



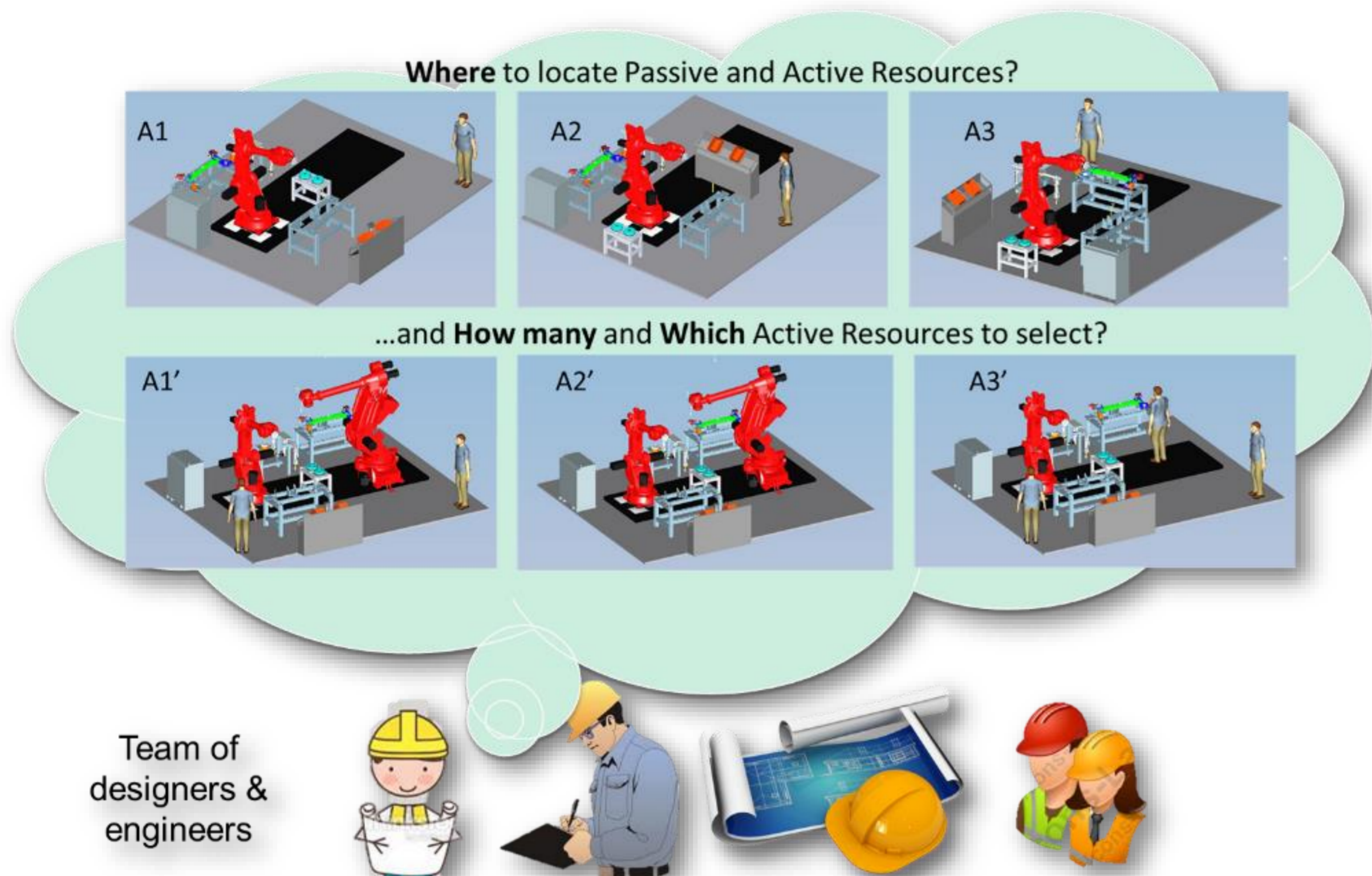
Seamless Human-Robot Cooperation for Intelligent, Flexible and Safe Operations in the Assembly Factories of the Future (ROBO-PARTNER)



