

System Engineer Aerospace Mechanics (m/f/d)

HPS GmbH, headquartered in Munich downtown, is a quickly growing space company and provider of key subsystems: highly accurate reflector antennas for telecom- and science applications, large deployable reflector subsystems (LEA) for earth observation and telecom, deployable drag-sail subsystems (ADEO) for de-orbiting small and medium sized satellites, thermal control hardware for spacecraft and landers, as well as plenty of high end components in the structural and thermal area.

HPS' subsidiary in Romania (HPS S.R.L.) focuses on metal structures, thermal hardware components and MGSE. A joint venture in Northern Bavaria (HPtex GmbH) produces highly reflective metal mesh for deployable antennas.

In all sites laboratories and integration halls provide space for assembly and integration activities, partly in clean environment. Currently, the HPS family concludes 2020 with a staff of 70 persons, whereas 45 are located in Munich.

HPS is well acknowledged at the European Space Agency ESA, the German Space Agency DLR, ThalesAleniaSpace, OHB and Airbus, as well as at all major players of the European space industry. Up to now HPS is onboard 20 flight missions, whereas eight are already in space. The most recent projects are: Ka-band antennas on the German Mission "Heinrich Hertz" and the ESA-mission "EUCLID"; a 25m² deployable sail to be qualified in Q1/2021 with an in-orbit verification in 2022, and an 8m large deployable reflector subsystem embarked on the Copernicus mission CIMR, kicked-off on 16.11.2020.

We have ramped up our team with more than a dozen new engineers in 2020 and **continue our rapid growth at HPS Munich** in the first quarter of 2021, with the following **System Engineer profile**:

Job profile:

The system engineer will technically lead

- **Flight Hardware Projects &**
- **Technology Developments**

mainly in the area of deployable drag-sail subsystems.

Please be aware that we are not looking for just a "coordinator", but for a person who is technically leading and motivating a team of between 3 and 10 involved members, in self-responsibility and with appropriate technical background, targeting full compliance to requirements and catching the delivery/launch date. First targets are the full qualification of the de-orbit subsystem ADEO-L Protoflight Model in Q1/2021 and the planned launch of our next ADEO-N in June 2021. Next projects, such as preparation for series production, are in the pipeline.

Respective tasks will be:

- Technical management of internal engineering activities
- Customer point of contact for technical aspects
- Control of internal interfaces between design and analysis
- Lead of technology development including qualification activities
- Identification of critical development problems and their resolution
- Analysis & review of concurrent design activities
- Definition of system architecture and top level product tree
- Definition of requirements and elaboration of lower tier specifications
- Identification and management of technical risks
- Technical subcontractor- and supplier management
- Technical change management, identification and monitoring of changes
- Interface engineering, mass budget and performance analysis and monitoring
- Test planning and coordination up to subsystem level tests
- Evaluation of test results and elaboration of conclusions and test reports
- Verification control engineering
- Technical assessment of request for proposals and preparation/lead of technical proposals
- Preparation of system engineering documents
- Review and approval of technical documents.
- Support (engineering contributions, document reviews, brainstormings, design suggestions, etc) to other projects in case of need for all aspects related to mechanical systems and configuration, structural design, analysis and mechanical testing



Qualification:

Applicants should have as a minimum:

- More than 5 years of work experience in space flight hardware development projects (design, analysis, manufacturing, assembly, testing, verification) Strong technical background in at least two of the following disciplines within space applications: lightweight structures (CFRP and metal), deployable structures, reflector antennas, electronics, thermal hardware.
- Ability to work in an international teams
- Ability to satisfy both, customer requirements as well as company level goals
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- Good Knowledge of ESA ECSS standards
- Good knowledge of English (writing and speaking); advantage: German (speaking)
- Good knowledge of MS office S/W tools (MS Word, MS Excel, Power Point, MS Project)
- Basic knowledge in CAD and FEM (e.g. INVENTOR, ANSYS, NASTRAN)
- Master's degree in mechanical/aerospace engineering or physics.

Appreciated is a basic knowledge in the field of spacecraft and payload structures, mechanisms, dragsails, nano satellites, CFRP materials, reflector antennas, multilayer insulation, radiators, electronics, MGSE, coating, 3D printing, structural design and analysis, thermal design and analysis, kinematic analysis, radiation analysis, reliability analysis, manufacturing, series production, assembly, alignment, material characterization, environmental testing (static, dynamic, thermal, thermo-elastic, acoustic, metrology, RF), document management, configuration management, quality assurance, contacts in space community.

The applicant should have the ability to interact with customers, sub-contractors, partner companies and internal staff applying excellent soft skills (communicative, mentally strong, ability to delegate tasks, leadership, convincing). The ability to work autonomously, effectively, systematically and cooperatively in a diverse and international team environment and to define and implement solutions in line with team and individual objectives and project deadlines is a prerequisite. In addition good analytical, organizational and reporting skills, a proactive attitude to solving problems and an interest in innovative technologies is needed.

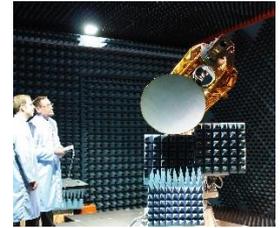
Possibilities:

HPS offers the chance to significantly contribute to outstanding, highly visible space products and to actively take part in the growth of an international operating company. The HPS staff is a family and stands to a team-oriented, friendly working environment. As HPS is an SME (Small/Medium Enterprises), all HPS staff is well informed on company strategy items, can influence the path of HPS growth and improvement suggestions by staff are highly welcome.

The new colleague will have the chance to work very close on the one hand with highly experienced engineers as well as to train on the other hand young ones. He/she will be involved in several projects which makes daily life very diversified.

A four-days-per-week contract might be possible. Self-responsible flexibility in working time per day is our company culture. Documented in our Quality Management System is not only the goal to deliver high end technology and to maintain financial health of the company, but also to create very high degree of employee satisfaction.

Being part of HPS means to be involved in space missions, having hardware flying around the Earth or contributing to the European exploration of the Universe.



We are looking forward to your application (preferred via e-mail):
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