



# Test Engineer—Electric Motors, Starters, Alternators, Pumps, Rotating Power, etc.

Ball Systems is searching for an experienced **test engineer with expertise developing electromechanical test systems for electric motors, alternators, starters, or other rotating power systems** who enjoys unique challenges, varied assignments, and has the initiative to take on complex engineering projects and drive them to completion. We move quickly, work hard, and take great care of our team and customers. Ball Systems is a small company, and we treat each other as family. We are looking for “A-players”. Do you measure up?

## Job Description:

A member of a cross-functional team that will specify, design, and manage complex electronic and electromechanical test systems for a wide variety of industries. You will be part of the complete system development cycle from quoting to design to system build and check-out to delivery and post launch support. You will be interacting with customers and required to deliver project status to the company’s management team, so communication skills are a must.

Applicant will perform technical analysis of electronic, power, and rotational mechanical test requirements, develop strategies to address requirements, develop/design/specify hardware systems, system schematic design and component specification, and provide program management of projects through entire order life cycle, including fabrication and delivery/installation.

## Experience with:

- Rotating electric machines, power electronics (high voltage and high current), control software
- Previous experience with rotating machinery alignment and vibration monitoring & analysis
- Sensor selection and integration for measurements including temperature, speed, vibration, actuator force, noise, deflection, torque, etc.
- Design and layout of power distribution and power measurement systems, control panels, mechanical stands, safety systems, dynamometers, instrumentation and sensors, etc.
- Test procedures required for product validation and manufacturing testing
- Control panel and control cabinet design
- Automotive based testing
- Minimum 3 years test/validation experience required
- Minimum of 5 years of engineering experience required

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50 YEARS OF INNOVATION

## Able to:

- Define equipment software and hardware requirements
- Collaborate with the team and customer throughout the development of the equipment, including setting up, troubleshooting, and testing the product
- Work closely with cross-functional teams and various customers to understand the product and ensure it meets/exceeds customer performance and durability requirements
- Deal with Ambiguity
- Routinely work in a hands-on manner

## Qualifications/Experience:

- **US CITIZENSHIP OR CURRENT GREEN CARD REQUIRED. WE CANNOT SPONSOR VISAS DUE TO OUR MILITARY CONTRACTS. PLEASE CONFIRM CITIZENSHIP REQUIREMENTS MET WHEN APPLYING.**
- **DESIRED MAJOR(S):** BS or MS in Electrical Engineering, Computer Engineering, Computer Science, Electrical Engineering Technology, or Computer Engineering Technology.
  - Mechanical Engineering backgrounds will be considered with appropriate electrical depth of understanding
- 5+ years rotating electric testing experience, however, will consider other candidates with appropriate related experience.
- Hardware design experience (analog, digital, embedded, and mixed signal).
- Functional test development experience (H/W and S/W).
- Test strategy development.
- Test fixturing design.
- Controls and automation.
- PXI, cRIO, and cDAQ experience.
- Manufacturing or design verification test experience.
- Experience working on cross-functional teams hitting deadlines.
- Preferred skills include: NI LabVIEW, TestStand, C, C++, C# programming experience.

## Who are we?

Ball Systems is a **full-service test, automation, and custom engineering company** offering a wide variety of solutions and services to a broad range of industries. Our growing portfolio of solutions includes automotive and aerospace testers, power electronics and automated systems.

We **value honesty, excellence, and transparency**. We employ talented specialists with applied experience and an excellent command of the tools of the trade. We operate a tight-knit environment, managing each project to ensure consistency and quality at every level. We have a **50-year history** in the test market, and our expertise is supported by decades of momentum. We communicate openly, understanding that system requirements, managed timelines, wise budgeting, and informed processes are critical – not only to the growth of our business but the success of our relationships.

Fill out the [form](#) or send us your resume to [recruiting@ballsystems.com](mailto:recruiting@ballsystems.com).



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