

	Job Description	Format No:HR_F_160 Version: 2.0 Date: 23-Jul-21
Senior Engineer Mechanical Design - JD (JD2026002)		
Roles	Mechanical Design Sr. Engineer	
Responsibilities	<ul style="list-style-type: none"> • Design and develop mechanical systems for thermal weapon sights • Perform tolerance analysis for precision assemblies • Create and release detailed 3D models, drawings, and specifications • Design for ruggedization considering recoil, vibration, and environmental loads • Collaborate with optics, electronics, PCB, and firmware teams • Develop enclosure designs ensuring sealing (IP-rated), thermal management, and EMI shielding • Work closely with vendors for precision machining, coatings, and assembly • Support prototype builds, testing (environmental & field), and design iterations • Document lessons learned and improve design robustness 	
Category		Description
Qualifications	Bachelor's degree in Mechanical Engineering	
Experience	5-6 years experience Experience in: Precision machined components Sealed enclosures (IP-rated designs) Opto-mechanical assemblies (preferred) Experience with recoil/impact-resistant product design is an advantage Proficiency in CAD tools: Creo (preferred) / SolidWorks	
Technical & Process Capabilities	Strong knowledge of: GD&T and tolerance stack-up analysis for optical alignment Opto-mechanical design principles (lens mounts, sensor alignment) Thermal management (heat sinks, conduction paths) Experience with: DFM, DFA, DFMEA Sealing methods (O-rings, gaskets, adhesives) Understanding of materials and surface treatments: Aluminum alloys (6061, 7075), anodizing, hard coating Exposure to manufacturing processes: CNC machining, surface finishing, assembly Experience working with cross-functional teams (Electronics, Optics, Quality) Vendor development and supplier coordination	
Behavioural Capabilities	Strong collaboration and cross-functional coordination Self-driven with ownership mindset Good communication and documentation skills Problem-solving attitude with attention to detail Willingness to work in fast-paced development cycles	
Skill Sets	Knowledge of engineering standards: ANSI, ISO, ASTM Ability to troubleshoot system-level mechanical and integration issues Experience in: 3D design of precision assemblies Assembly process documentation (SOPs, work instructions) Prototype integration and validation Capability to design quick prototypes for concept validation Ability to present technical concepts to internal stakeholders	
Values	Accountability & Responsibility Ethics & Integrity Collaboration & Teamwork Continuous Learning Agility & Innovation Empowerment with Accountability Sustainability	
Preferred Experience, Knowledge & Attributes	Experience in defence or ruggedized product design Familiarity with thermal imaging systems and IR sensor integration Knowledge of environmental testing standards: MIL-STD-810 JSS 55555 Experience in recoil/shock testing and validation	
Compensation	To be filled by HR	