

SPACE CARBON TITANIUM STRUTS

Space Carbon Titanium Struts are manufactured by MECANO ID. Each strut is composed by a carbon tube and two titanium end-fittings. These products are space qualified.

HIGHLIGHTS

- > Standard tube diameters: Ø15, Ø32, Ø50, Ø70
- > Length up to 2000 mm
- > Thread diameter and pitch can be manufactured on demand
- > Full space qualification file provided

Space Carbon Titanium Struts are manufactured by MECANO ID from Carbon fabric / Epoxy resin using RTM (Resin Transfer Molding) process and Titanium machining. A carbon tube and two bonded titanium end-fittings compose each strut.

Our own specific manufacturing and integration processes ensure uniform and repeatable high quality level for each strut. Struts length is adjustable by choosing adapted tube length. Each end fitting ends with a M10x1.25 thread.

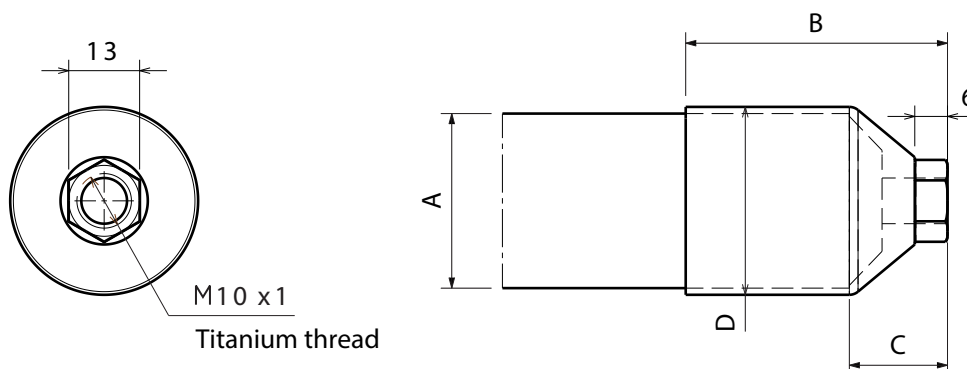
It could be validated by performance tests: tensile test and quality tests such as non-destructive testing (NDT), micrography, void volume ratio determination and differential scanning calorimetry (DSC).

These struts can be supplied on demand with their qualification file and are used in Space & Defence fields.



SPACE CARBON TITANIUM STRUTS

Layout



Applicable documents

CURRENT DATASHEET	Space Carbon Titanium Struts v1.1
INTERNAL SPECIFICATION	Refer to D4G specification
QUALIFICATION FILE	MID-ZNB-RPT-023 1-0
LAYOUT	MID-ZP0-COM-008-1-0 for titanium end-fittings MID-ZP0-COM-006-1-0 for carbon tubes

Dimensions

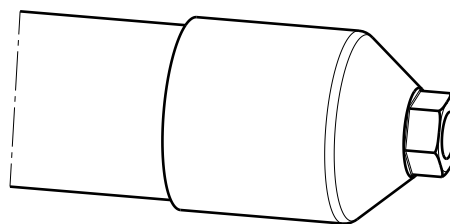
TUBE DIAMETER	Ø32 , Ø50
LENGTH	achieved on demand from 180 mm to 2000 mm
STRUTS INTERFACE	M10x1,25 Titanium
Other thread diameter and pitch can be manufactured on demand.	

Term of use

Space Carbon Titanium Struts are composed of one carbon tube and two titanium end-fittings with the same diameter (standards: Ø32 - Ø50). The link is achieved by bonding according to a qualified internal process. The strut length is adjustable on demand from 180mm to 2000mm.

For the tube layout, refer to catalogue (MID-ZP0-COM-006) for standards versions. Contact us for any other configuration.

The strut interface is achieved by M10x1.25 in Titanium (thread diameter and pitch can be modified on demand) and a nut for integration.



You need further sizes or mechanical properties? MECANO ID is specialized in design, sizing and manufacturing of high performance composite parts. For any specific need or any question, you could contact us at : contact@mecano-id.fr - +33 534 608 400