

SOLUTION STUDY BAG PALLETIZING STANDARD

INSTALLATION IN GREECE 

APPLICATION BLETSAS ANIMAL FEED TECHNOLOGY

*Bag Palletizing Standard for flexibility,
high functionality and excellent quality.*

The Bag Palletizing Standard solution proposed by Gizelis Robotics is an integrated robotic palletizing system equipped with a Yaskawa four-degree-of-freedom robotic arm that responds to demanding palletizing applications.

THE COMPANY BLETSAS ANIMAL FEED TECHNOLOGY S.A.



The company Bletsas Animal Feed Technology S.A. was founded in 1982 with the aim of initially trading raw materials and, subsequently, entering dynamically into the production of animal feed, representing the industries of the sector. In 1997, it created a feed production and marketing craft,

based on the production of ready-made feed for sheep and goats in meal form.

Activities:

- Trading of raw materials
- Trading of flasks
- Pet Food Trading

The company, creating a relationship of trust with its customers, offers selected products, as there are continuous controls of the produced food by qualified people, resulting in the satisfaction and acceptance of its customers.

THE ISSUE

Due to the increasing demand of its products, the company Bletsas Animal Feed Technology S.A. asked Gizelis Robotics for an integrated robotic palletizing solution, which satisfies the following:

- Increase in productivity from 6 bags per minute to 10 bags per minute
- Reduction of human error leading to raw material destruction
- Save space on the pallet by reducing the gaps between the bags
- Automatic pallet wrapping
- Flexibility in the choice of different pallet sizes
- Flexibility in the choice of different pallet patterns
- Small spatial footprint
- System operation under dusty conditions
- Less regular maintenance
- Optimizing working conditions by relieving workers from heavy duties
- Quality sack-making process with automatic label placement



THE SOLUTION: BAG PALLETIZING STANDARD

The solution proposed by Gizelis Robotics is an integrated robotic palletizing system the Bag Palletizing Standard equipped with a robotic arm of Yaskawa specifically the MPL 160II arm.

An industrial robotic arm with four degrees of freedom that meets demanding palletizing applications. Its design is based on the requirements of modern production, since the philosophy of placing the motor-reducer directly at the point of movement allows a significant reduction in maintenance costs.

This is because the reducers do not require maintenance, and endless bolts, drive belts and terminal switches on the shafts are omitted, elements that require increased replacement - adjustment costs.

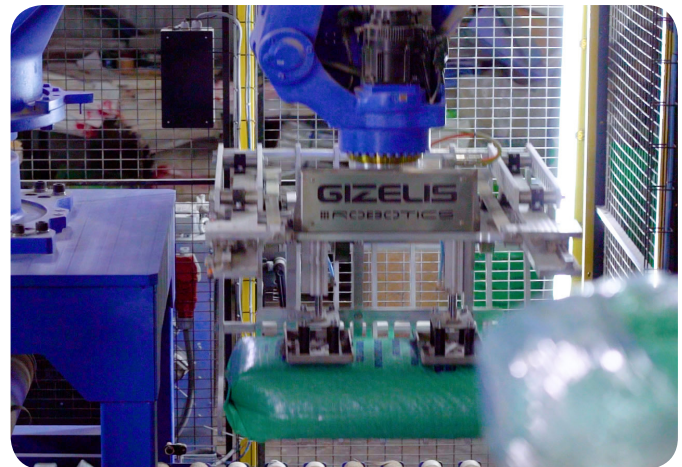
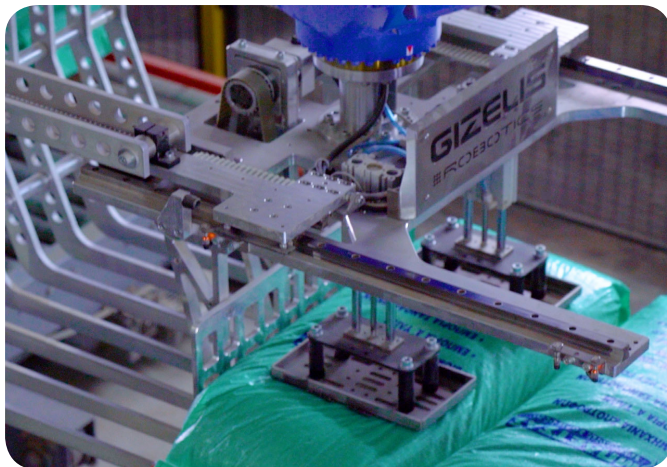
A robotic gripper with a servo mechanism has been added to this arm, which is able to transfer bags from the pick-up point to the pallet depositing point without altering the geometry or injuring the product.

The proposed solution consists of an integrated management system which includes:

- Bag tipping mechanism



- Special flattening rollers for optimal product distribution
- Buffer ready pallet transport chain
- Automatic empty pallet feeder
- Safety device with safety fence, light curtains and safety controller
- Special operator SCADA using high-definition HMI for operator interface with the system, changing recipes and fault notification
- Sawing machine with automatic feeder and automatic label feeder
- Automatic rotating platform wrapping machine with adjustable propulsion.



THE ADVANTAGES OFFERED BY THIS ROBOTIC SOLUTION

After the successful installation of the robotic Bag Palletizing Standard system by Gizelis Robotics, the advantages offered by this robotic solution are:

- Increase in productivity 70%
- Error reduction 80%
- Production stoppage reduced by 85%
- Elimination of human injuries from heavy work
- Increase in the performance of human resources as they work in a modern company that cares and eliminates factors that endanger the health and safety of employees
- Better quality end result
- Space savings from the reduced footprint of the robotic solution
- Measurable production times without unpredictable interruptions or fluctuations in production flow

George Koutsoudakis, Business Development Manager, Gizelis Robotics: The robotic application Bag Palletizing Standard that we implemented at «Bletsas Animal Feed Technology S.A.» is a concrete example of successful adoption of robotic technology, which aims to improve working conditions, increase productivity, stable and uninterrupted production process, with a focus on the safety and health of employees. We are particularly proud of our fruitful and creative cooperation with the people of «Bletsas Animal Feed Technology S.A.».

«Bletsas Animal Feed Technology S.A.»: «Our company's continuous effort to adopt to the changes of times and the increasing technological developments, pushes us into continuous investments in modern equipment that ensures flexibility and excellent quality of product. The collaboration with Gizelis Robotics and the innovative application that we implemented together confirms our commitment to transformation».

