

FIRST-CLASS TESTING & CALIBRATION SERVICES

Delivered with Exceptional
Precision & Expertise.

- Material Testing
- Calibration Services
- Non-Destructive Testing & Training
- NDT Level III Consulting Services



ENJOY OUR COMPLETE SUITE OF MECHANICAL TESTING

Mechanical testing, otherwise known as destructive testing, is a vital part of the product development process that allows developers to determine whether a material is suitable for the intended application or not. BMP Testing and Calibration Services Inc. provides a complete line of mechanical testing services for metallic and nonmetallic materials, components, and specialty products. Each test we offer is carefully designed and executed to provide accurate, reliable results, regardless of your project.

OUR MECHANICAL TESTING CAPABILITIES

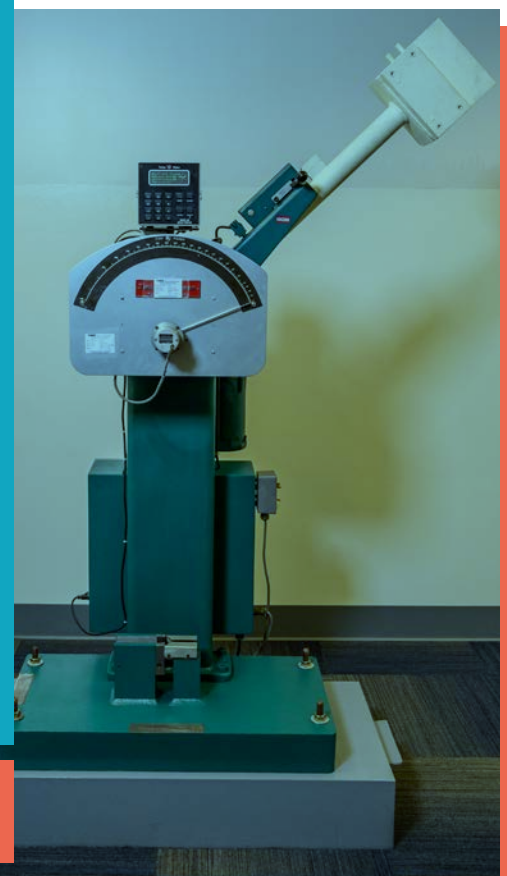
With expertise spanning a wide range of industries, BMP Testing and Calibration Services, Inc. can help you with any project, regardless of its complexity and material. Our **mechanical testing** experts can perform these tests:

- Tensile / Ductility
- Yield Strength
- Stress Rapture
- Wedge and Axial Tensile (Full Size)
- Proof Load
- Bend Testing
- Flattening
- Charpy V Notch Impact
- Hardness Testing (Rockwell, Brinell, Superficial)
- Hardness Vickers and Knoop
- Welder & Procedure
- Qualification (per API, ASME, AWS Codes, ASTM, EN, and Pressure Equipment Directive)

COMPLETE FAILURE ANALYSIS TO PREVENT FUTURE PRODUCT FAILURE

Development enables industries to prevent future product failures and improve them for the end-user. It's a multi-faceted approach to finding how and why a product failed. It involves an in-depth investigation of the circumstances surrounding the failure and discovery of relevant background information, including but not limited to the type of application, environmental factors, service life, and pertinent design information.

At BMP Testing and Calibration Services, Inc., we have the capability and skills to carry failure mode and effect analysis carefully and thoroughly on any failed parts. Our skilled analysts apply a wide range of analytical methods based on the product type to identify the causes of failure and find crucial information that may help prevent such failure in the future.



CALL US FOR TOP-NOTCH CHEMICAL TESTING SERVICES

Chemical testing is a critical part of material and product manufacturing in various industries. It helps identify the content, composition, and quality of materials used in manufacturing, product development, and other industrial applications. It is also necessary for industries that depend on chemical materials and substances to be subject to legal regulations, restrictions, standards, and certifications because of their potentially harmful effects on **high peroxide strip tests**, **Chlorine strip tests**, the environment, and customers.



