



Australia's first laser-guided pork cutting robot at work at Craig Mostyn Group's Linley Valley Fresh processing works in Woorloo.

Laser robot cuts out meat wastage

Australia's first laser-guided pork cutting robot has made its first cuts at Craig Mostyn Group's Linley Valley Fresh pork processing works at Woorloo.

The \$700,000 laser-guided robot takes precise measurements of the carcass and makes cuts based on the individual animal's anatomical features.

Cuts are designed to maximise production of high-value meat based on particular customer requirements.

Project manager Dean Romaniello said that such precision cutting reduced contamination and wastage of meat due to accidental cutting of the stomach.

"Critical to the value of this laser-guided H-bone saw and belly opener equipment for the evisceration line is that stomach breakage, caused by manual error, is reduced from 4 per cent to less than one per cent," Mr Romaniello said.

Based on current production levels at Linley Valley, this equates to more than 20,000-affected pigs annually, which could be reduced to 5000 or fewer with robotic cutting. Stomach breakage carries a high risk of meat contamination and affected carcasses have to be carefully and individually handled and heavily trimmed.

Mr Romaniello said food safety was a vital concern for the company, which spent more than \$10,000 monthly on its own microbiological testing for bacteria, while also working closely with Singapore's AVA quarantine inspection agency.

Introducing robotics would halve the necessity and cost of testing.

"The initial German designed and built evisceration robot we've fitted allows staff to be redeployed to higher duties and other robot modules can be added progressively, increasing redeployment of staff," Mr Romaniello said.

"Robotic cutting also delivers a more predictable cut of meat, with consistent quality and an increased yield of one per cent per carcass."

Alongside matching dollar funding from the Federal Government's Food Innovation Grants Program, the laser-guided cutting robots program was also supported by Food Equipment Australia, Bann's Meat Technology of Germany, Australian Pork Limited, WA Pork Producers Association and the Pork CRC.

Craig Mostyn Group meat and livestock division general manager Ron Penn said Australia's major fresh pork competitors in Singapore, Denmark, Canada and the US had already addressed the challenges of food safety, productivity and labour costs by investing in robotic cutting machines.

"Australia simply had to invest in the technology to protect its competitive edge," Mr Penn said.

"Taking an industry leadership role as Australia's major exporter of fresh pork into the very important and competitive Singapore market, Linley Valley Fresh and the Craig Mostyn Group committed to significant expenditure as the first adopter in the Australian pork processing sector of this world-class robotic cutting equipment."