



Senior Optomechanical Engineer / STOP Analyst

Axient Systems, Delft

At Axient Systems, we are shaping the future of sovereign space capability. Based in Delft, at the heart of the Dutch aerospace ecosystem, we develop advanced satellite systems that support critical commercial and government missions. Our solutions enable secure communications, defence, security, and resilient infrastructure where performance and reliability are essential.

As a growing and ambitious organisation, we offer professionals the opportunity to contribute directly to innovative space projects that make a real impact on society, security, and technological progress.

We are looking for an optomechanical engineer who owns what heat and structure do to optical performance: the coupled structural-thermal-optical chain of a high-performance imaging satellite.

The project

You will own the STOP chain of an optical satellite: how thermal loads in orbit deform the structure and the optical bench, and what that does to focus, alignment and line-of-sight. From concept through detailed design, qualification testing and correlation

What you will own

- The system-level optical performance analysis.
- The STOP analysis chain end to end: thermal fields into structural deformation into optical performance, per orbit position and season, and its maintenance through every design cycle.
- The alignment budget of the vehicle: optical bench, payload, star trackers and their stability over temperature and over time.
- Dimensional stability: material choice on CTE, creep and moisture release, mounting and isostatic concepts, together with our materials and processes engineer.
- The optomechanical interface with our payload supplier: mounting, alignment, what we guarantee to them and what they guarantee to us.
- The optomechanical side of qualification: alignment measurements before and after vibration and thermal vacuum testing, and the correlation of your models against them.
- The stability case at the design reviews: the numbers, the assumptions, and the margin that is left.

You own the coupled chain. Our imaging performance systems engineer sets the requirement and judges the result, our thermal engineer supplies the thermal fields, and our structural dynamics engineer covers the dynamic disturbances.

You have the following demonstrable competencies

- You think across three disciplines at once and are not thrown by a thermal model, a finite element model and an optical prescription in the same afternoon.
- You know why a mount is isostatic and what happens when it is not.
- You are precise about micrometres and about the assumptions that produce them.



- You keep your models under configuration control and can explain what changed between two design cycles.
- You work naturally with an external optics supplier: challenging, accepting, and knowing where their responsibility ends.

Essential qualifications

- Eligible for a Dutch VGB-B clearance.
- Engineering degree in mechanical engineering, applied physics, precision engineering or comparable.
- 5+ years in optomechanical design or analysis of precision optical systems, with demonstrable ownership of an alignment or stability budget.
- Thermo-elastic analysis craftsmanship: finite element work coupled to thermal results, and the translation into optical performance.
- Experience with STOP analysis chains and the tools that support them (for example Nastran or Ansys coupled to Zemax or Code V, or comparable).
- Fluent English.
- Comfortable in a multidisciplinary, transatlantic team.

Desirable qualifications

- Space sector experience, including thermal vacuum testing and space materials.
- Space systems understanding.
- Earth observation or astronomical instruments.
- Semiconductor, metrology or other high-precision industry backgrounds are equally welcome.
- Kinematic mount design and bonded optical assemblies.
- Fluent Dutch.

What we offer

- Ownership of the physics that decides whether a satellite still focuses after eight years in orbit.
- Competitive, market-aligned salary and benefits, real ownership of your discipline, and room to grow as the organisation scales.
- On-site work in Delft, limited hybrid working possible.

Particularities

This role requires Dutch security screening. You will need a VOG (Certificate of Conduct) to start, which is quick to obtain and lets you begin work on the project immediately.

You might also need a VGB-B clearance. This takes longer, and we support you through it. It is required for some aspects of the role, so you must be eligible for it and willing to undergo the screening, but you do not need to have it in hand to join us.

**Interested?**

Apply via the vacancy on LinkedIn or the registration form on our website.

In your application, include a short description of one alignment or stability problem you owned: the mechanism behind it, what you predicted, and what the measurement showed. Applications without this description will not be reviewed.