

RHC aitch bone cutter



Improved yields

In comparison to manual cutting, the aitch bone cutter cuts with high precision ensuring improved quality of the hams. The operation is also performed without damaging the intestines or the organs.

The concept

With AiRA robots, continuous operation on the dressing line conveyor is maintained, as the robots are synchronized with the main line conveyor; so while carcasses by drop fingers are pulled forward, the position, depth, and angle are determined by the detection unit (vision scanner) and the process is performed in a downward movement.

The AiRA robotic concept is a dynamic concept, as multiple AiRA robots can be fitted along the main conveyor of the slaughter line. The AiRA robots are all “plug and play”, and can operate in any type of new or existing pig slaughter lines.

Hygiene

The integrated sterilization system with its unique cleaning set-up secures fast and accurate sterilization between each operating cycle, allowing the robot to operate at high capacity with negligible risk of cross contamination. The robot itself is enclosed in a strong flexible protective cover with constant air flow inside and lightly over-pressure, keeping the vital part of the robot clean and safe in the harsh environment.

Options

- The operation can take place before or after the rod (penis) and the testicles (in case of non-castrated animals) have been removed
- A guidance system for the hind legs

Why the RHC aitch bone cutter!

- High capacity: 700 carcasses/hour
- Fully automated cutting
- No damage to the intestines
- Easy to service with quick and easy change of blade



Pre-conditions

The total system consisting of:

- Robot with a hygienic protective cover
- Cutting tool attached to the robot
- Sterilization system
- Vision system which is installed along the slaughter line
- Carcass guidance system
- Control unit with transformer box
- Robot fence with secured entrance

Safety and legal requirements

The AiRA aitch bone cutter is CE approved and designed to meet the strictest demand on health and safety.

Technical data

Capacity	700 carcasses/hour
Live weight	60-140 kg/132-308 lbs
Process parameters	Individual cutting parameters for each carcass, customized settings possible
Vision scanner	3D vision system based on optical measuring device
Voltage	380-575V AC 50/60Hz 3 phase
Control voltage	24V DC
Requirements:	
Water	6 bar (min. 4 bar constantly)
Water consumption	Cold (<20°C) 0.6 liter/pig* Hot (>82°C) 0.3 liter/pig*
Compressed air	8 bar (min. 6 bar constantly) Dry air, free of oil and dust absorbed Approved for use in the food industry ISO 8573-1:2010 Class 1.4.1

*Values are based on experience in the field and cannot be guaranteed, as many factors can influence these numbers
Technical data may be subject to changes



Advantages with the AiRA concept

- A concept founded on more than 20 years in R&D and engineering of automated processing
- Homogeneous processing and high quality cuts
- High hygiene level with integrated sterilization of cutting tools, minimizing the risk of cross contamination
- Reduction of labour cost with one robot
- Human machine interface for setting and adjusting the robot
- Low maintenance
- Easy and swift to clean and keep clean
- Easy operation and troubleshooting with uniform user-friendly operator panels on the AiRA robots
- The software interfaces with all types of monitoring systems

AiRA ROBOTICS

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