OUR CHEMICAL TESTING CAPABILITIES

Our chemists analyze metals Ferro alloys and aluminum alloys. We can help our customers with special analysis requirements or orders with limited sample weight. Our chemical testing experts can perform these tests:

- Optical Emission Spectroscopy (OES)
- Contaminate Detection
- Positive Material Identification (PMI)
- Material Verification
- Residue Analysis
- Welder & Procedure Qualification (per API, ASME, AWS Codes, ASTM, EN, and Pressure Equipment Directive)
- Material Identification
- Chemical Composition Analysis

LET METALLOGRAPHY EXAMINATION EXPERTS TAKE CARE OF YOUR PROJECT

At BMP Testing and Calibration Services, Inc., we specialize in the **metallographic examination of metallic and nonmetallic materials** to analyze their structure and varying properties. Using state-of-the-art metallographic techniques and the latest equipment, we comprehensively examine a material to provide accurate, in-depth analysis to carry on with your project. Our **metallurgical engineering service report** includes:

- Grain size analysis
- Coating thickness & case depth
- Grain flow pattern
- Particle size/distribution
- Inclusion rating
- Phase area fraction
- Ferrite/pearlite percentage
- Porosity
- Flake size classification

WORLD-CLASS METALLURGICAL TESTING SERVICES AT YOUR FINGERTIPS

Metallurgical testing is a crucial part of metal processing and manufacturing and is used in almost every industry aerospace, including shipbuilding, steel, construction, and many others. It involves using a wide range of techniques and equipment to identify the material type, potential defects, and processing errors.

BMP Testing and Calibration Services utilize the latest and suitable metallurgy testing techniques and equipment to ensure metal's structural integrity and mechanical properties to prepare it for end-use. We specialize in a wide array of metallurgy testing and services, from grain size analysis to macroscopic evaluation to fractography.



OUR METALLURGICAL TESTING CAPABILITIES

At BMP Testing and Calibration Services, we focus on quantifying the properties of metals together with mechanical testing and chemical analysis. We also take advantage of metallography - the study of the microstructure of all types of metals - to determine the material type, grade, and grain size and to provide certifications for new materials and mixed batches and microstructure and failure analysis.

MICROSCOPIC EXAMINATION

- Microstructure
- Grain Size (ASTM E 112)
- Inclusion Rating (ASTM E 45)
- Ferrite by Point Count (ASTM E 562)
- Alpha Case/Surface Contamination
- Intergranular Attack & Oxidation
- Nodularity, nodule count

SAMPLE PREPARATION

- Precision Cutting
- 1.5" Mounts
- Thermoset and Thermoplastic Mounting
- Automatic grinding and Polishing
- Electrolytic Etching

MACROSCOPIC EXAMINATION

- Macro Etching (ASTM E 340)
- Grain Flow
- Weld Qualification
- Surface Condition

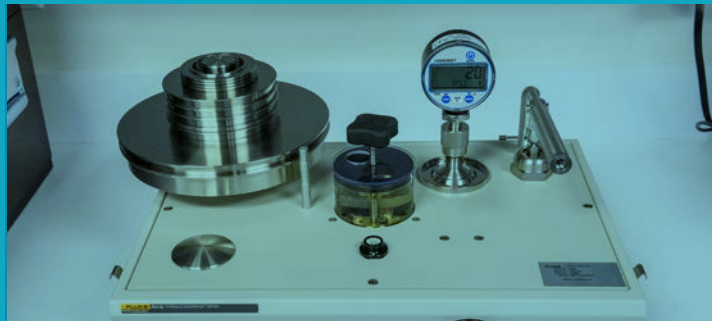
MICROSCOPIC EXAMINATION

- Knoop and Vickers Hardness Testing
- Surface Contamination
- Case Depth
- Profile

ACCURATE AND TIMELY CALIBRATION SERVICES – JUST A CALL AWAY!

Dimensional Inspection, or Dimensional Metrology, evaluates the geometric characteristics of manufactured parts and products to ensure their compliance with design specifications. It verifies the accuracy of part features that can impact its reliability and functionality. Dimensional inspection is a critical part of the product development process.

At BMP Testing and Calibration Services, Inc., our calibration experts have the capabilities and expertise to accurately inspect the surface and special features of parts and products according to your **specifications**. Using cutting-edge dimensional pressure, temperature, and thread measurement equipment, we can quickly verify your product designs and manufacturing process and compile the obtained data into a detailed report. This helps you shorten your manufacturing cycle, identify potential defects and problems in your machined parts and components while enhancing quality control.



