

A NEW TECHNOLOGY

Going beyond additive and subtractive manufacturing from 3D printers and CNC machines, Robotic Blacksmithing can achieve a wide range of material properties by utilizing heating and deformation techniques.

WHAT IS IT?

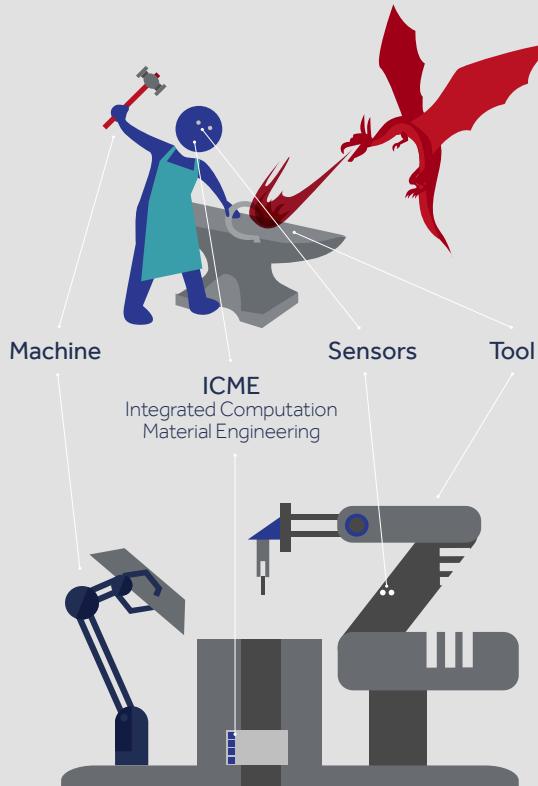
Instead of a blacksmith manipulating and forming materials while he/she hammers, bends, twists, and/or pulls the materials, a robot performs these movements and manipulations using a set of agile forming tools. Robotic Blacksmithing performs the same tasks a blacksmith would but with greater efficiency and agility, and with more precision than a person with traditional tools.



LIGHTWEIGHT INNOVATIONS
FOR TOMORROW

Robotic Blacksmithing Competition

The Evolution of Robotic Blacksmithing



LIGHTWEIGHT
INNOVATIONS

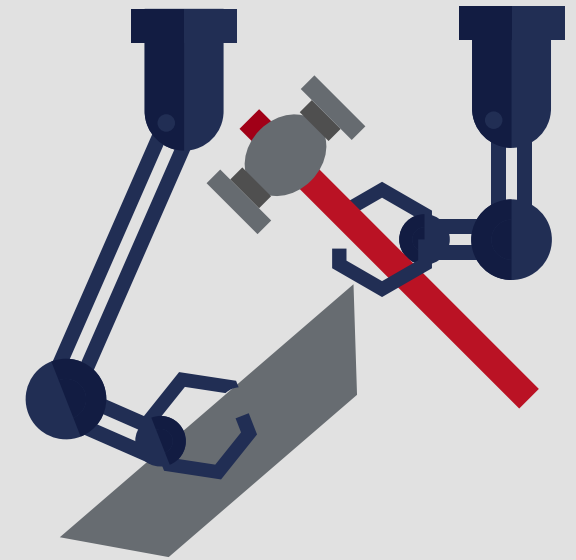


THE OHIO STATE UNIVERSITY

For more information, please see lift.technology or www.roboticblacksmithing.com.

For questions about LIFT Education & Workforce initiatives, contact Director Emily DeRocco at ederocco@lift.technology.

For technical questions on the LIFT Prize in Robotic Blacksmithing, please contact Glenn Daehn at daehn.1@osu.edu.



**Igniting Student
Interest in Manufacturing
Skills and Innovation**

THE CHALLENGE

Using robotics, develop a new mechanical process to form three common shapes in three different phases of the competition.



Phase One:
Shaping plasticine/clay



Phase Two:
Shaping soft metal



Phase Three:
Shaping including thermal processing to make very strong components

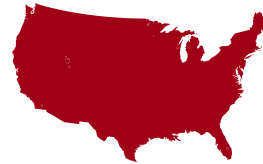
THE BENEFITS



Display innovation and skill by researching and developing a completely new technology.



Contribute to a new digital manufacturing revolution, and gain valuable engineering experience.



Compete for prizes in an open-ended nationwide challenge.

ELIGIBILITY

The program is open to any student team attending a U.S. high school, community college, or university and partnerships with regional or national companies are encouraged.

TIMELINE

Registration:
August 1st - November 30th

Build Stage:
December 1st - March 31st
Winners will be announced by the last week of April.

Full Rules:
Expected to be announced in September 2016

MORE INFORMATION

Visit www.roboticblacksmithing.com
Michael Gentil • Email: gentil.l@osu.edu •
Phone: 614-598-5276



PRIZES

Winning teams will receive recognition and cash awards in excess of

\$50,000.

