

JOB DESCRIPTION NUMBER: SME 005 JOB TITLE: OPTICAL MANUFACTURING ENGINEER

MANAGER: Operations Manager REVISION DATE: October 2021

LOCATION: 16490 INNOVATION DRIVE, JUPITER, FL

SHIFT: FIRST SHIFT

POSITION SUMMARY:

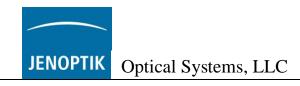
The Optical Manufacturing Engineer (OME) will be responsible for providing both optical and opto-mechanical engineering support to the production, assembly, and systems testing environments. Guided by the customers' specifications and schedule-driven needs, the OME's main efforts will be focused on maximizing production efficiency by achieving continuous improvements and optimization of JENOPTIK's complex production processes. Furthermore, the OME is to support the maintenance of the existing stream of products already undergoing volume production.

A critical function of the OME is to act as a conduit between the engineering team and all other in-house production groups. The OME will support and act on behalf of the engineering team in regards to product design, manufacturing, production, assembly training, troubleshooting, and critical decision making. The OME will also provide the production floor, systems test group, and sustaining engineering group with technical guidance on assembly tooling, fixtures and jigs, product set-up, and optical performance troubleshooting.

While the OME will advise on and partake in all aspects of the product life cycle from design, to prototyping, to volume production, the individual will mainly focus on post-launch aspects and life cycle management. The OME holds responsibility for manufacturing sustaining activities to drive continuous improvement, cost reduction, and on-time delivery.

<u>RESPONSIBILITIES INCLUDE</u> (BUT ARE NOT LIMITED TO):

- Support and improve the manufacturing, assembly, quality, and cost of critical opto-mechanical assemblies and systems.
- Perform optical re-compensations for first article releases and lead efforts to create self-governing automated build sheets for volume production of melt re-comp and sub-cell turning assemblies.
- Play leading role in troubleshooting, problem solving, failure analysis, root cause, and corrective action processes as required to maintaining continuous work flow.
- Support field servicing of delivered instruments thru remote and on-site support of customers and/or field service engineers.
- Design experiments, perform analytical measurements and interpret results of system and sub-system level testing to qualify or resolve product and process issues.
- Create and conduct verification & validation protocols to qualify new/modified measurement and test processes.
- Act as technical leader while interfacing between Engineering, Quality, Production and System Test to provide constructive feedback and assist in verifying designs meet internal and customer requirements.
- Support continuous documentation efforts including maintaining engineering drawings, bill of materials, test reports, acceptance test procedures, assembly procedures, and design validation plans.
- Monitor, review, and enhance flow of work within the facility by utilizing LEAN principles to ensure timely shipment of customer orders.
- Work with purchasing on critical inventory conditions and product urgencies, as well as production, manufacturing, and supply concerns; providing assistance and options where possible.
- Ensure assembly personnel, supervisors, and in-line inspectors are clearly trained on products and procedures; advising on assembly techniques and identifying critical features and functions.
- Reports potential on time delivery risks to management, proposes appropriate actions to mitigate delivery risk.
- Provide feedback to engineering on manufacturability, product concerns, and improvements for design standards.
- Identify, specify, and acquire appropriate equipment and essential assembly tools, jigs, and fixtures.
- Utilize and propose automation where possible to improve the assembly process.
- Participate in conferences, trade shows, audits at supplier sites, training at customer sites, or off-site training courses as requested. All policies and procedures of the off-site location must be followed when visiting.
- Performs all other duties as assigned.



MINIMUM REQUIREMENTS:

- MS in Optical Engineering or related field.
- 10+ years of related experience in a production/manufacturing environment.
- Understanding of blueprint interpretation, geometric and optical tolerancing, and classification of fit.
- Experienced in the use of ray-tracing tools such as ZEMAX and/or CODE V.
- Experienced in the use of Microsoft Excel or scientific programming for the purpose of mathematical analysis and data representation.
- Experienced with optical testing methods & metrology tools such as interferometry, MTF testing, and image analysis software.
- Experienced with precision optical alignment and proper handling of optical components.
- Experienced at working within ESD-controlled and cleanroom environments, as well as laser safety guideline.
- Knowledgeable with handling, operation, and computer-control of digital imaging sensors.
- Knowledgeable with LEAN manufacturing principles and their implementation into a manufacturing environment.
- Knowledgeable with quality improvement tools and techniques (Six Sigma, Statistical Process Control, & FMEA)
- Knowledgeable with ISO 10110 standards.
- Excellent written and oral communication skills.
- Ability to work with others in complex management matrix structure.
- Must possess the following "soft skills": attention to detail, clear communicator, customer focus, negotiation, prioritization/multitasking, problem-solver/decision-maker, team player.
- Demonstrated ability to work independently and collaboratively across disciplines required.
- Must be able to comply with policies and procedures when visiting any facility outside of Jenoptik, such as customer, supplier, & manufacturer sites, as well as conferences, trade shows or off-site training.
- In compliance with federal law, all persons hired will be required to verify identity and eligibility to work in the United States and to complete the required employment eligibility verification form upon hire.

PHYSICAL REQUIREMENTS:

The physical requirements described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally required to stand; walk; sit; use of hands or fingers to handle, or feel objects, tools or controls and keyboarding; reach with hands and arms; climb stairs; balance; stoop, kneel, crouch or crawl; talk and hear.

The employee must occasionally lift and/or move up to 50 pounds.