DIMENSIONAL CALIBRATION

- Dial/Digital Calipers, ID, OD, and Depth Micrometer
- Steel Rulers and Tape
- Gage Blocks, Bore Gages, and Height Gages
- Indicators, Diameter Width, Thread, and Lead Gages Dial/Digital
- Test Indicators, Gage Makers, Length Standards, and Many More Dimensional Tools

INFRARED PYROMETER / TEMPERATURE GAUGES CALIBRATION

- Thermometers/Humidity Gauges
- Temperature Measurement Infrared Pyrometer 65-1750°C

PRESSURE CALIBRATION

- Dead Weight Testing 200-20,000 PSI

THREAD GAGES

- Thread Profile
- Thread Pin/Plug/Ring Gages
- Plain and Taper Thread Rings
- Thread Rolls
- Tri and Bi Element Segments Roll Element



Onsite Calibration Services Are Available on Request! 832.637.4235
Onsite calibration is available upon request; please call us for quotation and more information.

NONDESTRUCTIVE TESTING (NDT)

Nondestructive Inspection is a procedure of examining a component or assembly without changing or breaking the test object. It is usually applied to operations needing machinery and piping equipment, such as offshore, refineries, shipbuilding, aviation, and nuclear plants.

The widespread NDT techniques include dye penetrant, eddy current, magnetic particle, radiography, remote visual inspection, magnetic flux leakage, leak testing, and ultrasonic testing. A non-destructive examination is employed to analyze metal components for deterioration, composition, and processing defects.

MAGNETIC PARTICLE TESTING (MPT)

- Fluorescent Wet Particle Examination
- Visible Wet Examination
- Dry Visible Examination
- AC/DC or HWDC Current
- Circular and Longitudinal and Yoke Magnetization

LIQUID PENETRANT TESTING (LPT)

- Type I and Type II Penetrant
- Method, A, B, C, and D Methods
- Carbon Steel, Stainless Steel, and other Alloy Materials



PHASED ARRAY & ULTRASONIC TESTING (UT)

- Phased Array Inspection
- Conventional UT Inspection
- UT Corrosion Scanning
- UT Digital Thickness Measurement

VISUAL & OPTICAL TESTING (VT)

- ASNT SNT-TC-1A Certified
- AWS -Certified Welding Inspector (CWI)

EDDY CURRENT TESTING (ET)

- Material Sorting and Conductivity Measurement
- Surface Crack Detection
- Second Layer Crack Detection
- Tube/Rod Inspection

FILM INTERPRETATION (RTFI)

- Conventional Film Interpretation
- Digital Film Interpretation
- CR/DR Image Interpretation

NDT LEVEL III CONSULTING SERVICES

- NDT Procedure & Written Practice
- Technique Development
- Professional NDT Level III Services

