

# Engineering Student Technology Committee

<http://www.engr.colostate.edu/ESTC>

**College of Engineering**  
**Colorado State University**

## 1. Title of Proposal:

ASCE Concrete Canoe Team Batch Mixers

## 2. Proposal Participants:

*Primary Contact for Proposal*

**Name:** Tony Grasso

**E-Mail:** agrasso2@rams.colostate.edu

**Department/Major:** College of Engineering – Civil Engineering

**Check One:** Student

*Additional proposal participants*

**Name:** Marissa Vortherms

**E-Mail:** mavorth@rams.colostate.edu

**Department/Major:** College of Engineering – Civil Engineering

**Check One:** Student

*Additional proposal participants*

**Name:** Hussam Mahmoud

**E-Mail:** hussam.mahmoud@colostate.edu

**Department/Major:** College of Engineering – Civil Engineering

**Check One:** Faculty

## 3. Proposal Abstract (limit to 100 words):

ASCE Concrete Canoe has been a growing student project within the Civil and Environmental Engineering Department. Two years ago, it was introduced as a senior design project with enormous success (2<sup>nd</sup> place at regionals!). In the spirit of constant improvement, CSU Concrete Canoe would like to propose several batch mixers that will streamline the process of making trial concrete mixes and thus more trials can be tested before selection.

## 4. Proposal Budget

Item	Quantity	Estimated Total Cost
Avantco MX10 Batch Mixer	2	\$1,300

*Dollar or percentage amount requested from ESTC:* \$1,300

## 5. Full description of proposal:

The Concrete Canoe team needs a more efficient method of creating trial concrete mixes in quantities that are manageable and repeatable for each batch. Automated mixers will ensure that there is a consistent and acceptable consistency which is critically important during casting day when there are over two dozen volunteers ready to help place concrete. These mixers could remain in the Concrete Lab for use by any other senior design projects or by every Civil engineering student during lab (such as CIVE 302).