



MOBILE MANIPULATORS

MOVING INDUSTRY SMARTER

MOBILE ROBOTICS SOLUTIONS IN ACTION



- 1) **MRP IONTEC 90** with KUKA KR 90 R2700 robot for loading and unloading turning and milling machines, as well as workpiece handling.
- 2) **KMR Cybertech 35** with KUKA KR 35 R1840-3 robot for small load carrier (KLT) handling and pre-picking in an automated manual warehouse.
- 3) **KMR Cybertech 20** with KUKA KR 20 R1810 robot for demand-driven tool supply to turning and milling machines.
- 4) **KUKA KMP 1500P** with a custom superstructure for autonomous transport of EPAL pallets and mesh containers between warehouse and production.
- 5) **MRP IONTEC 50** with KUKA KR 50 R2500 robot for machine tending and flexible linking of multiple turning and milling machines.
- 6) **KUKA KMR iisy 11 R1300** with KUKA LBR iisy 11 R1300 robot for material supply to changing manual workstations and assembly stations.
- 7) **KUKA KMP 1500P** for demand-driven delivery of empty chip containers and transport of full containers to a central collection point.

KMR iisy 2+

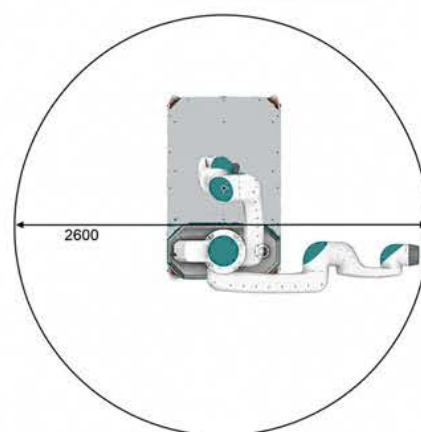
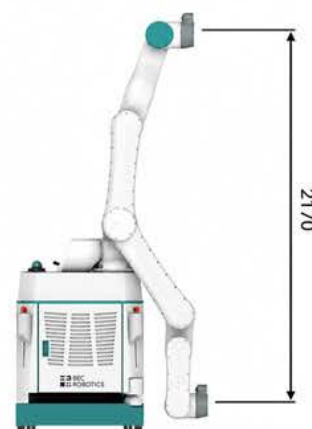
The **KMR iisy 2+** combines an autonomous mobile platform with the capabilities of a sensitive cobot. Thanks to integrated joint torque sensors, the robot can respond sensitively to contact and process forces. This makes the system particularly suitable for flexible handling tasks in which components are safely picked up, positioned and supplied to different workstations or process stations.

Its compact design and sensitive robotics open up a wide range of applications, from material supply and assembly to machine tending. Changing tasks can be accommodated with application-specific grippers and additional sensors. The KMR iisy is therefore particularly well suited to production environments where flexible automation and the linking of manual and automated processes are required.

A Cleanroom variant is also available for cleanroom applications up to ISO Class 3, enabling deployment in sensitive production environments such as the semiconductor and electronics industries.

Typical Applications

- Material supply to workstations
- Assembly and handling tasks
- Pick-and-place of small components
- Loading and unloading process stations
- Inspection and quality control tasks



Technical Data	KMR iisy
Number of Variants	2
Robot Payload	11 kg / 15 kg
Max. Robot Reach	1,300 mm / 930 mm
Additional Platform Payload	200 kg
Platform Dimensions (L × W × H)	112 × 70 × 700 mm
Charging Technology	Inductive
Drive Concept	Differential drive
Total Weight Without Payload	425 kg

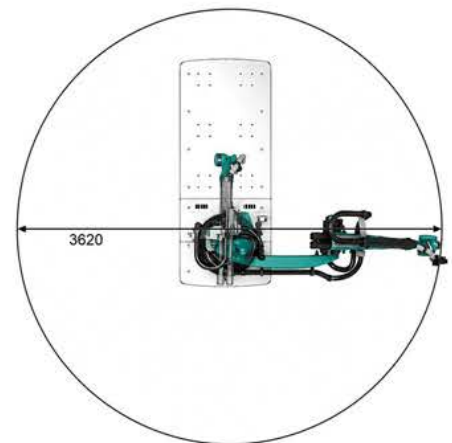
KMR Cybertech

The **KMR Cybertech** combines autonomous mobility with the performance of a conventional 6-axis industrial robot. It performs demanding handling tasks at different machines, storage and transfer stations, connecting material flow with robotic handling. Its strength lies in its versatility across production environments – from tool supply to automated order picking.

The omnidirectional drive enables precise maneuvering even in confined spaces and supports deployment in existing production environments. Application-specific grippers and additional sensors allow the system to be adapted to different components and tasks. Integration with machines and higher-level systems enables demand-driven processes across multiple stations. Inductive charging supports high availability in 24/7 operation.

Typical Applications

- Tool supply to machine tools
- Small load carrier (KLT) and container handling
- Order picking of components
- Storage and retrieval of components
- Material supply in production



Technical Data	KMR Cybertech
Number of Variants	2
Robot Payload	20 kg / 35 kg
Max. Robot Reach	1,813 mm / 1,840 mm
Additional Platform Payload	500 kg
Platform Dimensions (L × W × H)	2,000 × 800 × 800 mm
Charging Technology	Inductive
Drive Concept	Omnidirectional drive
Total Weight Without Payload	Max. 1,600 kg

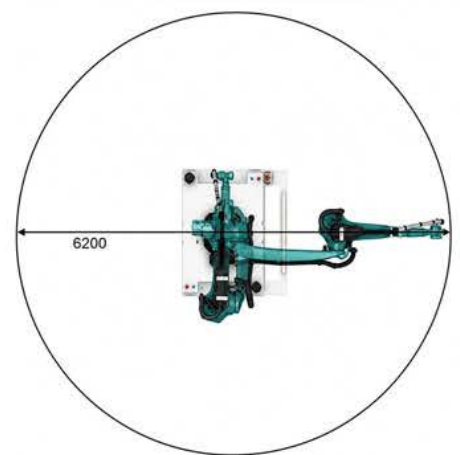
MRP Iontec & Quantec

The MRP IONTEC mobile robot platform takes a new approach to industrial mobile robotics: the robot platform and transport vehicle are decoupled. An autonomous transport vehicle drives underneath the MRP, lifts it and transports it to the required machine. There, the robot unit is precisely secured at a docking station and automatically supplied with power, compressed air and communication connections. The transport vehicle is then free to carry out other tasks.

Thanks to mechanical docking, the industrial robot operates at the workstation like a stationary system, without the need for additional camera-based referencing. This allows high-performance industrial robots to be deployed flexibly across multiple machines and existing production areas to be automated with manageable infrastructure requirements. Additional docking stations enable the system to be expanded step by step.

Typical Applications

- Loading and unloading machine tools
- Flexible multi-machine tending
- Handling larger workpieces
- Palletizing and depalletizing
- Linking machining processes



Technical Data	MRP
Number of Variants	2
Robot Payload (KUKA IONTEC & QUANTEC)	20–300 kg
Max. Robot Reach	2,300–3,904 mm
Platform Dimensions (L × W × H)	105 × 155 × 630 mm
Charging Technology	Docking station
Drive Concept	AGV-dependent
Total Weight	1,500 kg



BEC GmbH
Marktstr. 195
72793 Pfullingen
Germany

BEC Corp.
271 17th Street, NW, Suite 1750
Atlanta, GA, 30363
USA

BEC Medical GmbH
Otto-Hahn-Strasse 2
39106 Magdeburg
Germany

www.bec-robotics.com