

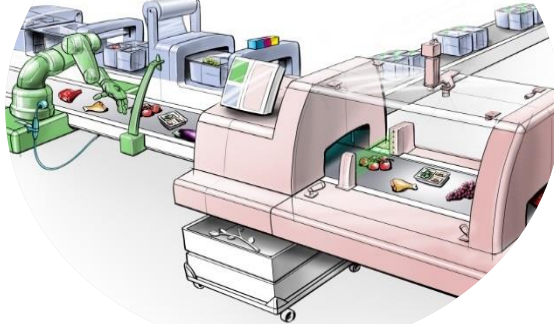
PicknPack

Erik Pekkeriet

Senior Project Manager Agro Food Robotics

Erik.pekkeriet@wur.nl

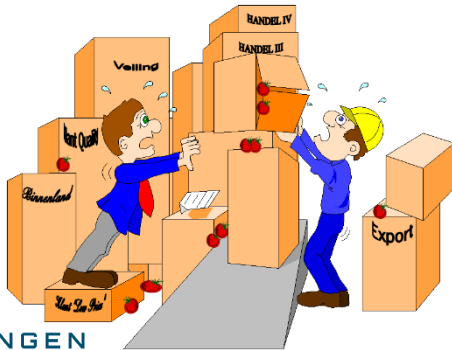
23/11/2017



KBBE.2012.2.3-03:

Call: "Automation in food packaging systems"

- Food industry is facing:
 - high numbers of food products and varieties and packaging types
 - small batches and small runs
 - need for operational flexibility

