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Title

Testing of components for a future European heavy launcher

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Abstract

The Space Industry is very unforgiving and every component developed to be used for a space application has to be extensively tested in order to guarantee their proper functionality and to determine their as-built performances.
SCOUT (Sandwich Common Bulkhead Optimized Upper Stage Tank) is a project of MT-Aerospace and funded by ESA's Future Launcher Preparatory Programme in which COMOTI was in charge, among other actions, with the design of the Anti-Vortex Devices (AVDs) of these tanks.
Taking into account the fact the high requirements in terms of mass flow and pressure, some work-around solutions have been implemented in order to ensure the highest possible flow conditions under the project's budget restrictions.
In this paper, the tests performed on the AVDs will be presented, together with the knowledge gained while developing these tests.

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