

Alignment Assessment Services

Instron engineers have worked directly with Nadcap and ASTM to understand the requirements for materials testing system alignment. We have developed and established alignment assessment services complying with the guidelines and calculations detailed within ASTM E1012 and by Nadcap.

We offer a wide range of alignment assessment services conforming to the requirements of:

- ASTM E1012 requirements and calculations for assessing test frame and specimen alignment
- Nadcap AC7101 criteria for mechanical testing of metals
- Nadcap AC7122 criteria for non-metallic materials
- Nadcap AC7109 criteria for coating evaluations

These standards and criteria for materials testing system alignment address an extensive range of materials testing applications, including metals, plastics, composites, coatings, bonding, and fasteners. Whether your test laboratory is engaged in raw material manufacturing, component manufacturing or independent testing services, Instron can provide you with the support, services and application expertise needed to help you address your businesses materials testing system's alignment requirements.

Alignment assessment of your system's load train will be carried out at your site following an evaluation of requirements by an Instron alignment verification consultant. The evaluation will include review of the alignment criteria for your testing system's application and the criteria for an alignment cell specimen which is representative of your test material. A certificate documenting the required comprehensive set of multiple test strain readings (including the Percent Bending parameter) will be issued upon completion of Instron's alignment assessment.

Instron can also provide or manufacture the required representative strain gauged alignment cell specimen.



Should your testing system's alignment not be in compliance with your application's Nadcap materials testing system alignment requirements we can work with you to develop a corrective action plan to achieve the required level of accuracy. Adjustment and/or Instron's AlignPRO Alignment Fixture combined with our alignment assessment procedures can often bring a non-complying system into alignment compliance.



The difference is measurable®

Instron Professional Services... The Difference is Measurable®

Instron's Global Professional Services Team will assist you at each step to address your compliance verification requirements; beginning with consultation to understand requirements specific to your materials testing systems application and operations – through to the scheduling and delivery of required services.

We can work with you to comply with audit criteria requirements beyond alignment assessment. These include: additional testing system measurement accuracy verifications and calibrations, preventative maintenance, staff training, and services frequency criteria to comply with Nadcap criteria.

Instron's Professional Services Team provides the knowledge and skills to help your business keep your materials testing operations functioning effectively while addressing your specific audit requirements.

Additional Services for Audit Compliance and Materials Testing Laboratory Efficiency

Instron® Professional Services can deliver a comprehensive range of support services aimed at providing value, availability, and test quality throughout the life of your materials testing system.

Alignment is just one area where we can assist you with your Nadcap audit. We offer additional professional services, that can help you address Nadcap audit requirements beyond alignment while helping to maximize effectiveness and return on investment in your materials testing laboratory operations.



Consulting Services

Working with you; we can offer knowledge, advice and, direct help for materials testing within your laboratory operations, including the addressing of your Nadcap audit requirements.



Preventive Maintenance

Preventive maintenance ensures you get the most out of your materials testing equipment. Each visit includes a pre-defined set of maintenance activities designed to help maximize uptime



Calibration and Verification Services

Instron's accredited services reduce your costs and your exposure to risks, providing you with the confidence in the reliability and repeatability of your test results for your business and your customers. Our laboratories are ISO/IEC 17025 accredited.

On-site calibration and verification services include Force, Speed, Strain (extensometers), Displacement, Impact, Temperature, Torque, Creep, Alignment, and Strain Gauge Channel

Our verification and calibration services cover a wide range of procedures to meet or exceed many of the ISO and ASTM standards. Certificates, which can be used in the event of an audit, are individually issued following each calibration.



Training

Offering a comprehensive range of system level training courses, our curriculum is designed to meet the training needs of machine operators and test method developers - from novice to expert. Training is offered in a classroom setting, on-site, or customized to your needs.