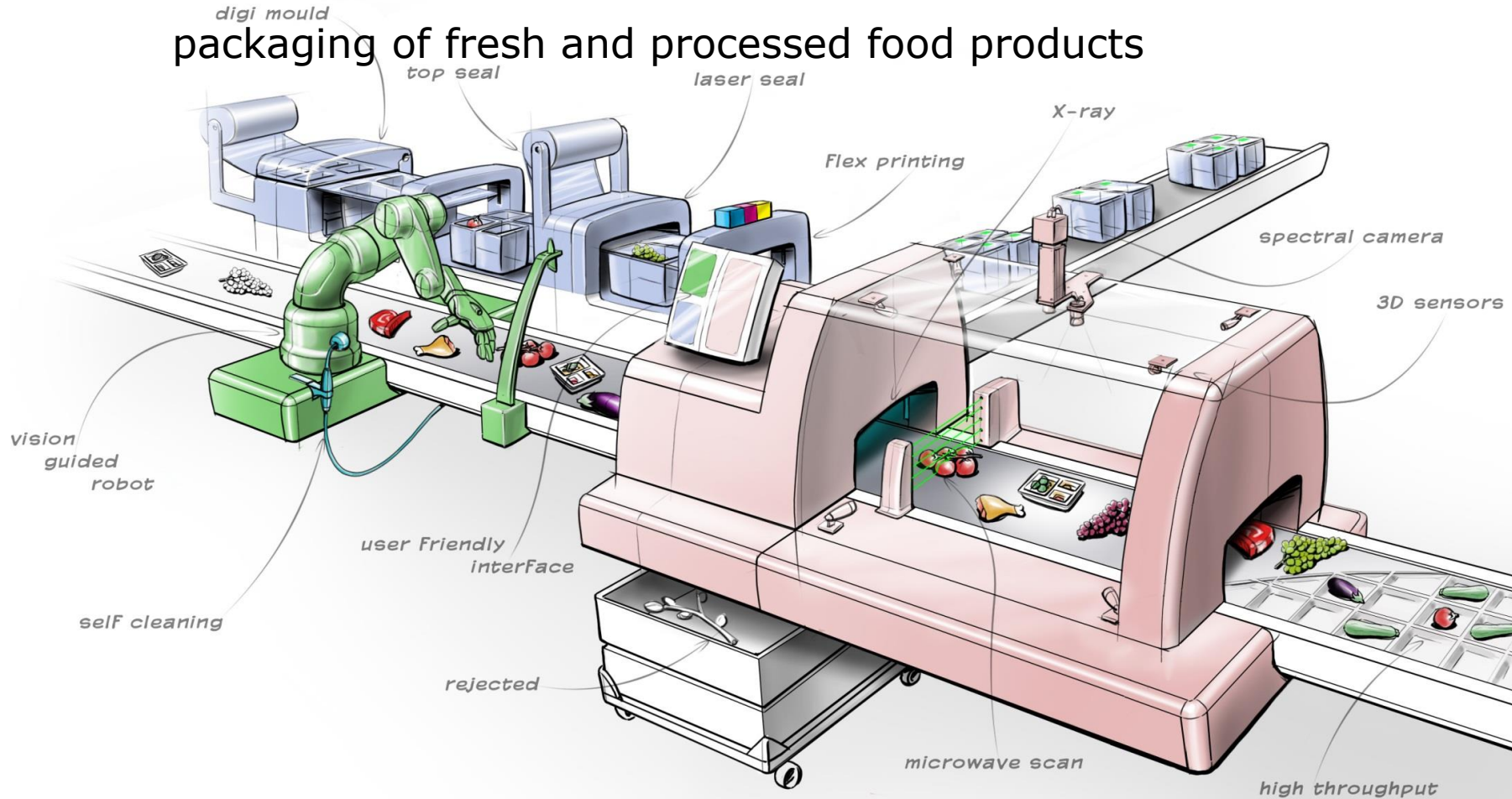


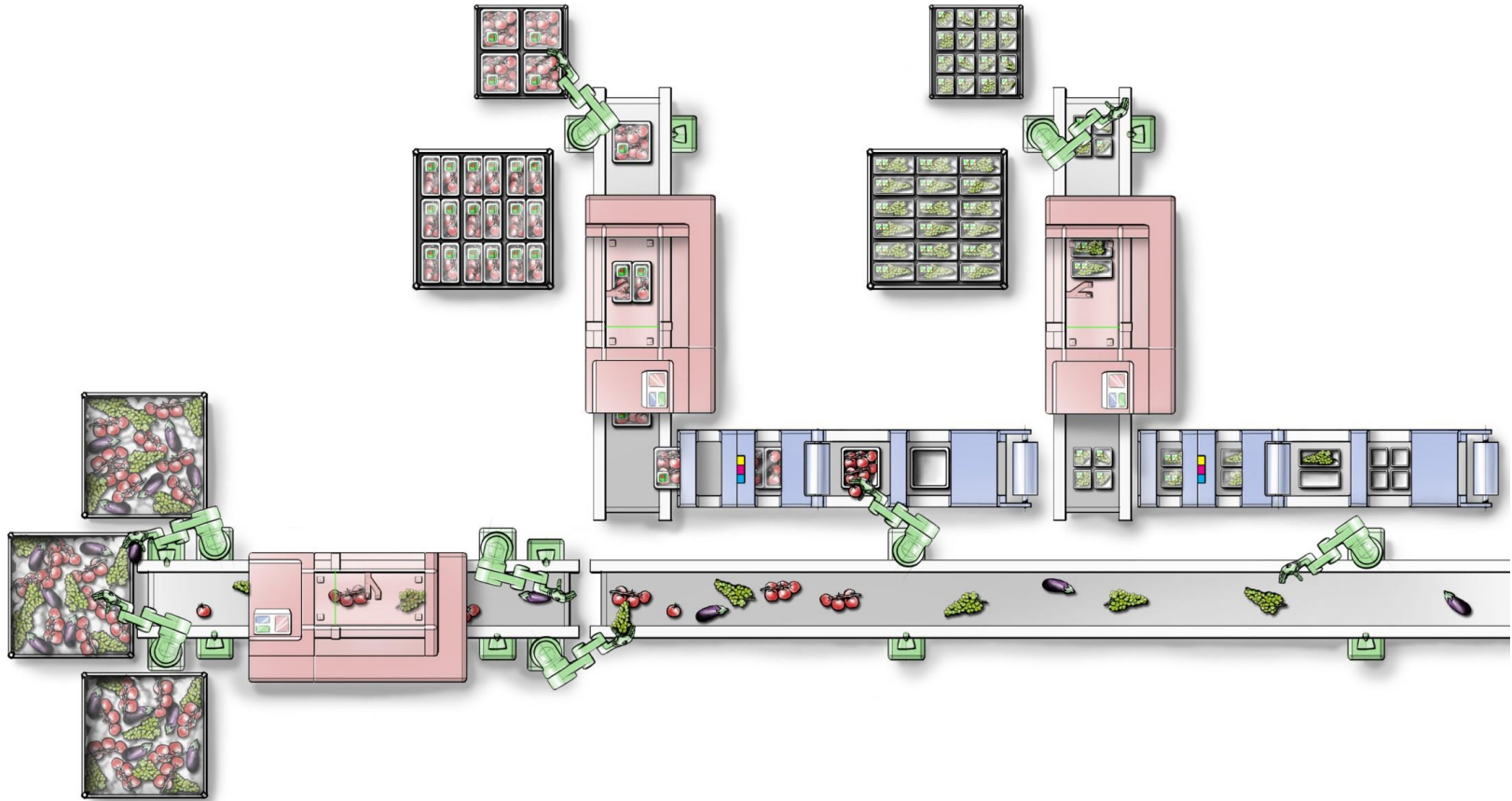
KBBE.2012.2.3-03: Automation in food packaging systems

