

SOFOCLES

Smart and flexible clamping solutions for sealing

Robotics

Human-Machine Collaboration

2020



A project by



Project consortium



Summary

SOFOCLES develops a flexible, reconfigurable, and innovative collaborative robotic system for handling and clamping large components. The production cell consists of two robotic arms, that are collaborating with a human operator. The solution enables the handling of parts with over 150 kg of weight.

This payload goes far beyond the current state of the art (<15kg). Moreover, a digital twin of the cell ensures safe and efficient interaction.

Currently, different use cases are being integrated, e.g. sealing, welding and WAAM.

The pilot integration aims to be used in the aeronautical industry. An integration of further processes such as drilling, and sanding is possible. Companies from industries such as Energy, Construction, Transport sector etc. are welcome to contact us for possible post-projects.

