

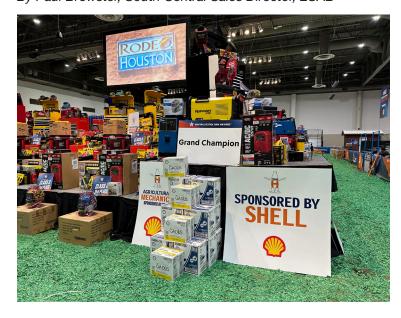
Yes, things are bigger in Texas, and that includes the massive creations entered in the Agriculture Mechanics competition at the Houston Livestock Show and Rodeo™, which was held March 16 and 17. Through its Future Fabricators program, ESAB donated welding and cutting equipment with a retail value of \$511,000 as part of the prize packages.

More than 500 projects, including trailers, truck beds, gates, hay haulers, log splitters, tractors and more, were submitted by 1,500 high school FFA and 4-H students from more than 250 Texas school districts. Their entries look like something you would expect from a professional fabrication shop, but the high school students do the cutting, welding, electrical, hydraulic and paint work themselves.

ESAB salutes the dedication of these students, their instructors and the countless volunteers that make the Ag Mechanics competition possible. Here are just a few of the inspirational tales from the show. If you would like to nominate an educator or student for recognition, or to learn more about ESAB's support for the next generation of welders, visit ESAB's Future Fabricators web page.

FABRICATORS IN TEXAS

By Paul Brewster, South Central Sales Director, ESAB





# TUCKER SOULES, INSTRUCTOR KEVIN

**OSBORN** 

#### **GRAND CHAMPION**

Tucker Soules of the Hallsville, Texas FFA chapter was named Grand Champion of Show for fabricating a hydraulic arm truck bed that is made for moving two round bales of hay at a time. The Grand Champion prize package (shown behind Tucker, pictured with instructor Kevin Osborn) included an ESAB Ruffian ES 150G EDW engine driven welding generator, an ESAB Rebel™ multiprocess welder, Victor® oxy-fuel equipment, a plasma cutter, TIG and MIG welders and welding helmets.

"The support that I'm receiving here is going to help me grow. I plan to make a business one day as far as building beds and custom fabrication," says Soules, a 17-year-old-junior who invested about 425 hours to build the bed himself. He will put it on his 2016 F250 truck for delivering hay as part of the family's cow/calf and hay operation. Where Tucker lives, people buy two or three bales at a time. The bed makes delivering hay to people as well as feeding cows a lot easier because it eliminates a tractor.

"Even from a young age, Tucker has always been interested in mechanical things, fixing things, taking apart his toys and putting them back together. He just absolutely loves hands-on building," says his father Mack Soules. "Whatever direction he wants to go from here, he's got a great foundation."

#### **RESERVE CHAMPION**

The Agricultural Mechanics team from West Hardin, Texas was named Reserve Champion of Show for its 40-ft. long deck over trailer for hauling school buses that break down and metal for the Agricultural Mechanics program. The school won a prize package that featured an ESAB Warrior 400i MV CC/CV heavy industrial multi-process welder, MIG and TIG welders and oxy-fuel cutting equipment. The school used an ESAB Rebel to MIG and Stick weld portions of the trailer.

"We're teaching life lessons that go way beyond a welding curriculum so we can make sure students can obtain a job in the industry and climb that corporate ladder to become project managers, engineers and more," says West Hardin advisor James Merrifield.

West Hardin student Colten Brackin helped fabricate the trailer, and he plans on attending a trade school in Texas after he graduates. Mom Amanda Brackin says that "The Ag Mechanics program has helped him tremendously, such as by instilling a good work ethic. He has an amazing teacher that has taught them so much; he believes in those kids and pushes them."



WEST HARDIN





#### **LASTING A LIFETIME**

"The way that the industry supports the program doesn't just last until the end of the life of the tools they donate. It lasts for the lifetime of these students," says Dr. Curtis Langley, current Superintendent of the Agricultural Mechanics competition, Assistant Professor at Tarleton State University and owner of Langley Metal Works. "By supporting these kids at a young age, they can continue to build those skills throughout their young adult life and have the skills and the abilities manufacturers want, not just for technical work, but in sales, engineering and more."

As a result of his involvement with Agricultural Mechanics as a youth and acquiring an ESAB MIG welder, Langley started his own fabrication business, Langley Metal Works. Today, that small business has grown and now has created jobs for 15 people.

#### THE FUTURE IS BRIGHT

Justin Kirby, co-owner of AllTex Welding Supply and past Superintendent of the Agricultural Mechanics event, says that Houston is the largest welding market in the country with significant welding career opportunities in oil, gas, chemical, energy and agriculture markets.

"If you could see the fancy trailers and equipment these kids build, you'll see the future is bright for the welders and fabricators in the state of Texas," says Kirby. "This competition is essential in encouraging our youth to pursue a career in welding, which is necessary because we have a serious labor shortage. The students still need some job specific training, but you're hiring a person that's a good kid and they already have the background in welding, cutting and fitting."

### CLEAR VIEW OF THE PUDDLE AND HIS FUTURE

Carl Soeffker of the Georgetown FFA built a dovetail hauling bed for his 2013 F350. "I wanted a flatbed because I wanted more stability when I'm hauling things. I haul my fifth wheel for high school, but I also haul a lot of heavy equipment for work. I'm mainly a welder's helper, but I do drywall every now and then too. Also, a lot of people need their excavator or skid steer moved. I just use my truck to move it around."

