

PROJECT

ASTRASYS

Avantis SStructural Rod Adjustment SYstem

Funding: European (Horizon 2020)

Duration: Mar 2018 - Feb 2020

Status: Complete

Total project cost: €534,301

EU contribution: €399,490



Call for proposal: H2020-CS2-CFP06-2017-01

[CORDIS RCN : 213798](#)

Objectives:

The aim of the project is to design, define, realize and test one prototype of adjustable length structural rods that can withstand high loads encountered in the aeronautical field.

Two overall concepts will be studied and one of them will be retained for the prototype.

- First solution consists to reinforce existing adjustable rods locally by welding titanium threaded inserts in order to support high loads and avoid fatigue problems.
- The second solution consists to invent a welded assembly method and the associated tool in order to complete the manufacture of rods on the aircraft during integration phase.

During this project, the AVANTIS Company, specialized in innovative aeronautical design and ARMINES laboratory will take the required measures to evolve from first ideas to the final demonstrator and to upgrade the technology readiness level (TRL) from 2 to 4.

Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Other programmes: JTI-CS2-2017-CFP06-AIR-02-44 Adjustable high loaded rod

Lead Organisation:

Avantis Project

Address:

12 ROUTE DE ST MATHIEU
06130 GRASSE
France

EU Contribution: €314,559

Partner Organisations:

Association Pour La Recherche Et Le Développement Des Méthodes Et Processus Industriels

Address:

Boulevard Saint Michel 60
75272 Paris

France

Organisation Website:

<http://www.armines.net>

EU Contribution: €84,931

Technologies:

Manufacturing processes

Titanium alloy

Development phase: Validation

STRIA Roadmaps: Vehicle design and manufacturing

Transport mode: Air transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Other specified

Geo-spatial type: Other