FRONTMATEC



Worth the investment

With the AiRA neck clipper, improved yields is one of the advantages, as the clipping of necks is determined and performed with high precision.

The concept

The AiRA robotics concept ensures uniform processing, accuracy and high-quality products.

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).

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

For eliminating and minimizing cross contamination, the tools are efficiently cleaned and sterilized after each operation. To ensure high hygiene levels, as well as easy and efficient cleaning, the robot is covered with 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.

Why the RNC neck clipper!

- High capacity: 750 carcasses/hour
- Fully automated cutting and precise clipping of necks
- Head remains attached, while bone has been completely servered
- Yield improvements
- Easy to service, minimal moveable parts, quick and easy change of cutting tool



Preconditions

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
- Control unit with transformer box
- Robot fence with secured entrance.

Safety and legal requirements

The AiRA neck clipper is CE approved and designed to meet the strictest demand on health and safety.

Technical data

Tooliiiiodi data	
Capacity	750 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) 1.2 liter/pig*
	Hot (>82°C) 0.5 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



US: kansascity@frontmatec.com

Phone: +1 816 891 2440