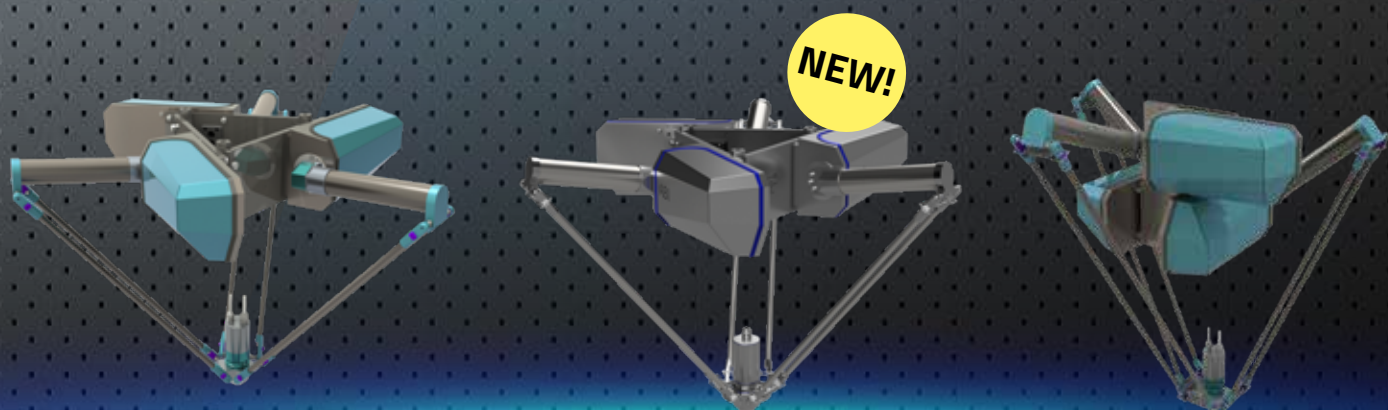




Managing Motion

ABIFLEXX ROBOTIC SYSTEMS

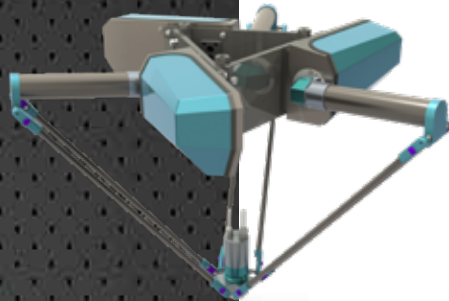
ENDLESS POSSIBILITIES



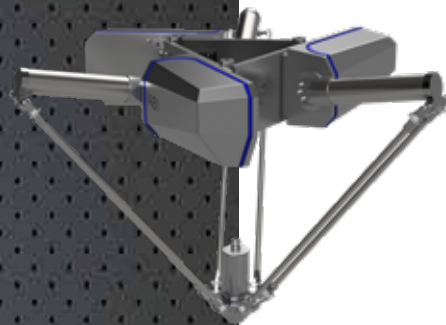
www.abi.nl

Made in Holland

ABIFLEXX
ROBOTIC SYSTEMS



Delta Robot

Full hygienic
stainless steel & titanium Delta
or Wide Delta RobotWide Delta Robot
(patent pending)

ROBOTIC SYSTEMS

ABIflexx Robotic Systems offer the following advantages

- Available as separate components or as a complete system, ready to use with KEBA Robot Controller (optional)
- Designed to meet FDA and EHEDG specifications for Hygienic Design
- Free choice of dimensions offers you a flexible working range and optimal footprint
- Customization possible for grippers and colours
- No homing necessary with multi-turn encoders
- Low TCO through:
 - High quality planetary gearboxes guarantee precise position repeatability during the entire lifespan
 - Easily changeable wear parts ensure minimal downtime
 - Lifetime lubrication

