

When manufacturing large high-added value parts, incorrect fixturing and location can be a source of errors, rejected parts, idle times, and consequently, a waste of resources and money. Due to its relevance in productivity and competitiveness, the initial alignment is done by long time consuming processes (mostly manual). Current approaches are labor intensive and strongly dependent on skilled operators using specialized measuring instruments.

TACCO Project aims at developing a groundbreaking innovation for the fast, reliable and accurate set-up of large raw parts using an attractive, flexible and easy-to-use modular approach based on photogrammetry, enabling the democratic engagement of one-of-a kind operators to a critical manufacturing process step, the raw part set-up.

ROLE OF POLITO

The **Geomatics group**, coordinated by prof. Andrea Lingua, with the collaboration of **Pic4Ser**, will take care of the optimization of the algorithms for industrial photogrammetry. In particular, we will try to develop new techniques and systems to increase the precision of measurements on industrially manufactured objects. A new interactive way to guide the operators in the data acquisition phases will be investigated too. Finally, the PoliTO group is the leader of the dissemination task, in which learning nuggets on the topics of photogrammetry and industrial metrology will be provided to the public.

PROJECT DURATION

01/01/2023 – 31/12/2024

WEBSITE E SOCIAL MEDIA

<https://tacco-project.eu/>

PARTNERS

- MONDRAGON Corporation S. Coop. (DE) - coordinator
- Soraluze (ES)
- Ideko (ES)
- Dr. Matzat (DE)
- Maschinenfabrik Wüstwillenroth GmbH (DE)
- Officine Meccaniche B.B.M S.P.A. (IT)
- RENISHAW Iberica (ES)

FUNDING INSTRUMENT EIT MANUFACTURING

BUDGET

Total: 1.827.977,71 €

DIATI: 225.833,33 €

POLITO and DIATI's role:

Politecnico di Torino – DIATI is a partner of the Consortium, under the scientific responsibility of **Prof. Andrea Lingua in collaboration with PIC4SeR**

<https://pic4ser.polito.it/>