Safety first

New table saws reduce chance of injury in secondary school shops



Grade 12 student Josh Holmes, right, cuts a piece of plywood under the watchful eye of teacher Frank Lepain.

(Windsor, Ontario, Dec. 10, 2014) – In his 22 years of teaching shop, Frank Lepain has yet to see one of his students have an accident on a major machine.

And while he's reluctant to jinx his good fortune, he's feeling even more confident now that a much safer brand of table saw has been installed in his construction technology shop at St. Anne Catholic High School.

"This is the best safety initiative for our students that I've ever seen," said Lepain. "The margin for error is gone."

The board has installed SawStop brand table saws in all eight of its secondary schools – including two at St. Thomas of Villanova in LaSalle – at a cost of about \$45,000. The saws have patented technology which makes it almost impossible for the user to cut their finger on the blade.

The price is a small one to pay to ensure student and staff safety, according to Alex Ramos, the board's health and safety specialist.

The blade has the built-in ability to sense electrical current emitted from a human body. So if a finger touches the blade while it's spinning, the current causes an aluminum cartridge located mere millimeters below the blade to pop up into the saw's teeth, forcing it to come to an immediate stop.

"It's only one-sixteenth of an inch away from the blade, so it stops in a nanosecond," said Lepain. "It's an amazing piece of equipment."

Of the 720,000 injuries in Canada associated with woodworking each year, 42 per cent happen at the table saw, according to the National Electronic Injury Surveillance System. In the U.S., the Consumer Product Safety Commission says about 10 people lose a finger or mangle a hand in a table saw each day. The agency estimates consumers suffered about 67,300 medically treated blade-contact injuries annually in 2007 and 2008. Including medical costs, lost time from work, and pain and suffering, the injuries cost more than \$2 billion US in each of those two years.

Lepain said the new machines have taken the anxiety out of working with a table saw.

"We still treat the saw with the same respect, but students have a lot more confidence with it," he said.

Grade 12 student Josh Holmes admits he was a little nervous the first time he worked with a table saw, but said he feels much better about working with the new one.

"You have to respect the machine," he said. "Having this definitely reassures you. You still have to be careful with the machine, but it does make you feel a lot safer."