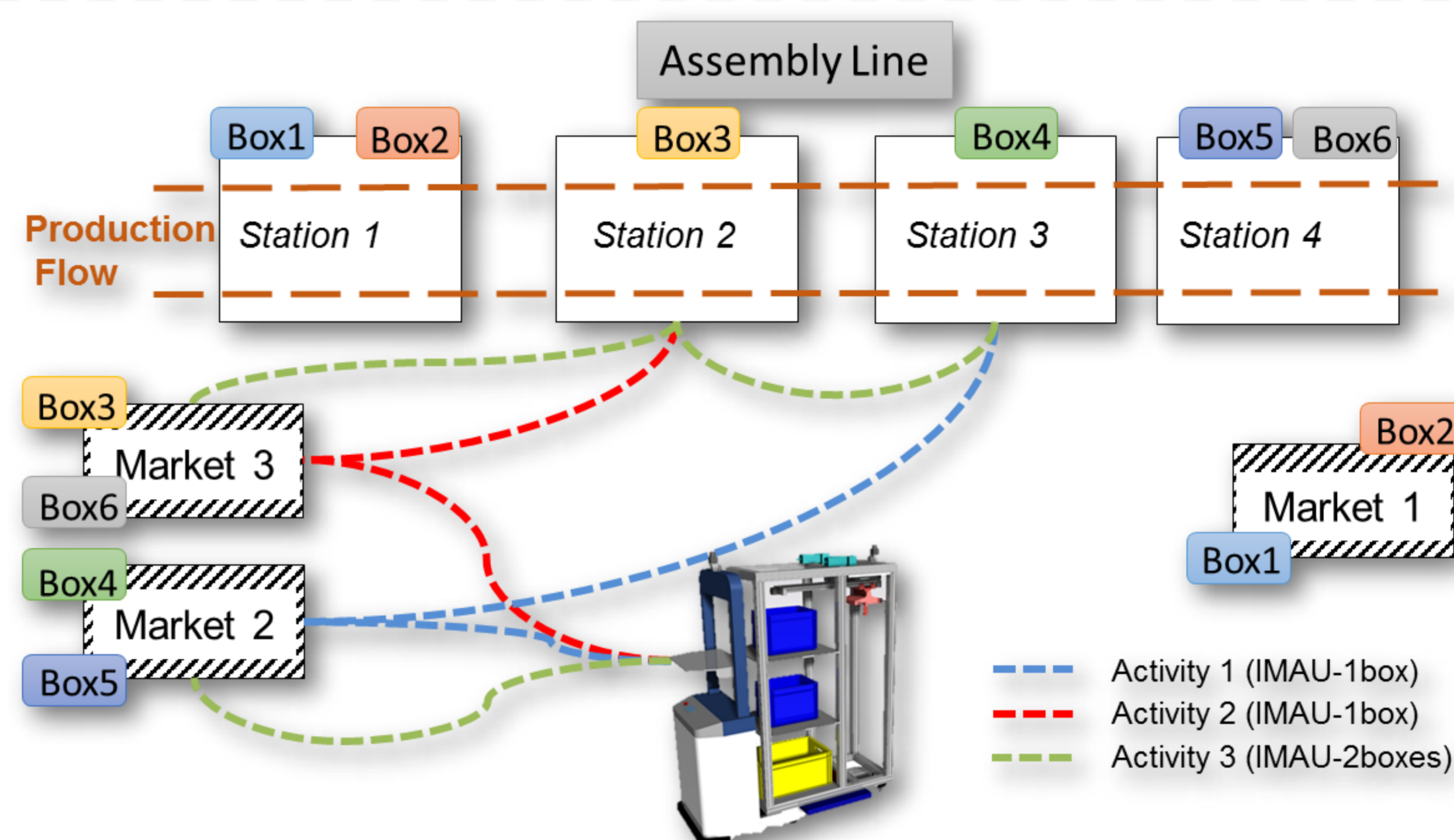
Human – Robot Partnership in assembly operations

ROBO-PARTNER aspires the integration of the latest robotic systems for assembly operations inside human based assembly environments. The vision is to combine **robot strength, velocity, precision and computational power** with human capabilities, **intelligence and skills**, establishing a common working environment with **reduced physical and cognitive load for the operators**.