Soeffker plans to work in construction. At age 18, he already has six years of welding experience. He uses an ESAB Sentinel™ welding helmet because he was exposed to it by his first welding boss and his instructor. "It's a great hood. You can see everything. I can see soapstone lines. It's super clear, and I can see my puddle great."





## DEVELOPING A FUTURE WORKFORCE

Julie Wright, Shell Rotella brand and media manager, says that "Shell is proud to be a sponsor of Ag Mechanics and supporting all of the students, their builds, the volunteers and the instructors that work tirelessly to put this program on. The Ag Mechanics program really showcases creativity and innovation. It's inspiring that young people are creating these kind of projects. I would encourage the industry to look at these students and the volunteers in this program and see how they can support the development of our future workforce."



#### **GOT BEEF?**

Gabriel Marler of Liberty Hill High School fabricated this beefy welding table with a height suited for people in a wheelchair but with the idea that adding casters to it would then create a height where the table is usable for everybody.

"Welding is one of those trades that you can just get into. It's you, your puddle and the helmet," says Gabriel. "Sometimes your mind can go blank and you forget about everything else. It's a craft where you can always be better, you can always improve." Gabriel plans to attend Austin Community College, get all his qualifications and be a professional welder.



### JUSTIN WOOD

AG SCIENCE TEACHER AT LIBERTY HILL HIGH SCHOOL

#### **BUILDING CONFIDENCE**

"I believe that the Ag Mechanics program teaches kids a lot of different types of skills," says Justin Wood, Ag Science teacher at Liberty Hill High School. "It helps build their confidence and their communication skills, so they become outstanding students and eventually outstanding adults. It also helps introduce them to different businesses and trade schools and a whole bunch of different areas out in the industry. It makes that real world connection where the classroom simply can't."

Wood notes the school just had a bond pass and needed more welders. Wood was more familiar with a different brand, but he wasn't keen on the high price tag. After some research, he purchased 10 ESAB Rogue 180i PRO Stick/Live TIG welders and two Rebel EMP 215ic multi-process welders.

"The first time that I struck an arc with those ESAB machines, they impressed me immensely," says Justin. "They're super simple to use. The machines that are out there have capabilities (such as with different settings for 6010/6011 and 7018 electrodes). I'm really impressed with the overall quality."

#### **DIVISION 1 FABRICATORS**

Ryan McMillan (second from left) and Dawson Grissett (far right) have been active with Ag Mechanics since the seventh grade. This year, they and their teammates fabricated a 32-ft. trailer with a 5-ft. dovetail for a local feed, tack and country supply store. During summers and on the weekends, Ryan works at a local tank and surface equipment fabricator, Long Industries. One of the front office personnel introduced him to CAD, and Ryan learned enough to develop the blueprints for the trailer.

"We all love sports, but let's be real. We're small; we're not going D1 (e.g., play sports at a Division 1 school), so we might as well actually focus on stuff that's going to support us in the future," says Ryan. "If we already know a little bit about everything and we go out into the [job] field and wenalready have basic knowledge, we will exceed over others. We're setting up our future, and it's just something that we like to do."

Melissa Grissett, Dawson's mom, notes that because of participating in Ag Mechanics, "he is doing things that neither one of us could have ever taught him how to do. He's interested in going to college, getting a technical degree now and being able to make a career for himself."

Dad-Malcom says, "We are very fortunate to be at a school that really supports Ag Mechanics. We're blown away by what these kids can do."



**BUFFALO ISD** 







AG MECHANICS INSTRUCTOR AT HAZARD INDEPENDENT SCHOOL DISTRICT

#### **BUILDING MONSTROSITIES**

Joey Perez, an Ag Mechanics instructor with the Hazard Independent School District, has participated in the competition at the Houston Rodeo for 16 years.

"The competition is pretty stiff when you look around and see the monstrosities these kids build, like that 28-ft. cattle trailer behind me," says Joey. "Three years ago, we won Reserve Champion, and a lot of those kids in that class went on to a technical school. Now a lot of them are making more money than I'm making. They have flourished, and that's why it's important for manufacturers to be involved with these kids. If you don't give a child an opportunity, they'll never be able to see where they can be."



#### STICK FOR STRUCTURAL

Bubba Muniz and Sage Sherman from Anahauc FFA fabricated a 15-ft. long, 5-ft. wide service and fuel trailer.

"We have a diesel tank on the back that holds 900 gallons of diesel. We also have a box here that has a DEF tank (Diesel Exhaust Fluid) that holds 110 gallons," says Bubba. "The DEF pump is powered by a 3,500-watt generator, and we also have a 250 CC air compressor that builds up around 150 PSI." They used the ESAB Rebel's Stick capabilities for all the structural steel welds and the MIG welding capabilities for non-structural elements.

#### **WELDING AT 10**

Ten-year-old Aidyn McFarland from the Bexar County 4-H says she welded, "a livestock pen for pigs, ducks, and sheep. The reason I built it is because the pens in our barn are rusty and old. The first problem was a latch. The pigs would get out of their pens because they could nose up the latch." Using a spring-loaded latch on the gate made it easy for people to open the gate but hard for the pigs. When asked to show off her welds, Aidyn said, "The good ones and the bad ones, or just the good ones?" Yes, this 10-year-old is critical of her own welds. For any other young girls out there who are thinking about welding, Aidyn says, "It's a little hard. It takes lots of practice, but I bet you can do it."

Aidyn's father Wes McFarland teaches Ag Science Technology Academy in San Antonio at Northside ISD says, "Learning a skilled trade is the backbone of any developed country. It's knowing how to do things. For kids that are involved in these projects, and my own kids as well, it's just super important to have skills in their pocket where they can go down the road and earn a living. I don't even want to call it a fallback career. That's taboo for me."





