Helwig Farms Quarter-Scale Tractor Team

The Kansas State University Helwig Farms Quarter-Scale Tractor Teams, formerly Powercat Tractors, came home with two top-five finishes in the 20th annual American Society of Agricultural and Biological Engineers’ International Quarter-Scale Tractor Student Design Competition.

The teams competed June 2-4 in Peoria, Illinois, against 27 teams from universities in the U.S., Canada and Israel. K-State’s A team took fifth place overall and its X team second overall. This is the 19th time in the last 20 years that one of the university’s teams has won or placed in the top three at the event.

“Our now 20-year record speaks for itself,” said Joe Harner, head of the biological and agricultural engineering department. “To continually rank in the top tier of this international competition reflects well on our program, our students and our advisers.”

A panel of industry experts judge each design for innovation, manufacturability, serviceability, maneuverability, safety, sound level and ergonomics. Teams submit a written design report in advance of the competition, and on site must sell their design in a formal presentation to the panel. Finally, machines are put to the test in three performance events — three tractor pulls, a maneuverability course and a durability course.

The A team — juniors and seniors — won both the Safety and First-Time-Through awards, and placed third in written report, first in oral presentation and fifth overall. The X team — freshmen and sophomores — took first in the pulling event and second overall.

Team leaders

**A Team**
- Lucas Weller: President
- Gabriel Bergmann: Vice President
- Megan Workman: Secretary
- Alexander Nytko: Treasurer
- Wade Stroda: Shop Foreman
- Curtis Doughramaji: Jr. Shop Foreman
- Conor Hamilton: Fundraising Co-Chair
- Braden Mishler: Fundraising Co-Chair
- Jesse Meier: ESC Representative
- William Moreland: ESC Representative

**X Team**
- William Friesen: President
- Brett Schwarz: Vice President
- Jace Shirley: Secretary/Treasurer
- Evan Ridder: Shop Foreman
- Garret Schneider: Shop Foreman

Faculty advisers

- Ed Brokesh, BAE instructor
- Lou Ann Claassen, BAE administrative specialist
- Dan Flippo, BAE assistant professor
- John Kramer, retired BAE extension ag engineer
- James Pat Murphy, BAE emeritus professor
- James Schmidt, vice president of engineering, Mechanized Design
- Jonathan Zeller, BAE research technician

Second and fifth place overall at 2017 ASABE annual International Quarter-Scale Tractor Student Design Competition