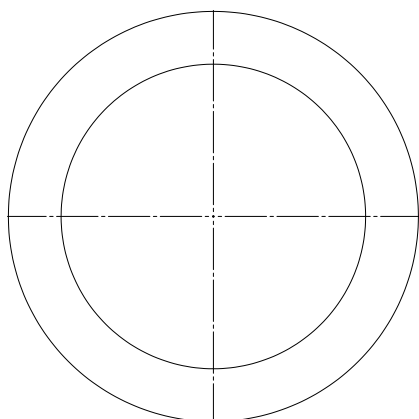
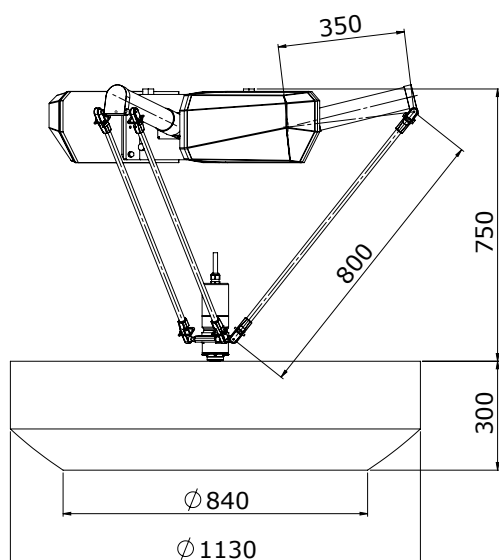
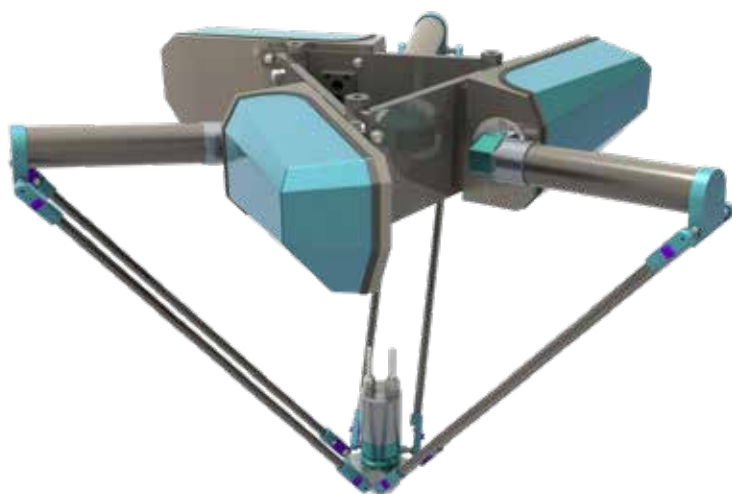
System components

- Titanium cranks and sticks
- Stainless steel mounting base
- Other parts: FDA-approved PTFE impregnated anodized aluminium
- Protection: IP65/IP67
- Optimal wash-down design

advanced systems, efficient solutions

Parallel Kinematic **Delta Robot**

- Number of parallel axes 3 (drive units)
- Additional axes (rotation) 1 (directly on gripper plate)
- Working range diameter 750 – 1600 mm
- Working range height 200 – 500 mm
- Max. picks/min 230
- Max. handling capacity 12 kg
- Weight 61 kg
- Environment 0°C to +45°C
- Height adjustable frame



Performance

- Position repeatability $\pm 0,2 \text{ mm}$
- Angular repeatability $0,1^\circ$

