



MKS is committed to being the highest quality and reliability provider of advanced Lasers - high power diode laser applications - enabling capabilities for imaging and micro materials processing applications for Scientific & Industrial customers. As part of the mission, the Principal Reliability Engineer will be responsible for supporting the Lasers Group's reliability program including product development, design for reliability, design for manufacturability, as well as advanced reliability testing. This position will include the improvement and/or development of new design processes which enhance reliability and will also interface internally with the design engineering/manufacturing groups and externally with the customer on key reliability programs and issues.

## RELIABILITY ENGINEER (f/m) supporting our quality department

### Job description:

- Develop and implement reliability plans including design, validation, qualification and assessment methods to support successful new Lasers product introductions
- Provide technical supports to improve existing Lasers reliability and provide daily support for on-going projects to resolve reliability issues throughout the entire product life cycle
- Interface with design engineering and marketing organizations to establish customer use conditions, and reliability test conditions to be used during internal testing/reliability analysis
- Performs Volatile Organic Compound or VOC Testing and Analysis
- Evaluates, from a reliability physics perspective, the materials, properties and processes used in production of electronic and optoelectronic devices and systems
- Perform various DiR techniques: lead the product qualification-testing, reliability and durability testing (HALT, HASS, life test, etc.), in addition to ownership of reliability test equipment (reliability labs), reliability predictions (modeled and field - MTBF), reliability allocation, Design FME(C)A, Weibull Analysis, warranty collation and reporting to achieve company and customer reliability objectives
- Support and drive Lasers continuous improvement activities including best practice adoption
- Perform product design reviews focused on reliability concerns
- Collaborate with peer engineering experts in other MKS business units
- Work in a cleanroom environment and adhere to MKS' manufacturing best practices
- Advises design and manufacturing engineering on selection, application and test of electronic and optoelectronic components and systems

### What you can expect:

- State-of-the-art high-tech infrastructure
- Flexible working hours
- Cooperation and mutual support in a strong and innovative team
- The salary will be in excess of the min. KV remuneration and take into account qualification, training and the labor market in Vorarlberg

### Competences:

- B.S. (M.S. or Ph.D. is a plus) in Physics, Electrical Engineering, Material Sciences, Chemistry, or related field
- 8+ years' reliability engineering experience in electronic systems & failure analysis, semiconductors, lasers diodes or in electromechanical fields
- Experienced in Volatile Organic Compound or VOC Testing and Analysis
- Experienced in thermal measurement and device characterization techniques
- Understand PCBA and electronic component failure mechanisms and physics of failure
- Experienced in Design for Reliability techniques, approaches and methods
- Experienced in applying reliability modeling techniques and tools
- Experienced in HALT, HASS profile design and Life test methods (automated tests, LabVIEW)
- Ability to work cross-functionally to resolve issues, including with customers
- Experienced in data collection techniques and statistical analysis
- Good understanding of reliability analysis FA methods including multi-cell acceleration and competing failure modes
- Good understanding of laser physics theory, epitaxial growth, wafer fabrication and packaging technologies
- Familiarity with CE Compliance (RoHS, CDRH, FCC, Safety, EMC)
- Excellent communication skills
- Potential travel time (5% to 10%)

### Interested?

Please send your application documents via email to Bernadette Herburger ([jobs@spectra-physics.at](mailto:jobs@spectra-physics.at)).

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We look forward to meeting you in person.

[www.spectra-physics.com/karriere](http://www.spectra-physics.com/karriere)