# **FRONTMATEC**



# Fully automatic precision bunger

With the AiRA bung dropper, bunging is fully automatic with high precision each and every time and with minimized risk of cross contamination.

### 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 setup secures fast and accurate sterilization by fully enclosing the tool 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**

- Guidance system for the hind legs
- Sterilization as separate unit
- Upgrade with pelvic bone cutter

### Why the RBD bung dropper!

- High capacity: 650 carcasses/hour
- Fully automated bunging
- Minimal risk of cross contamination
- A vacuum suction ensures smooth and easy disposal of the removed bungs
- Easy to service, minimal moveable parts, quick and easy change of cutting tool



#### **Pre-conditions**

The total system consisting of:

- Robot with a hygienic protective cover
- Cutting tool attached to the robot
- Vacuum unit
- 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 bung dropper is CE approved and designed to meet the strictest demand on health and safety.

#### **Technical data**

Capacity	650 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:	
Requirements: Water	6 bar (min. 4 bar constantly)
	6 bar (min. 4 bar constantly) Cold (<20°C) 1 liter/pig*
Water	,
Water	Cold (<20°C) 1 liter/pig*
Water Water consumption	Cold (<20°C) 1 liter/pig* Hot (>82°C) 0.3 liter/pig*
Water Water consumption	Cold (<20°C) 1 liter/pig* Hot (>82°C) 0.3 liter/pig* 8 bar (min. 6 bar constantly)
Water Water consumption	Cold (<20°C) 1 liter/pig*  Hot (>82°C) 0.3 liter/pig*  8 bar (min. 6 bar constantly)  Dry air, free of oil and dust absorbed

<sup>\*</sup>Values are based on experience in the field and cannot be guaranteed, as many factors can influence these numbers



## 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



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Technical data may be subject to changes