ERIKS

Gripping fragile products is a sensitive issue

The Food Industry is a demanding one, with delicate objects easily damaged by conventional end of arm tools.

piab

Industry Sector:
FOOD AND BEVERAGE

Application:
ROBOTIC GRIPPERS

Food Industry manufacturers have recorded an **increase in productivity surpassing 25% after employing robotics***

Problem:

Multifaceted, and with a diverse range of products, the Food Industry is a particularly demanding customer.

Adding to the list of demands, many of the products are fragile and easily damaged, meaning that handling these quickly and efficiently is always difficult, not to mention the downtime, and associated costs, required to specify, design and manufacture a suitable solution.

Any vacuum handling system operating in such environments must be able to adjust its gripping force dependant on the object without causing any damage.

Solution:

The unique three-fingered **piSOFTGRIP® gripper from Piab** is an excellent and cost-effective solution for handling sensitive and fragile objects. Made in one piece, it's a simple and robust product, which is the first of its kind.

The food-compliant silicone gripper enables the food industry to extend their automated food handling to include a wider range of products, with unpackaged, fresh and delicate food items now handled without the risk of being spoiled due to crushing.

Bin-picking of small, sensitive, irregularly shaped and lightweight objects of odd geometries, such as toys, is another potential application.

The gripping force can be easily controlled by simply adjusting the vacuum level.

The soft gripper can grip objects with a diameter of up to 50mm, with larger models due to be introduced in the near future.

It is lightweight, meaning very little extra weight is added when fitted to robot arms. It also has a building height of approximately 80mm, allowing it to be used even when space is limited.

*Precision Agriculture and Food Security [Gebbers and Adamchuk, 2010]