

COLLABORATIVE ROBOTS (CANONICAL/ AIMEN)

Use of small robots to perform semi-autonomous operations to extend the workers capabilities in the pre-fabrication and outfitting stages. It is considered the possibility of deploying the solution in confined spaces and inside the ship for both new construction and retrofitting.

Video



<https://bit.ly/3OAN439>



<https://bit.ly/3KkSuwx>

Involved partners



Technology

Three different technologies are combined to create the collaborative solutions:

- Collaborative robots with Power and Force Limiting (PFL) operational mode (conforms to the TS 15066)
- Fast programming by means of hand-guiding and localization using perception and CAD matching
- Advanced perception for semi-autonomous operation

Applications

The use of collaborative robots in welding and cutting operations is an excellent way to increase productivity and efficiency. Collaborative robots are an ideal choice for small and medium-sized manufacturers who deal with low-volume, high-mix production. They can perform different tasks in a day and can adapt to new sizes and geometries. Mari4_YARD collaborative technology solutions are designed to work with humans in a shared space, and they can help reduce the chance of impact with human co-workers.

