

Engineers have firm handle on innovative hog-line system

By Kevin Mitchell
of The StarPhoenix

When somebody first approached Garry Paulson about a plan to make human hog-line judges obsolete, he shook his head. Paulson, who heads a Saskatoon engineering firm specializing in mining technology, couldn't see himself switching from underground rocks to those finely-polished granite slabs you find in curling rinks.

"I said no, we don't do that," the Startco Engineering president recalled this week when talking about the early stages of his new curling hog-line infraction detector.

"We build industrial electronics; we're not into that. We went out for lunch with them a number of times, until finally, I said 'we've got a bit of time with one of our engineers, and we'll take a look at it.' "

"Them" was a University of Saskatchewan professor and some of his engineering students who had taken on the task as part of a class project. They made a working model and garnered some press attention, but the system wasn't workable as a commercial unit.

So Paulson's employees overhauled the design, and the Canadian Curling Association loved the results. They'll use it at their major championships this winter, including the Brier and Scott Tournament of Hearts.

Paulson says the unit, which is accurate within three millimetres on draw-weight throws, is foolproof. Curlers who have tested it try to beat the system by various means, including tapping the pressure-sensitive handle, or grabbing it again after it's crossed the hog-line.

Nothing's worked - except certain types of heavy gloves.

"The technology in that thing is so solid that we're not concerned about it," Paulson said.

"It's taken away the element of human judgement. I was at the worlds last April in Winnipeg, and there were a number of what I thought were obvious violations. But after what happened to Colleen Jones and Randy Ferbey in the past (with hog-line controversies), the officials were very reluctant to do anything that would cause a controversy. They're happy to put the responsibility onto this electronic gizmo that can be very, very impartial and precise."

The system includes a magnetic strip placed under the ice a one-rock radius in front of the hog-line, plus a magnetic sensor built into the bolt that holds the handle on the rock.

The handle itself has a nickel-plated surface with a mat finish, plus two green LED lights and two red lights. If there's a violation, the red lights blink after the rock's been released.

The unit includes a battery that is activated when a curler tips the rock over for cleaning prior to the shot.

"Some of our electronic products, the level of complexity is two levels of magnitude more difficult than what this product was. But this is the one the public will look at," Paulson said.

"We've put a fair bit of development money into it, and it's been exciting; a real fun thing."