Naddeo



CORING

AI-CORE 3.0

Automatic coring machine

POWER	**17Kw**
VOLTAGE	**400V**
FREQUENCY	**50Hz**
WEIGHT	**2200Kg**

General configuration

The AI-CORE 3.0 is an automatic coring machine designed for precise and repeatable core removal and for integration into automated processing lines. The product is fed by a conveyor belt and positioned by the operator in the dedicated holders, where it is then analysed by the vision system. The machine consists of:

- Conveyor belt with precision-machined PVC supports;
- Dedicated holders for correct product positioning;
- Dual-camera vision system;
- Artificial intelligence system for core detection;
- Robotic arms dedicated to core removal;
- Dedicated belts for separating and removing the core;
- System designed to feed the subsequent quarter-cutting stage.

Functional characteristics

The heart of the AI-CORE 3.0 is its vision system based on dual cameras and artificial intelligence, capable of identifying the position of the core and automatically generating the references required to guide the robotic coring units. This configuration allows the machine to operate accurately even when the product is not perfectly oriented, compensating for angular variations of up to ±30° on each side. Once removed, the core is automatically separated from the product by dedicated belts, while the processed product continues toward the subsequent cutting stage. Production capacity can reach up to 3,000 heads/hour, ensuring process continuity and uniformity

Technical-functional summary

The AI-CORE 3.0 combines machine vision, artificial intelligence and robotics to automate one of the most delicate stages of product processing. Automatic core detection, the ability to compensate for product misalignment and robotic cutting make it possible to standardize the coring process, reduce the variability typical of manual processing and maintain a continuous production flow of up to 3,000 heads/hour. The result is a more precise, repeatable process, suitable for integration into highly automated food processing lines.