



Westlake High School



TECHNOLOGY & ENGINEERING EDUCATION DEPT.

STEM, TRIZ, AP CSP, Architecture, Engineering, Design, & Innovation Studies

FOR IMMEDIATE RELEASE

Date: 3-9-18
Contact: Scott Kutz, Westlake High School, Office Phone (440) 899-3075 Ext. 2041
Email: kutz@wlake.org

Re: Westlake High School TechMates team make finals of product design contest

Westlake, OH. – The Westlake High School TechMates team of **CONNOR REIS** (JR.), and **HENRY LEVENBERG** (SO.) made it to the finals of the Product Design Contest, sponsored by Rapid Prototype and Manufacturing LLC (rp+m) in Avon Lake.

They are one of only 3 teams from 18 entries representing schools from all over Northeast Ohio to make it in the finals. REIS & LEVENBERG redesigned a portable Step Stool for around the house they call the “SingleStep”. It includes storage and a feature that has a retractable step adding several inches to reach high places.

The Product Design Contest helped students learn about the process for designing everyday items as well as cutting edge technology in the additive manufacturing industry. REIS & LEVENBERG have also started the process to file for a provisional patent on their design.

Students were challenged to research, reverse engineer, and re-design the aesthetic and functional components of one of the following existing items for Additive Manufacturing:

- Household product (ex., Swiffer, Curling Iron, Step Stool, Flashlight)
- Kitchen utensil (ex., Pizza Cutter, Tongs, Can Opener, Apple Peeler)
- Garden tool (ex., Rake, Shovel, Tree Pruner, Weed Puller)
- Power or Hand tool (ex., Hammer, Screwdriver, Wrench, Pliers, Cordless Drill)

Each student entry required them to submit an orthographic (top, front, right side) drawing with dimensions, a 3D pictorial (isometric) view, and answer two essay questions. (Describe the benefits of your design; Is the design user friendly & why would someone buy it?). To make it to the finals, they also had to submit a 60 second “Shark Tank” type Youtube video to describe their design.

The final round will be judged on Friday, March 16, where the three teams will make a live presentation to a team of rp+m professionals. The grand prize winner will be announced immediately after at the rp+m company headquarters in Avon Lake, OH.

The designs are being judged in several categories including cost effectiveness, ease of use, functionality, creativity, feasibility, and aesthetic appeal. Prizes in the contest include gift cards for the first, second and third place teams. The winner will receive a professional version of their design 3D printed by rp+m.

Judges on the panel include rp+m professionals Steve Speaker (Industrial Design Engineer), Kyle Myers, Ph.D. (Research & Development Engineer), contest organizer Dana Hartup (Project Manager), Cameron Rogers (Research & Development Engineer), Brian Adkins (Production Manager), Maggie Kolovich (Binder Jet Technician) Tracy Albers, Ph.D. (CTO & President), and owner Matt Hlavin.

About rp+m: Rapid Prototype and Manufacturing LLC (rp+m) is a unique solutions company that provides clients with leading-edge additive manufacturing technology, engineering expertise, and design innovations to bridge the gap between concept and commercial success. rp+m operates a production facility in Avon Lake, Ohio focused on the additive manufacturing of polymers, metals and ceramics. For more information visit www.rpplum.com