

5M

COMMITMENT TO PRECISION AND RELIABILITY

SPACE DIVISION

we transform complex requirements
into flight-ready solutions



www.5M.cz

COMMITMENT TO PRECISION AND RELIABILITY



5M s.r.o was founded in the year 1992. Nowadays, it has about 250 employees, where around 40 of them work at SPACE division. 5M has a wide range of customers in space applications, aircraft manufacturing as well as in public transport (trains, trams, buses). The whole company is certificated under AS/EN9100 system of quality management.

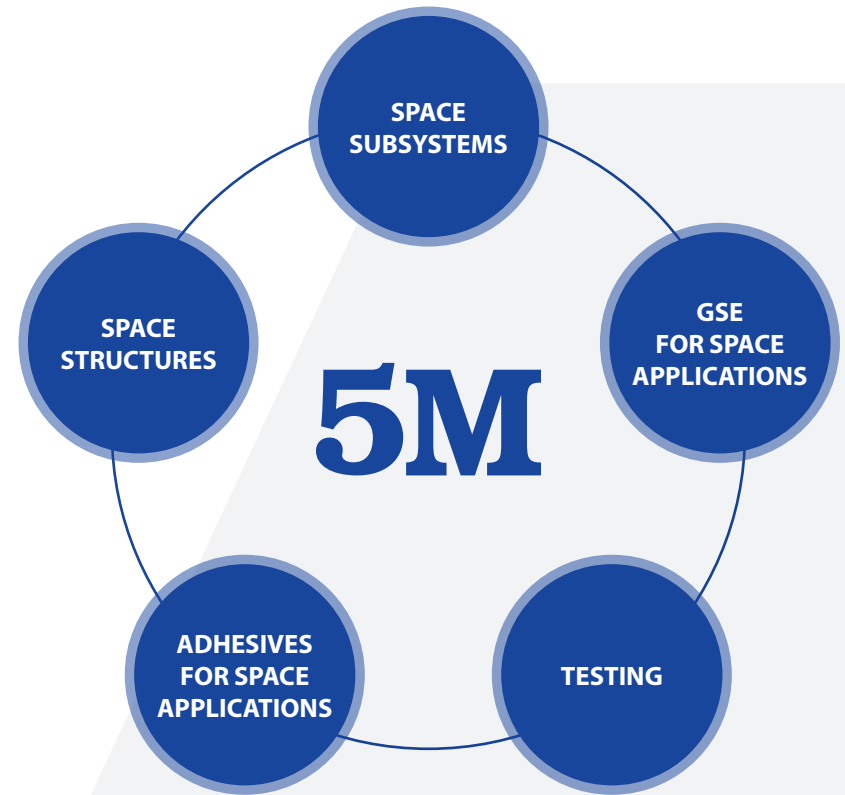
SPACE division of 5M is a trusted partner for demanding space applications, delivering advanced composite and structural solutions for the most challenging missions. We specialize in the development and manufacturing of high-performance solar array structures, lightweight sandwich panels, deployable booms, and other customized composite components.

We offer flexible cooperation through both Build-to-Print and Build-to-Specification approaches, enabling us to manufacture precisely according to customer designs or provide comprehensive engineering and development support from initial requirements to the final flight-ready product.

Combining extensive engineering expertise, advanced manufacturing technologies, and a commitment to precision and reliability, we help our customers transform complex requirements into flight-ready solutions.

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5M SPACE ACTIVITIES



SPACE SUBSYSTEMS

Solar arrays, radiation shielding

GSE FOR SPACE APPLICATIONS

Design and manufacturing of testing GSE and MGSE

TESTING

ESA approved testing for allowables

ADHESIVES FOR SPACE APPLICATIONS

Qualified foil (Letoxit® KFL 120) and paste adhesives (Letoxit® PL84 and Letoxit® LH 317)

SPACE STRUCTURES

CFRP Parts and Sandwich panels based on prepreg or LF Technology



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COMPONENTS **MANUFACTURING**

- Manufacturing of individual parts for manufacturing of complex structures

INTEGRATION OF **COMPONENTS TO SUBSYSTEM**

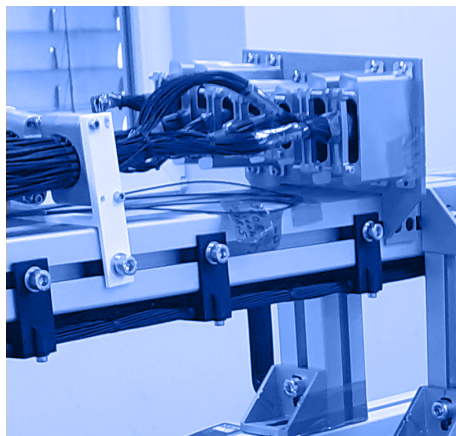
- Harness integration
- Flexible components integration
- Metallic parts integration to CFRP sandwiches
- Qualified riveting and fastening processes
- Structural bonding and mechanical fastening under 3D
- Laser tracker assisted assembly



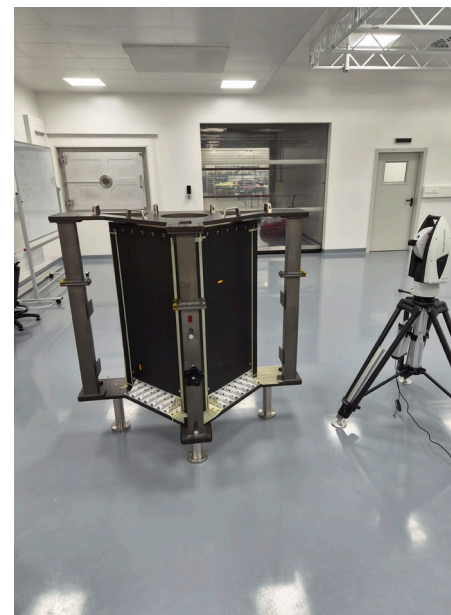
YOKE assembly and harness integration

FUNCTIONAL TESTING **OF ASSEMBLIES**

- Flexible solar array horizontal deployment
- Yoke deployment kinematic
- Solar array vertical deployment (zero-g)
- Static test of dispenser structure in co-operation



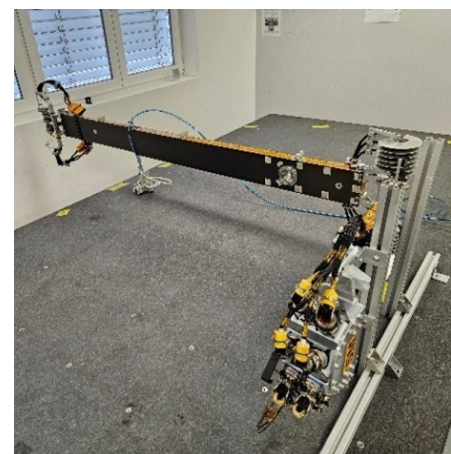
INTEGRATION **AND TESTING GSE**



VEGA laser Tracker asisted assembly



YOKE deployment test



YOKE deployment test



Flexible Solar Array System deployment test



REFERENCES



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