



Industrial Mobile Manipulator Challenge



PROBLEM/ISSUE ADDRESSED

The development of mobile manipulators increases significantly. However, the problems (e.g., safety aspects, navigation, programming, etc.) that limit these systems' utility are far from being solved, and many possible use cases are still not being addressed.

SOLUTION

IMMC is aiming to setup an open competition for mobile manipulators (mobile robot with industrial arm on top) in industrial settings, where these current problems in industry will be advertised. Heterogeneous teams from different countries will compete in various exercises to "robotize" the European industries.

WHY IT IS IMPORTANT FOR SOCIETY

In the short term, the project would address the topic of mobile manipulation more intensively to fix unsolved challenges step-by-step and then use the technology's advantages to raise manufacturing to a new level.

In the long term, a network of dedicated students, researchers, and companies will be created and a transfer of the knowledge in the European industry to strengthen its business location would establish.

“ Thanks to EIT we were able to lay the foundations of an international challenge to strengthen Europe in flexible manufacturing by solving problems in mobile manipulation ”



MAIN RESULTS & INSIGHTS



- Network building (Students, researchers , and industry) to transfer the knowledge within the European Union



- Raise technologies advantage of Industrial Mobile Manipulation



- Virtual challenge at the IROS 2022 as pilot challenge
- Physical challenge in the upcoming years



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