- Fresh and processed food
- Convenience and hygiene is important
- Integration of advanced technologies within robotics
- In-line quality control
- Intelligent management, ensuring traceability



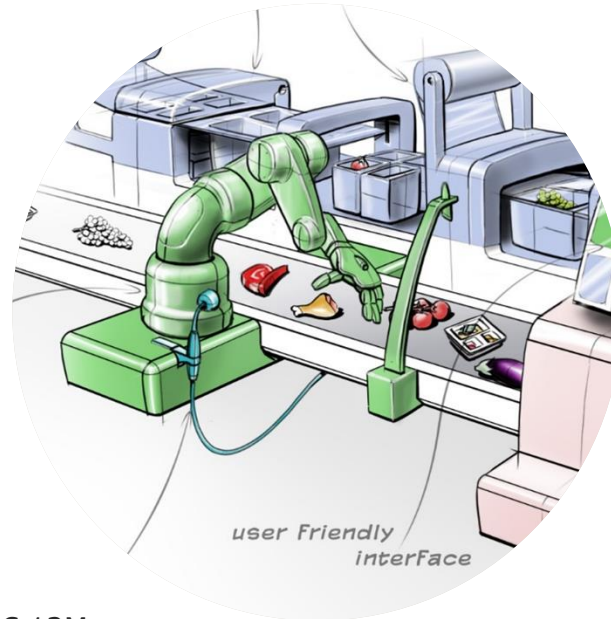
Flexible robotic systems for automated adaptive packaging of fresh and processed food products





Partners & budget

Wageningen UR (NL)
Danish Technological Institute (DK)
Tecnalia (ES)
KU Leuven (B)
University of Manchester (UK)
Fraunhofer AVV (D)
Lacquey (NL)
ITENE (ES)
InnospeXion (DK)
Marel (IS)
Tecnalia-AZTI (ES)
Cam-Tech (DK)
XaarJet AB (S)
Marks & Spencer (UK)



Budget € 12M

Funding € 9M

Duration: 4 years (Kick off: November 2012)



