

## Ethan Eck – Chem-Blade

This is Kansas Profile. I'm Ron Wilson, director of the Huck Boyd National Institute for Rural Development at Kansas State University.

Phoenix, Arizona. February 2015. A new invention is being highlighted at a national meeting. This invention, called a Chem-Blade, was selected as part of a national contest for agricultural entrepreneurs. The invention was created by an entrepreneur in rural Kansas. It's today's Kansas Profile.

Ethan Eck is the founder and owner of Eck Fabrication, maker of the Chem-Blade. Ethan is being assisted by product developer Ralph Lagergren, whom we met last week.

Ethan grew up on a farm near Kingman. He went to Wyoming Tech where he studied automotive chassis fabrication. Ethan's father had a commercial hay grinding business and his brother had a commercial spraying operation and sold agricultural chemicals to farmers, so Ethan helped with those enterprises as well.

"I was a sprayer operator," Ethan said. His job was to operate one of those large mobile spray rigs which are used to apply weed or pest control chemicals onto farm fields. To put those chemicals into the sprayer, he would have to get a plastic jug of the chemical, pull off the foil seal, pour the jug into the sprayer, rinse the jug and then discard it safely. It was a time-consuming and somewhat hazardous task.

After handling lots of these jugs, Ethan began to wonder if there was a better way. Using his metal fabrication skills, he built a device which was designed to cut open, empty, and rinse out a jug all in one action. It included a sharp blade on which the jug could be placed so as to open and empty it, plus built-in pressurized rotary rinse heads to rinse out the inside of the container.

It worked so well that he decided to commercialize the product. He named his company Eck Fabrication. His new product was named Chem-Blade.

Ethan met with farm entrepreneur Ralph Lagergren. Ralph not only encouraged Ethan to pursue it, he joined in the venture. "It's one of those great projects," Ralph said. "Ethan has the work ethic and creative mind to make it work."

They developed the new Chem-Blade ES which stands for Enclosed System. In this system the Chem-Blade is housed in a sealed metal enclosure so the operator and the environment are protected from fumes, spills or splashes.

Ethan said that the benefits of this product involve safety, productivity, efficiency, and the environment. Use of the Chem-Blade enables a safer work environment and avoids skin contact. The operator does not have to fumble with a pocket knife to try to remove the foil seal. The Chem-Blade allows a container to be emptied in a matter of a second or less, rather than several minutes. In a day, this might save half an hour and mean that 25 to 45 more acres could be covered by the operator.

The Chem-Blade avoids waste and saves time and money. The automatic rinse feature means that no valuable chemical is left behind in the container. It avoids having to rinse out jugs by hand at the end of the day and facilitates recycling.

"A producer can recoup his investment in a Chem-Blade in a matter of weeks," Ethan said.

In spring 2015, Eck Fabrication was selected to participate in the Launch A Business program by the Center for Entrepreneurship in the K-State College of Business.

This initiative, supported by Kansas State Bank and others, provided training by KSU faculty for entrepreneurs plus networking and mentoring with business leaders.

This selection followed another award. In 2014, *Successful Farming* magazine put on a national ag inventor's contest. Out of more than two dozen entries, the Chem-Blade was selected as one of two winners. It was showcased at the 2015 Commodity Classic put on by several national farm organizations.

Eck Fabrication has now sold hundreds of the Chem-Blade units across the nation. This is an impressive record for a rural business located on a farm outside of Kingman, Kansas, population 3,158 people. Now, that's rural.

For more information, go to [www.eckfab.com](http://www.eckfab.com).

It's time to leave Phoenix, Arizona where the Chem-Blade product has been highlighted from a national competition. We commend Ethan Eck and Ralph Lagergren for making a difference with agricultural entrepreneurship. Like his blade, this entrepreneur is sharp.

For the Huck Boyd National Institute for Rural Development, this is Ron Wilson with Kansas Profile.