Cycle time 25-305-25 mm

- Payload 0,8 kg 0,27 S
- Payload 3,5 kg 0,50 S

Parallel Kinematic **Wide Delta Robot**

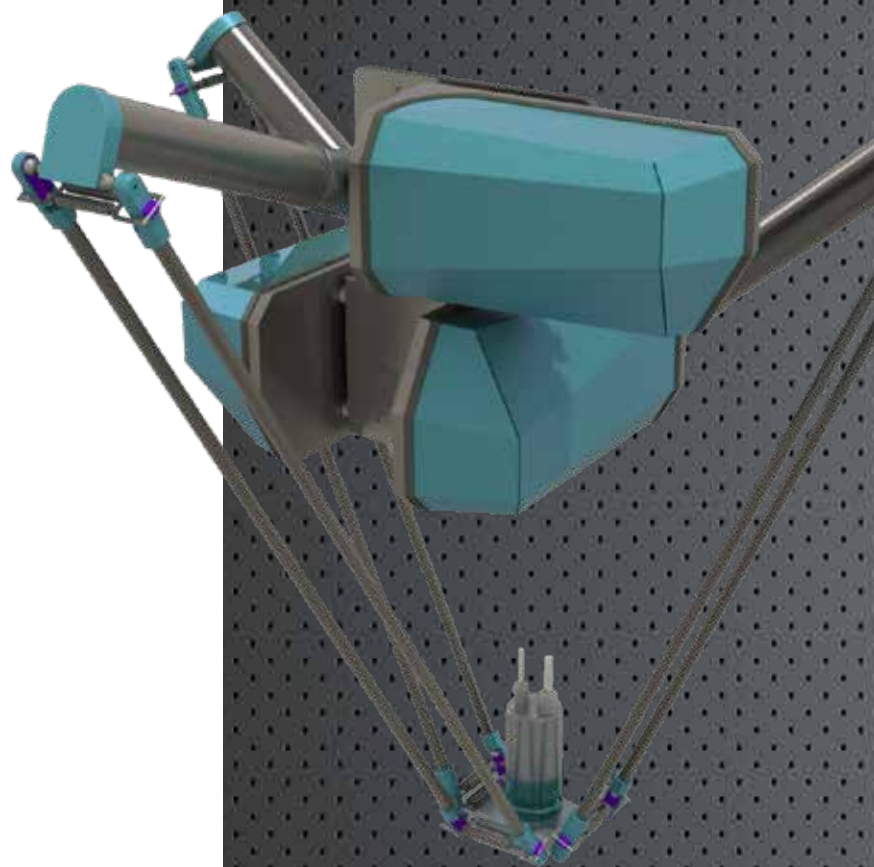
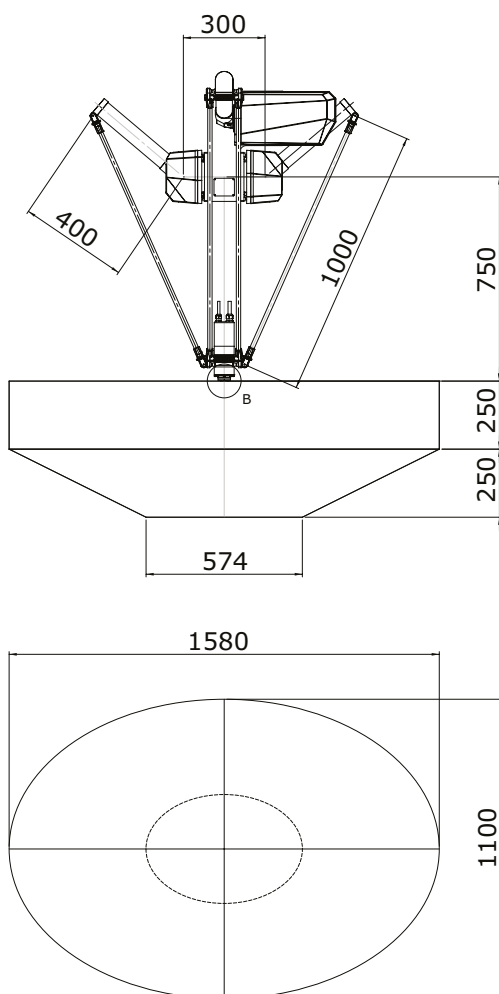
Patent pending

- Extra wide work area
- 50% reduced footprint
- 2 robots in same space as 1
- Hygienic design
- Flexible working range
- Patent pending



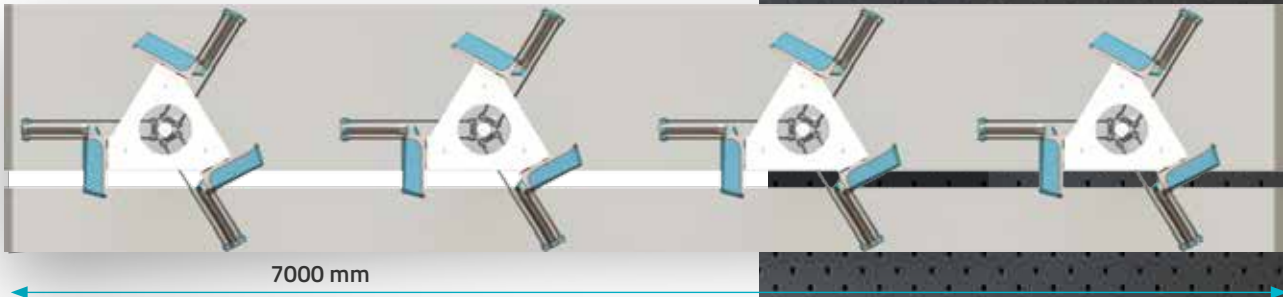
ABiflexx Robotic Systems Features

- Modular delta robot implementations
- Open food and high-care environments
- Design according to FDA and EHEDG guidelines
- High speeds, very short cycle times