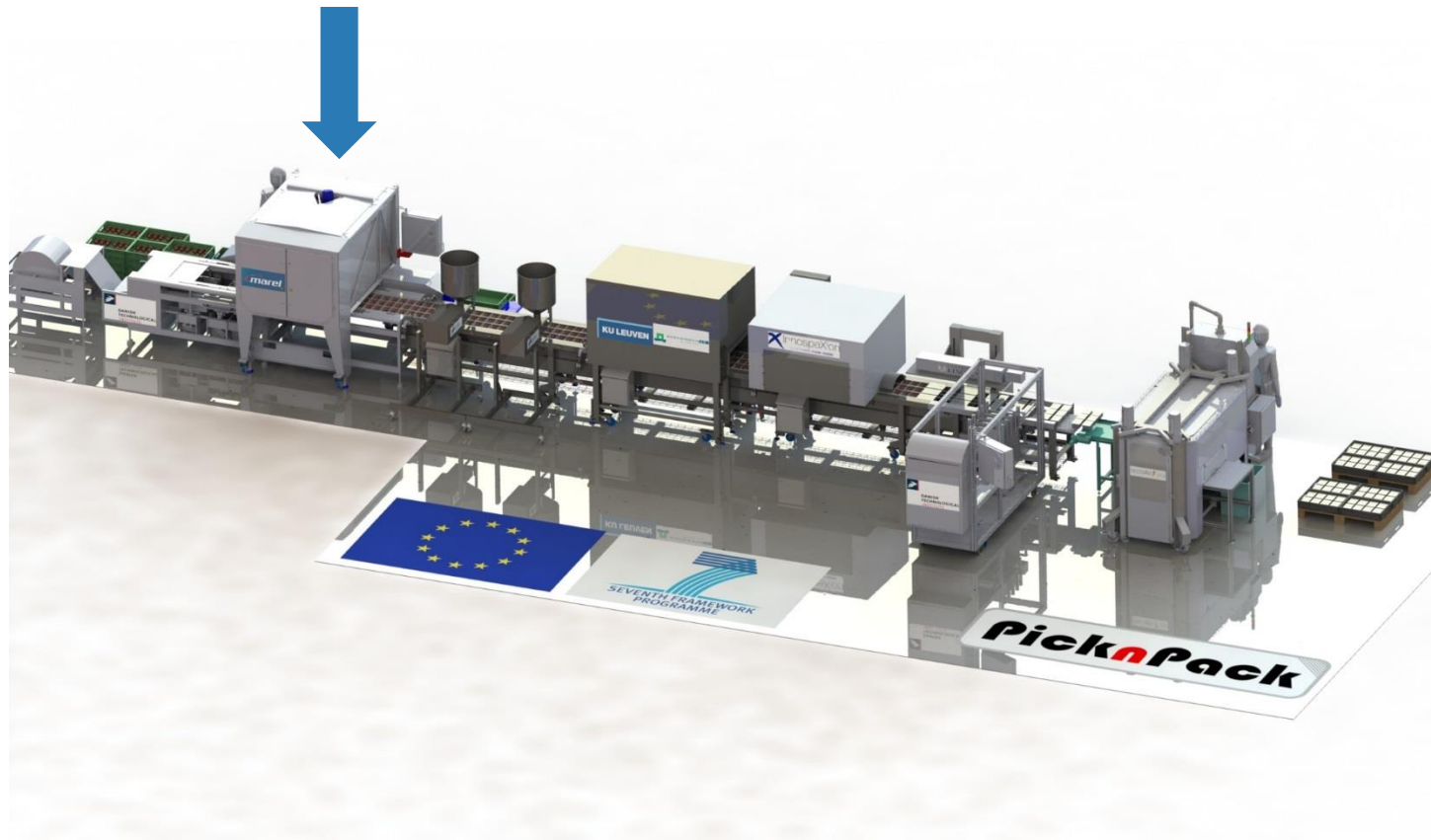
WAGENINGEN
UNIVERSITY

Marks & Spencer (UK)



Benefits

- Flexible sizes on every grid 40x40mm blocks
- Low cost mould
- Fast change over in seconds
- Fast and cheap designing lead time
- Short time to market
- Reliable forms