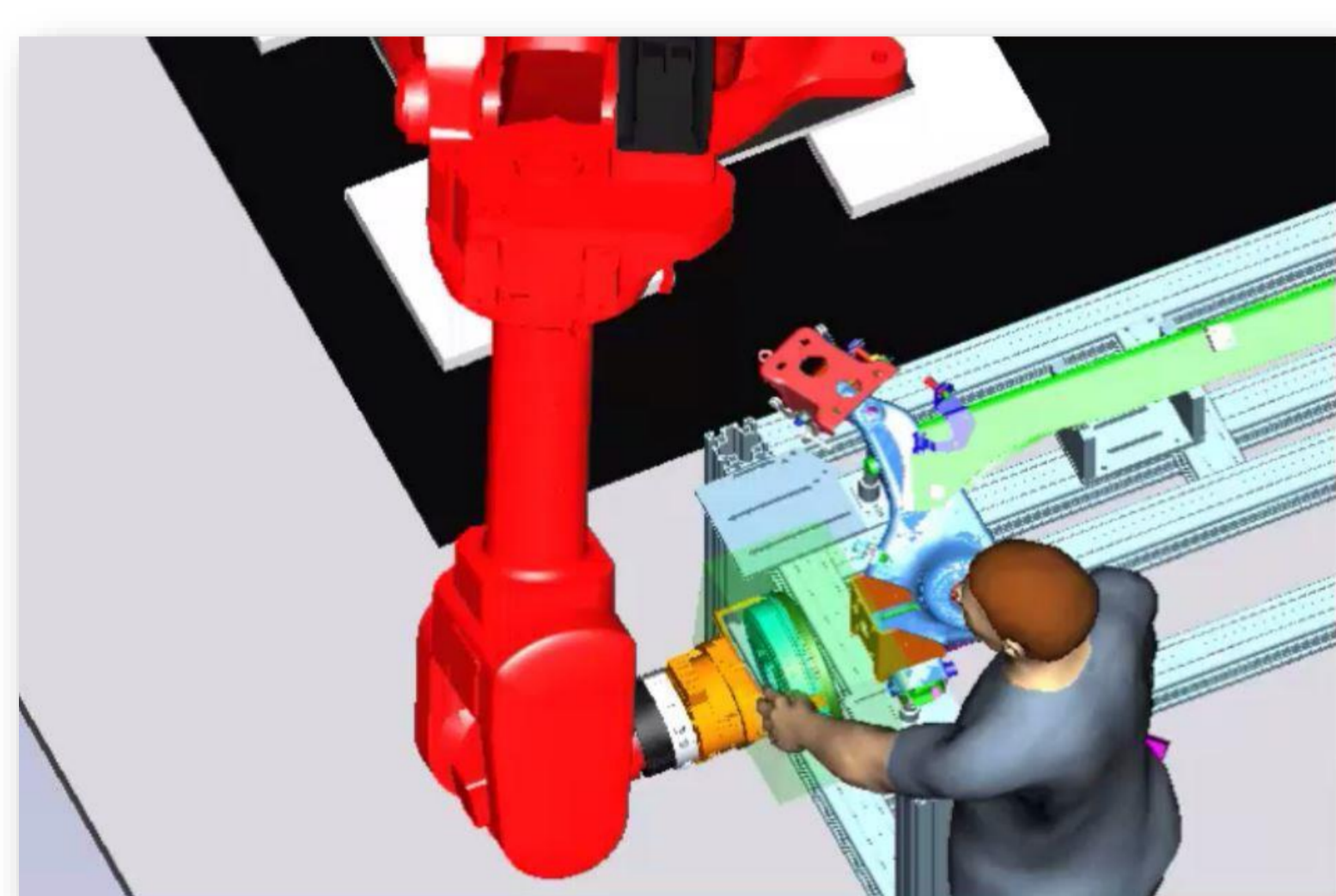
Technologies supporting H-R Collaboration



