Penn H.S.

An easy clamping mechanism so workers can hold two boards together at a 90 degree angle and screw them together. This clamp can be operated easily with one hand.



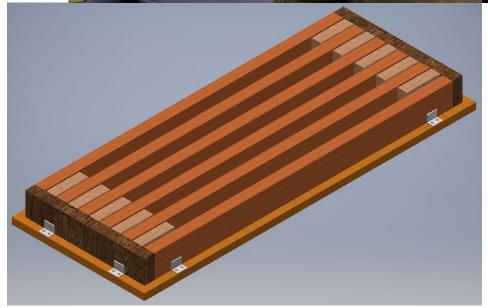
# B1-7 Screw Gun Caddy

Michelle K. & Lyvia L.

Mr. Langfeldt's IED- Penn H.S.

A jig that would allow workers to place boards in and will hold them in place without the use of clamps. Workers would then screw the boards together to create the top of a bench.



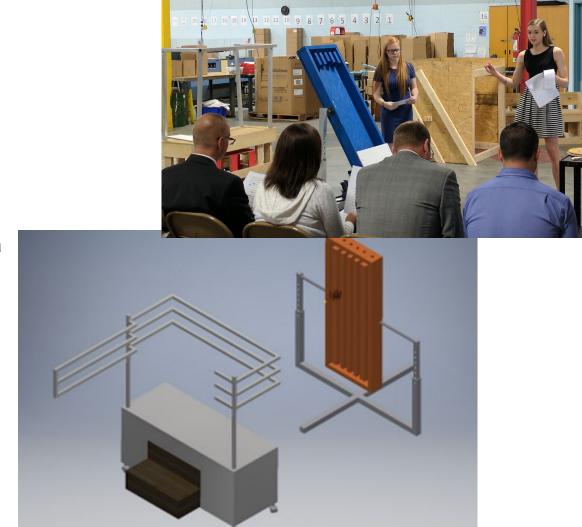


### B1-13 Bench

Christina F. & Rachel R.

Mr. Langfeldt's IED- Penn H.S.

A complete system to help workers build a wooden bench. There is a jig for workers to place the bench top into without using clamps. The jig rotates so workers can be at the optimal height and location to push down while attaching the boards. The stand is for screwing in the end boards which must be at an elevated height to push down.



## **G4-4** Washer Counter

Chris H. Evan M. & Dani S.

Mr. Parker's POE- Penn H.S.

A simple device to allow workers to easily count washers and place them into the package. The supervisor sets the height of the collar to match the number of washers that is needed, workers stack washers to the top, and pick up the jig to dump the washers into the bag.