Robotic Bin Picking of Chicken Breasts Project "PicknPack"



For more info, contact:
Gert.Kootstra@wur.nl

LACQUEY
Robot grasping solutions

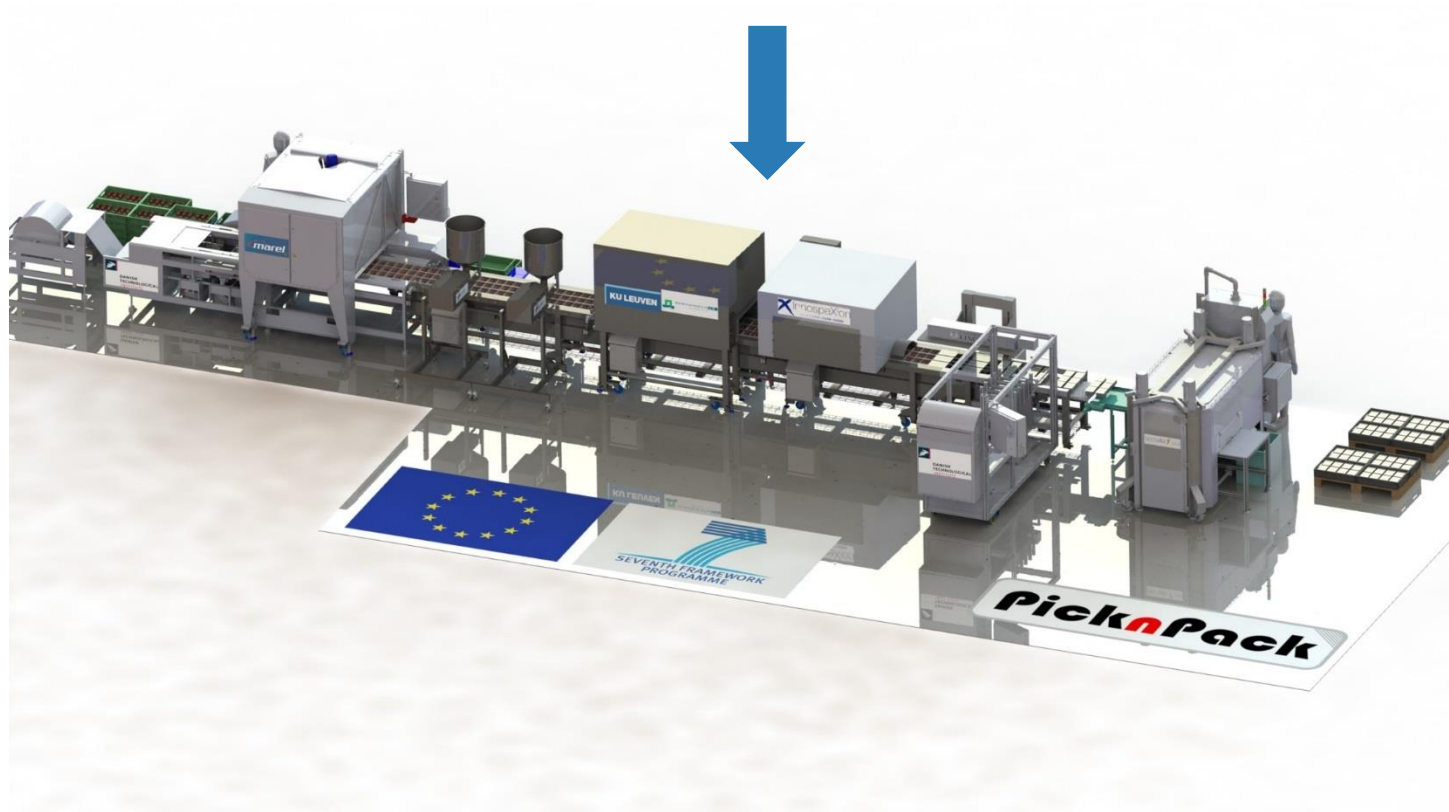


WAGENINGEN UR

For quality of life

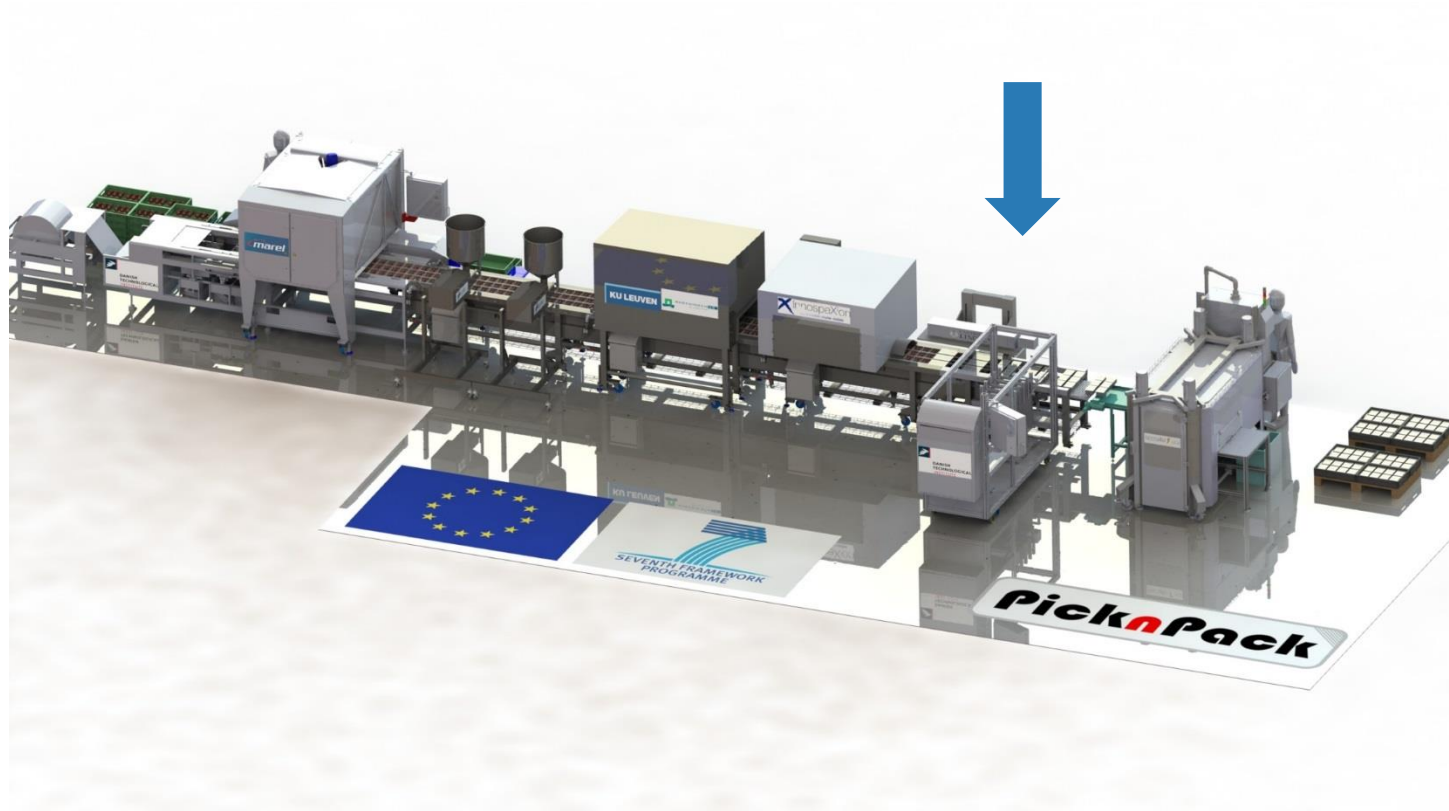
Benefits

- Minimal additional machinery required
 - Minimal footprint
 - Minimal cleaning
- 3D-camera in working area
 - Real time feedback on success of grasp
 - Second attempt possible
 - Control of surrounding area
 - Automated calibration by “hand-eye” coordination
- Fast change of end effector
- CIP
- Quality data (weight, camera-features)



