



MACHINERY AUTOMATION & ROBOTICS

Robotic Y-Cutter

New MAR Technology Development for Small Stock processing

Features & Benefits

- **Labour** – 2 to 3 operators per shift
- **Species** – Lamb, Sheep & Goat
- **OH&S** – reduced injuries and accidents
- **Productivity** – improved cut line accuracy and consistent quality of carcass dressing
- **Efficiencies** – repeatable with reduced rework
- **Increased Yield** – accurate cuts produce improved pelt quality with less damage
- **Hygiene** – reduced contamination compared to manual operations

Background

The Y-Cutter system in full production since 2005 was developed by MAR in conjunction with IRL NZ and MLA .

Designed to replace 2-3 operators manually completing the initial y-cuts in preparation for the removal of the pelt

The Automated Y-Cutter both reduces the risk of cross-contamination and improves the quality of the cut.

The Automated Y-Cutter includes a robot, integrated sensing and cutting tools to perform this dedicated processing task.

System Overview

A suspended lamb is presented into the system hanging upside down on the chain with all four hocks restrained in spreaders.

Each carcass fed into the cell passes through the sock ringer a spring loaded rotary knife that cuts an opening in the foreleg enabling an opening for the Y-Cut tool to be inserted.

The tool is inserted into each foreleg and cut down to the breast or sternum area sterilising between cuts. The second cut path on the trailing foreleg performs a cut to the breast bone and down to the underside of the neck.

Where To Next?

With the 1st fully automated Robotic Y-Cutter system developed in continuous production since 2005, MAR is currently seeking interest from processors to participate in the project by being a technology adoption site in this MLA/AMPC funded development project.

Further development will Improve current lamb processing efficiencies of +98% and enhance capabilities to process long wool sheep/mutton breeds.

CONTACT

For more information on Robotic Y-Cutter systems, contact:

Stuart Shaw

02 9748 7001

sshaw@machineryautomation.com.au

VISIT

www.machineryautomation.com.au