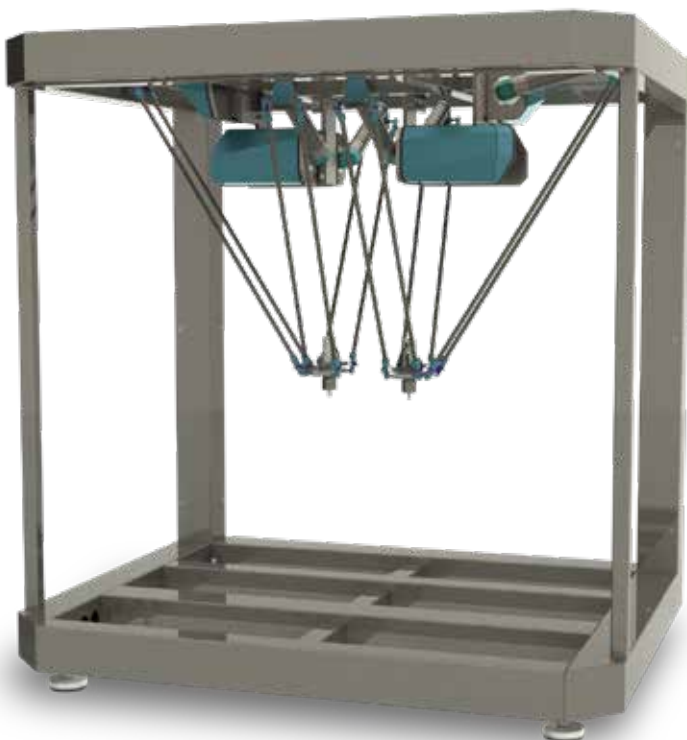
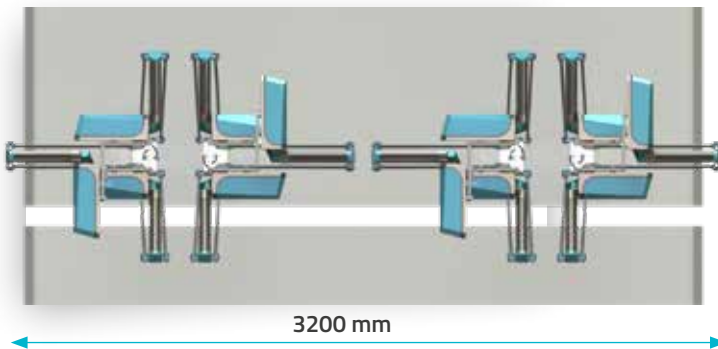


50% REDUCED FOOTPRINT!

Top view of 4 ABIflexx Delta D4-1600



Top view of 4 ABIflexx Wide Delta WD4-1580



KEBA ROBOT CONTROL SYSTEM

KeMotion Packaging

The KeMotion application software provides efficient solutions for robots in packaging systems. Pick & Place permits the simple configuration and programming of the entire machine and robot application. Palletizing is focused on typical applications with fixed and/or flexible pallet patterns.

Robot controls

- KAIRO robot programming language
- Online teach-in with KeMotion TeachView and offline programming using KeStudio KAIROEdit
- Predictive collision recognition
- Multiple robot tools with online modification
- Over 20 pre-defined robotic kinematics

PLC / robot interface

- Operational type management
- Robot program management
- Exchange of vision and palletizing data, diagnoses, system reports, etc.
- Robot application development with real-time simulation

SPS Motion

- IEC 61131-3 programming and language environment based on CoDeSys 3.x
- Comprehensive motion function blocks library
- Freely programmable machine sequence
- Complete control of the robot peripherals (conveyors, etc.) up to the entire system

Visualization

- Adjustable HMI for mobile and stationary panels with KeStudio ViewEdit

Pick & place specifications

- Free spatial arrangement of the conveyor belts
- Dynamic monitoring of the working and exclusion areas
- Guided robot, conveyor belt and vision system installation
- Statistical overview of the products on the conveyor belt
- Easy integration of application specific vision systems



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