

College Diesel Technology Students Visit Tenino Distillery

Ethanol: Centralia College Students Visit Tenino Business to Learn About Alcohol as a Fuel Source



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Centralia College Diesel Class

John Bourdon, owner of Sandstone Distillery in Tenino, explains the distillation process to Centralia College Diesel Equipment Technology program students taking a class alternative fuels.

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College Diesel Technology Students Visit Tenino Distillery By Dameon Pesanti / dpesanti@chronline.com | 0 comments

Seven students from the diesel technology program at Centralia College visited Sandstone Distillery in Tenino Tuesday to learn about fermentation — not for drinks, but for fuel.

Students visited the distillery for a tour of the fermentation process as part of an alternative fuels course taught by assistant professor Tyson Lucas.

“Ethanol and methanol are spark ignition fuels, kind of magic to diesel guys,” he said.

As opposed to gasoline, diesel is ignited by compression. Even though the college’s program centers around those types of engines, classes such as the one taught by Lucas will give graduating students a broader range of knowledge before they enter the workforce.

“The whole goal of the program is to expand their horizons a lot more than just being a mechanic,” Lucas said.

During the course, students have had hands-on experience making biodiesel and learned about compressed natural gas as a vehicle fuel source and the possibilities of hydrogen-fueled engines.

John Bourdon, owner of Sandstone Distillery, walked the students through the distillation process, but tweaked his usual distillery tour closer to engines than cocktails.

“The Model T Ford was designed to run on alcohol so farmers could make their own fuel,” said Bourdon.

Ethanol is also in the alcohol that people drink, but the fuel version is much less refined. While most people know ethanol is an alternative fuel blended into gasoline, it was at one point the main fuel source for internal combustion engines.

Carbureted engines are capable of running off ethanol alone, so long as the proof is high enough. And, it burns at a lower temperature than gasoline, which partially makes it a popular fuel choice for auto racing.

Ethanol is a renewable fuel source, but a lot of work goes into refining it.

Three hundred gallons of fermented grains, Bourdon said, produces about 25 gallons of high-proof alcohol. Only about half of that winds up being bottled and sold.

“The rest of it goes to the fuel tank of my '76 Ford truck,” he said.