

Faster to new markets

# KeMotion FlexCore

The open platform for powerful and versatile robotic applications



Robots are an indispensable part of increasing the productivity of industrial series manufacturing processes. Their range of applications is wider than ever before. An open robotics platform is the perfect basis for opening up these new markets fast. Using KeMotion FlexCore with its integrated ROS framework, KEBA offers a unique platform for implementing efficient solutions for any robotic applications.

## ROS – the Open Robotic System offers an unbeatable choice of features

The Robotic Operating System (ROS) is a comprehensive framework consisting of Open Source libraries that is ideally suited for industrial as well as non-industrial robot applications. The large ROS Community of thousands of developers worldwide continually offers new solutions.

The spectrum of algorithms, drivers and tools ranges from collision-free path planning, image processing and tracking through to Augmented Reality. ROS users can therefore leverage powerful manufacturer-independent developments for versatile robotics tasks.



## KeMotion – The proven industrial complete solution for high-end robotics

Highest quality, maximum availability and powerful innovations are the reasons why market leaders in industrial robotics rely on KeMotion for more than 20 years. The complete system offers a scalable hardware portfolio and brings together control, drive and safety technology in one system. KeMotion offers users an advanced turnkey solution for any type of robot.



## KeMotion FlexCore – The best of both worlds on one single platform

Integrating the ROS framework into KeMotion brings together the unique development strength of the ROS Community with decades of industrial experience at KEBA. The open FlexCore architecture also offers maximum flexibility for customer-specific expansions.

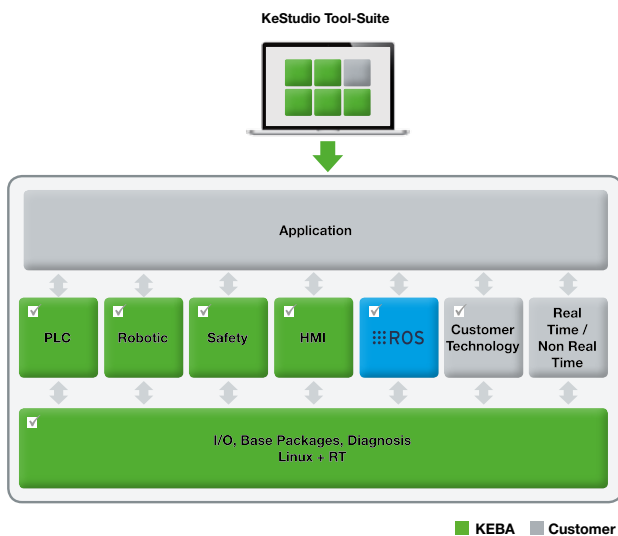
# KeMotion FlexCore

The best robotics solution for new markets:  
easy realisation with KeMotion FlexCore



## KeMotion FlexCore key components offer maximum solution customisation

The flexible integration capability of different technology modules in the KeMotion FlexCore system makes it easy to realise customer-specific solutions.



**Linux operating system:** The real time Linux operating system opens the door to a worldwide community and guarantees that drivers are always up to date, available long-term and therefore future safe.

**PLC:** Established industry standards enable the efficient control of machines and robots.

**Robotics:** A wide range of advanced technologies ensures maximum speed while delivering highest precision.

**Safety:** Scalable turnkey safety solutions are available for PLCs, single axes and robotic systems.

**HMI:** An intuitive robot HMI and application-optimised KeTop hand-held devices support smart interaction with robots.

**ROS:** Thanks to the established communication standard – ROS Messages – components can interact efficiently regardless of the components manufacturer.

**KeStudio:** Just one engineering tool is needed to configure and parametrise ROS as well as KEBA components intuitively.

**Customer Technology/Application:** The convenient integration of customer-specific technology modules rounds off this comprehensive package. As a result, it is easy to achieve highest differentiation.

## A high performance combination for new robotics markets

The integration of both systems into a shared hardware platform offers high performance solutions:

- Calculate complex robot paths in ROS and implement with exact positioning and low vibrations using KeMotion
- Use ROS image detection algorithms and combine with KeMotion High-Speed Pick&Place technology
- Plan mobile robot paths using ROS, while implementing the necessary safety and workspace supervision systems using KeMotion
- Use the intuitive ROS development language in the KeStudio Engineering-Tool

Innovative solutions for new robotics markets  
straightforward implementation  
with KeMotion FlexCore!