

MAG CANICA

4204 JUTLAND DRIVE
SAN DIEGO, CA 92117
USA

HIGH PERFORMANCE WIRELESS TORQUE SENSING



JOB DESCRIPTION

ELECTROMECHANICAL MANUFACTURING & ASSEMBLY TECHNICIAN
Full-Time Positions

COMPANY OVERVIEW

MagCanica, Inc., a leading provider of non-invasive torque sensor systems to the motorsport, aerospace, and energy sectors, is actively seeking new members to join our San Diego based team as we expect continued and sustained growth during 2024 and beyond. Since the Company's inception, MagCanica has focused its efforts on the development and commercialization of its non-contact torque sensor technology which is used to measure torque on high performance powertrains on racecars, rotorcraft, and gas turbines. MagCanica is the global market leader in motorsport torque sensing and powertrain performance monitoring across a variety of automotive racing series including Formula 1, Formula E, World Endurance Championship (WEC), IMSA, NASCAR, IndyCar, and World Rally Car. Additionally, MagCanica provides hardware, support services, and technology to the US Navy, US Army, and US Air Force as well as Lockheed Martin (Sikorsky) and Vericor Power Systems. Leveraging its leading position in motorsport torque measurement and having established a proven track record in solving some of the most challenging torque measurement problems facing industry, MagCanica is poised to expand further in its existing markets as well as into new markets electric and autonomous vehicles, and robotics and automation.

JOB DESCRIPTION & TYPICAL TASKS

The primary role of the MagCanica Electromechanical Manufacturing & Assembly Technician will be to ensure and further bolster the outstanding quality of physical manufacturing, assembly, functional testing, and electrical calibration of MagCanica's torque sensor product line. The candidate will apply the highest level of craftsmanship in assembly and the most exacting standards of quality in functionally testing and calibrating systems prior to delivery to MagCanica's full system calibration group. As MagCanica delivers products that measure mechanical parameters and provide electrical analog and digital output signals, the candidate will need to be experienced in both electrical and mechanical assembly (especially soldering), electrical testing, and data acquisition. The technician will have the opportunity to be exposed to various aspects of the production cycle, with a primary emphasis on electromechanical hardware manufacturing and assembly and electrical testing/calibration. The types of tasks the MagCanica Electromechanical Manufacturing & Assembly Technician will be responsible for carrying out are listed below.

Typical Primary Tasks:

- Physically build deliverable sensor systems: assemble mechanical components, solder electronic components, apply coatings to printed circuit boards, install printed circuit boards into sensor housings, precisely cut and strip wiring, mount fasteners, fasten and/or seal electro-mechanical assemblies by applying various bonding and/or sealing agents
- Perform final machining, cutting, or bonding operations on components such as sensor housings, sense elements, fine wires, etc.
- Assemble wiring harnesses and terminate connectors
- Assemble circuit boards, connectors, ribbon cables, jumpers, and other electronic components into custom-built enclosures
- Test sensors and printed circuit boards using a combination of electrical test equipment and

LabVIEW-based software scripts

- Participate actively in inventory management and quarterly inventory checks
- Conduct final assembly of sensor systems onto customer driveshafts, including application of sealant, ensuring integrity of the fully assembly, and certifying system fitness for homologation
- Participate in failure analyses by dissecting and analyzing hardware returned from the field, conducting diagnostic and validation testing, and comparing with original results. Assist in writing and issuing detailed reports outlining findings

JOB QUALIFICATIONS

Skill Requirements

- At least 2 years of full-time work experience in a related role
- Attention to detail and good craftsmanship, and a strong concern for quality
- Strong electrical and mechanical assembly skills
- Familiarity with wiring harness assembly protocols using AWG 20-gauge harnesses or smaller
- Familiarity with processing adhesives, soldering, and general machine shop skills
- Proficiency with LabVIEW or equivalent software
- Ability to read and interpret mechanical drawings and electrical schematics
- Understanding and knowledge of sensor or instrumentation calibration protocols

Although substantial formal and on-the-job training will be provided by MagCanica to further refine and complement the candidate's skills, the candidate is expected to already have a hands-on approach and a certain comfort level building and operating devices and instrumentation.

Educational Requirements

An Associate's degree in fields such as machining, mechanical technology, electronics, automotive technology, or electronics is preferred but not required. Candidates without an Associate's degree but with substantial experience in mechanical and electrical assembly and/or testing will be considered.

The Type of Person We Are Looking For

We are looking for self-motivated candidates who have a high degree of self-discipline and consistency in their work and really enjoy making and testing great products. A painstaking attention to detail and a rigorous commitment to quality are paramount for this position. It is also important to be well versed and comfortable with mechanical hardware, electrical hardware, and computers. The successful candidate will be a self-starter who has the ability to work under a changing timeline due to our heavy involvement in the motorsport sector. Our approach to quality is to combine rigorous process controls with individual attention to detail and dedicated craftsmanship in order to provide our clients with the combination of consistency and flexibility they demand. The MagCanica Electromechanical

Manufacturing & Assembly Technician will contribute first-hand to ensuring and improving MagCanica's global reputation for best-in-class products operated by the world's most demanding clients across the motorsport, aerospace, and energy sectors. These include Scuderia Ferrari, Mercedes AMG Formula 1 Team, Red Bull Technology, McLaren Racing, Porsche Motorsport, Corvette Racing, Toyota Motorsport, Honda Racing, Lockheed Martin (Sikorsky), Vericor Power Systems, and the US Navy, among others. Therefore, the successful candidate will be an individual who has very high personal standards, is a team player with a solution-oriented, "can-do" attitude, and derives genuine satisfaction from getting every detail right and striving for even seemingly minor but continuous improvements.

COMPENSATION & BENEFITS

MagCanica offers a very competitive compensation package including base salary, a discretionary yearly performance-based bonus, discretionary yearly merit raise, paid vacation, and 10 paid holidays per year. Benefits include medical, dental, workers' compensation, disability, and life insurance as well as a 401K program with matching and a Flexible Spending Account (FSA) program. The Company works hard to allow employees the greatest possible personal flexibility while achieving our overall technical and business objectives.

CONTACT INFORMATION

Please send your resume in **PDF format with the file name containing your full name** to:
recruiting@magcanica.com

MAGCANICA IS AN EQUAL OPPORTUNITY EMPLOYER AND WILL CONSIDER ALL APPLICANTS WITHOUT REGARD TO RACE, COLOR, RELIGION, SEX OR NATIONAL ORIGIN.