Benefits

- New sensor technologies
 - 3D colour
 - 3D X-ray
 - Hyperspectral image analysis
 - Microwave scanning
- Automated fuse of sensor data
- Learning to new quality features and products by training



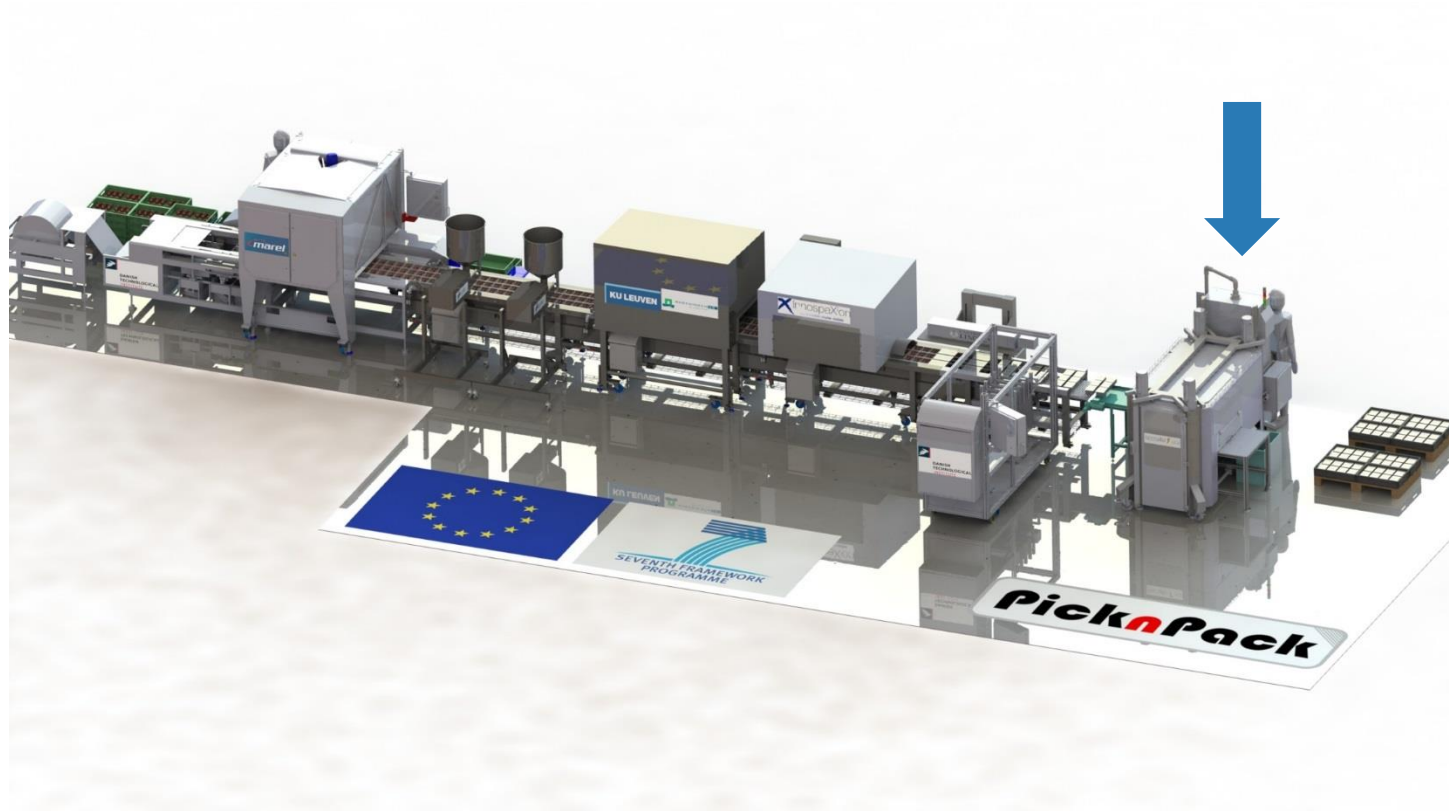
Benefits

■ Printer

- Full colour quality print is possible (b/w in demo)
- Only transparent foil on stock
- Less waste
- No change overs to other foils
- Flexible print 4 batches delay-time form QAS
- Possible in food environment

■ Laser

- Flexible seal shape, cuts and perforations
- With seal integrity test a second attempt is possible
- Energy, machinery and cleaning - savings



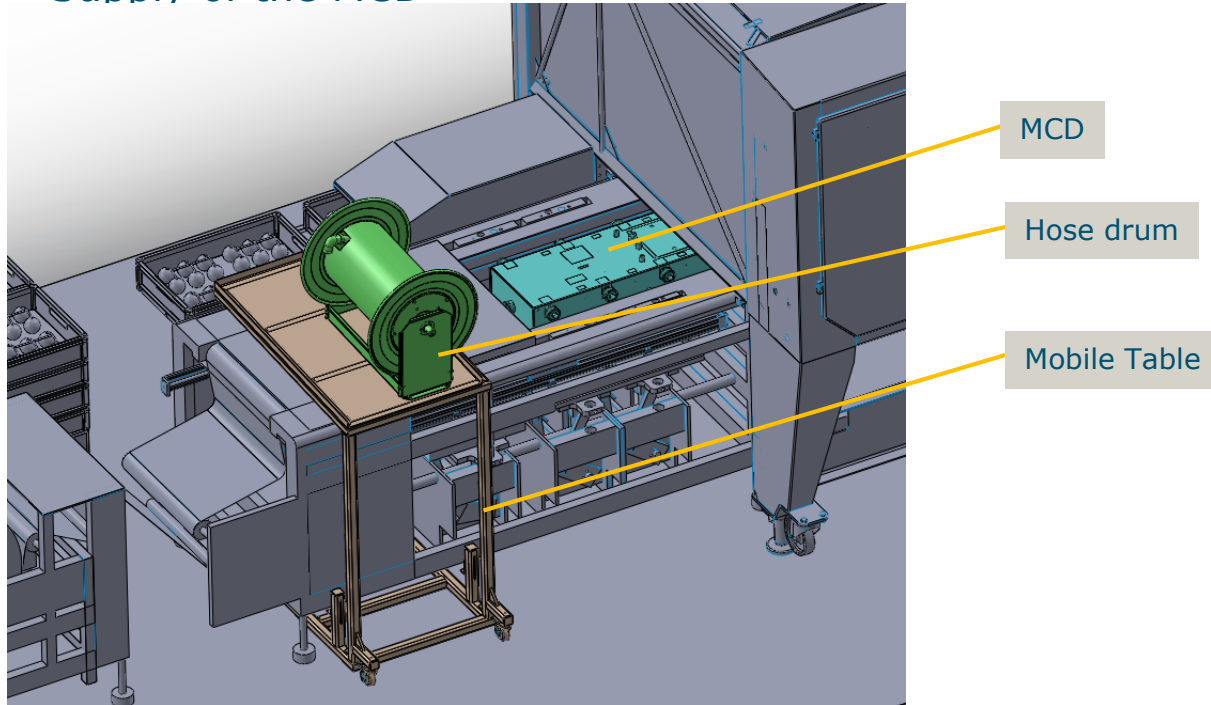


Benefits

- Fast
- Flexible workspace
- Rectangular workspace, able to pack many crate lines
- Camera tracking of packages

Finalisation MCD

- Supply of the MCD



Clean In Place delta robot