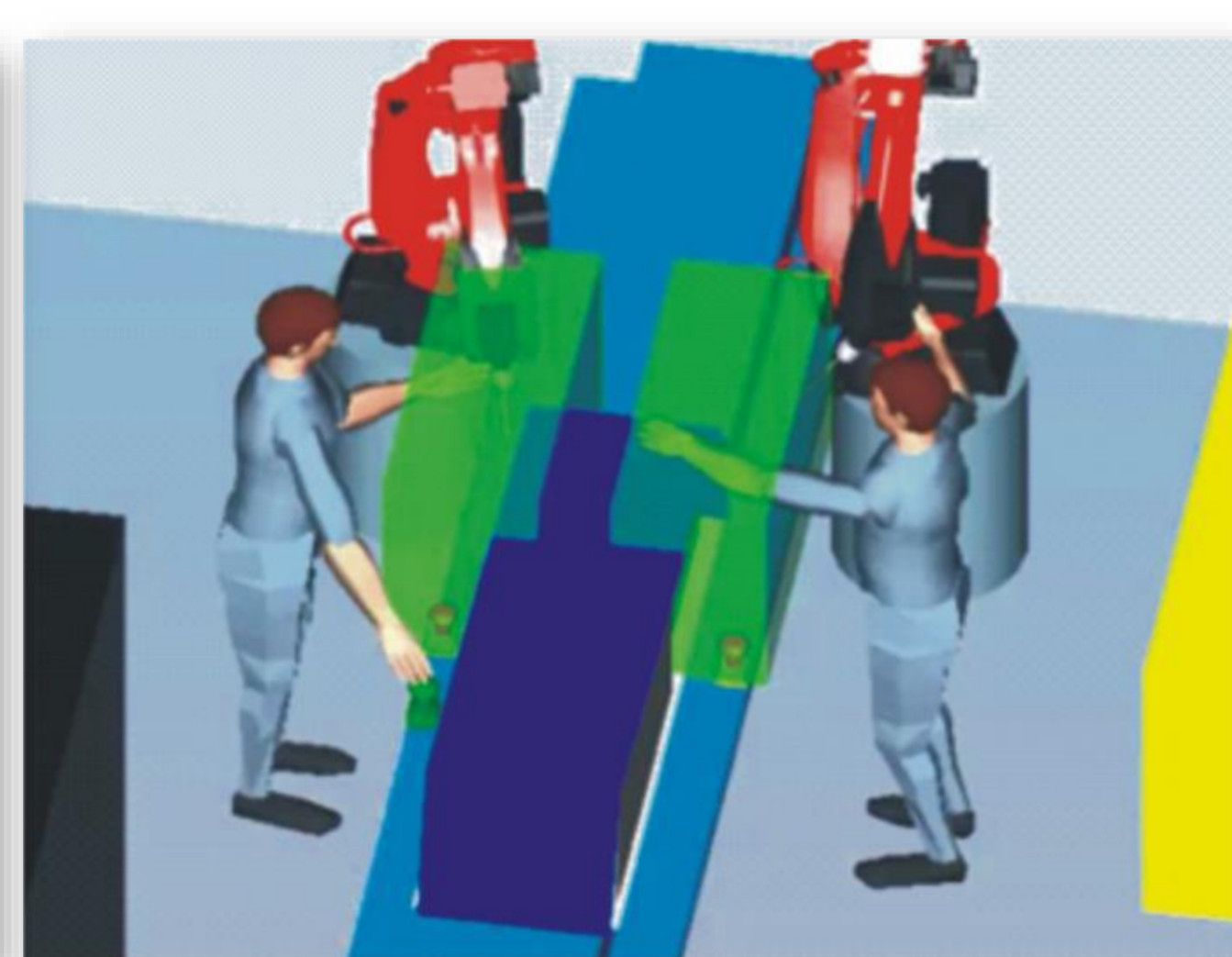
H-R Collaborative Task Planner



Intelligent Mobile Assistant Unit (IMAU)



Automotive Pilot Case



White Goods Pilot Case

Safe Physical Interaction with industrial robots



Augmented Reality Operator support Application

Expected Benefits

The Expected benefits for **ROBO-PARTNER** results are:

- ✓ **Enhanced reconfigurability/flexibility** by human - robot cooperation
- ✓ **Reduction of programming efforts** by enabling multi modal interfaces and task oriented programming
- ✓ **Enhanced product quality** – combining robot based automation and human skills
- ✓ Higher efficiency & equipment reutilization – **fast deployment of HR cells**
- ✓ **Higher inventory and line availability** - Automated part supply
- ✓ Equal opportunities for women, aged and disabled people - **reducing the fatigue and strain on operators**

*“Integrating new forms of **safe interaction** between robots and workers - make the most out of the **synergy effect**”*

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 For more Information visit:
www.robo-partner.eu

