



# MIPRO MEDIA

MACHINE VISION & IMAGE PROCESSING

## ADVANCE

DOUGHNUTS BY  
ROBOTS

THE AUTOMATE  
SHOW RETURNS

INNOVATIONS IN  
TYRE INSPECTION



# TELEDYNE: ROBOTICS BOOST DOUGHNUT PRODUCTION

**Teledyne** has released a product video demonstrating how robotics can help achieve perfect doughnut production.

The video shows the integration of robotics, multi-dimensional 2D and 3D vision inspection, and software processing that minimises costs and maximises production. The inspection system provides colour classification, shape verification, and identification of errors that aid process adjustments and allows predictive maintenance, reducing waste and increasing plant efficiencies. Using doughnuts provides an example of how this could be utilised for other inspections in other industries.

FANUC's Sales Manager Christian Schulte, Cretec Cybernetics' CEO Alexander Trebing, and Cybernetics Specialist Svenja Waller, demonstrate the fully-automated doughnut production system, explaining the process from baking to packaging. The system also guarantees food safety for the manufacturer, providing maximum output at a low cost.

To make this possible, Cretec provided complete project management and programming, in collaboration with FANUC technology. Teledyne DALSA's Z-TRAK2 3D profile sensor is utilised to detect missing parts and identify any deformities in the production process. The ZTrak2 is a new family of 3D profile sensors, reaching scan speeds of up to 45,000 profiles per second. It features built-in HDR and reflection compensation algorithm, delivering height

measurements for inspection, detection, identification and guidance.

Teledyne DALSA also provided its Genie Nano 5GigE area scan camera for colour classification and shape verification, to ensure the doughnuts meet the specification. To avoid food waste, rejected doughnuts are returned to the earlier process. The Genie Nano 5GigE is designed for imaging applications that require high-speed data transfer.

You can check out the full video [here](#).

Find out more about [Teledyne DALSA](#), [FANUC](#) and [Cretec Cybernetics](#) 

