

# Paul Colvin

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## Engineering Specialist IV

Engineering Specialist with deep expertise in manufacturing, assembly and testing of hard drives. Known for being highly organized in following test plans, providing clean data and understanding how test data affect design. Passionate about leveraging skills to enable the organization to achieve success.

Engineering | Manufacturing | Test Plans | Data Analytics | Design  
Documentation | Test Plans | Data Management | Data Collection | Soldering

## Professional Experience

**Seagate Technology** - Longmont, CO

May 1997 - November 2022

### Engineering Specialist IV - Spindle Motor Lab Technician

2001 - 2022

- Tested hard drive spindle motors for product qualification, FA, and to verify that suppliers met Seagate specifications ensuring 100% compliance. This enabled the design team to qualify suppliers for use in production. Qualifying different suppliers to obtain cost savings.
- Testing included the use of multiple complex test systems to measure specifics of the motor, frequency response of the bearings, electro magnetics, power consumption, wear and life testing, and metrology of the motor hub. These test results directly impacted the choice of design and implementation of improvements to increase motor performance in the field.
- Collaborated with engineers and other technicians to complete complex DOEs and FMEAs.
- Executed test plans, provided detailed test results, and published data to a database for engineers.
- Performed calibration of equipment in the lab, maintained a strict schedule, capable of keeping track of lots of equipment.
- Highly organized and meticulous in tester documentation and lab cleanliness.
- Leveraged the ultrasonic measurement system utilizing a Sono-Scan to examine transition interfaces between dissimilar materials, identifying and addressing potential gaps between adhesive and aluminum. Completed training for this in 2018.
- Measured disc pack flatness and disc warpage due to clamping with the Zygo Flatness tester. Completed training for this in 2018.
- Provided laser interferometer measurement to analyze HDD's media flatness evaluation
- Performed shock and vibration testing following test plans to provide shock and vibration testing using a shock tower and vibration table.

### Engineering Specialist - Clean Room and Prototype Lab Technician

1997-2001

- Prototype lab, drove assembly for small scale DOEs by hand. Work with engineers to provide small drive builds.
- Comfortable working with lots of small precision parts and soldering components on PCBAs.
- Maintained clean room for hard drive assembly on a production line and drive part preparation for assembly.