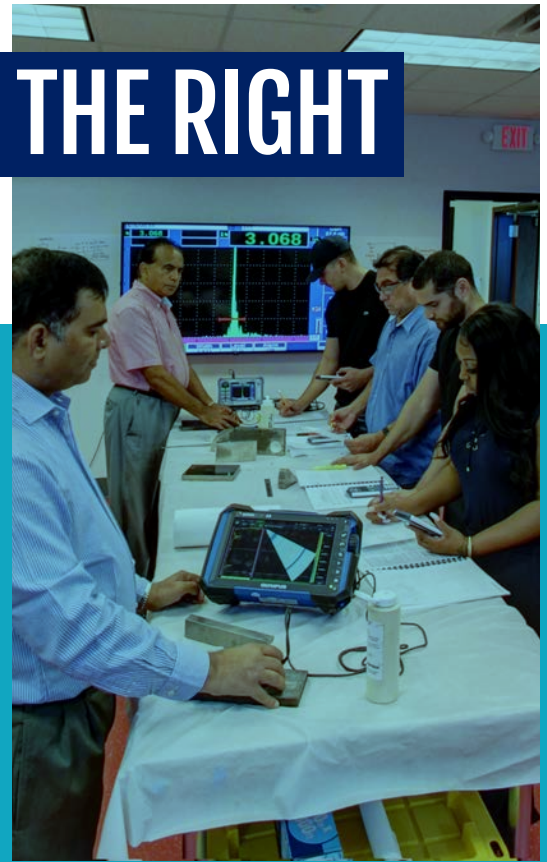
WELDER & PROCEDURE QUALIFICATION

- Welder Qualification
- WPS and PQR Qualification

SCALE NEW HEIGHTS WITH THE RIGHT NDT TRAINING PROGRAM

People from technical backgrounds know that starting a career as an NDT technician, inspector, or engineer is a remarkable feat. Plus, with the growing demand for NDT technicians across a wide range of industries, more and more students are looking forward to enrolling in a non-destructive inspection program. But it's important to choose a platform that provides proper training and is well recognized.

At BMP Testing and Calibration Services, Inc., we are a top-quality NDT technician training provider through our parent company NDT Consultancy Services Inc., in and around Texas. Offering the best NDT technician training programs, our courses include everything about non-destructive testing, from necessary information to in-depth theory knowledge, familiarity with the equipment, and techniques, to hands-on experience, enabling students to perform various non-destructive inspections independently.



NDT TECHNICIAN TRAINING PROGRAM

- 6 Weeks - NDT Technician Training Program
- TWC Approved Program
- VA Approved Program
- WIOA Approved Program

COMPREHENSIVE NDT PROGRAM

- 11 Weeks - Comprehensive NDT Package Program
- TWC Approved Program
- VA Approved Program
- WIOA Approved Program

FLOW IRON AND TANK FLOOR INSPECTION

- 10 Days - Flow Iron Inspection
- 12 Days - Tank Bottom Floor Inspection

INDUSTRIAL RADIOGRAPHER TRAINING

- 40 Hours - Basic Radiation Safety Training

CERTIFIED WELDING INSPECTOR PREPARATION

- One Week - CWI Preparatory Course

API 510, 570, 580, AND 653 EXAMINATION PREPARATION

- Two Weeks - For Each Preparatory Course for API 510, 570 and 643
- One Week - API 580 Preparatory Course



CHOOSE BMP FOR YOUR TESTING, CALIBRATION, SPECIMEN MACHINING, NDT TRAINING, AND CONSULTING NEEDS

At BMP Testing and Calibration Services Inc., our lab has state-of-the-art testing and calibration equipment. Our highly experienced staff uses the utmost precision to ensure that you, the customer, receive the most accurate testing and calibration results in the market. At BMP Testing and Calibration Services Inc., with our customer-focused, hassle-free order management system at any moment in time, you can access your testing and calibration certificate right from your device.

BMP ORDER MANAGEMENT SYSTEM:

- Customer Order handled through BMP Order Management System
- Online access to know status anywhere at any time
- Provide access to multiple users in your organization to access reports and the quality of your project
- Hassle-free reporting management system
- No Paperwork

ONE STOP CONVENIENCE

- Mechanical, Chemical, Metallurgical, and Metallographic Testing
- Calibration Services
- Nondestructive Testing
- Nondestructive Training
- NDT Level III Consulting Services

ACCURATE AND EXCEPTIONAL QUALITY SERVICES

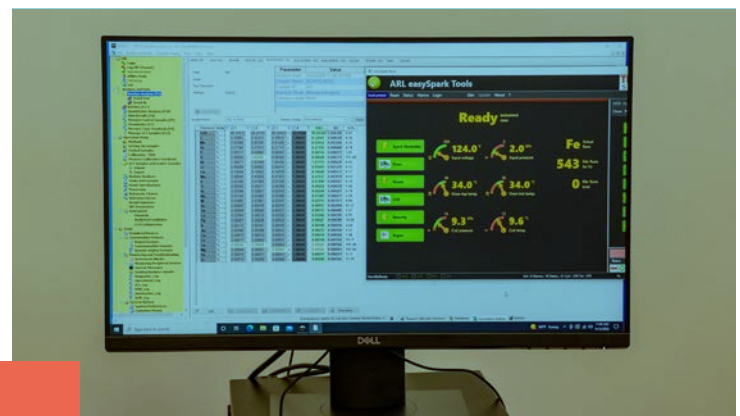
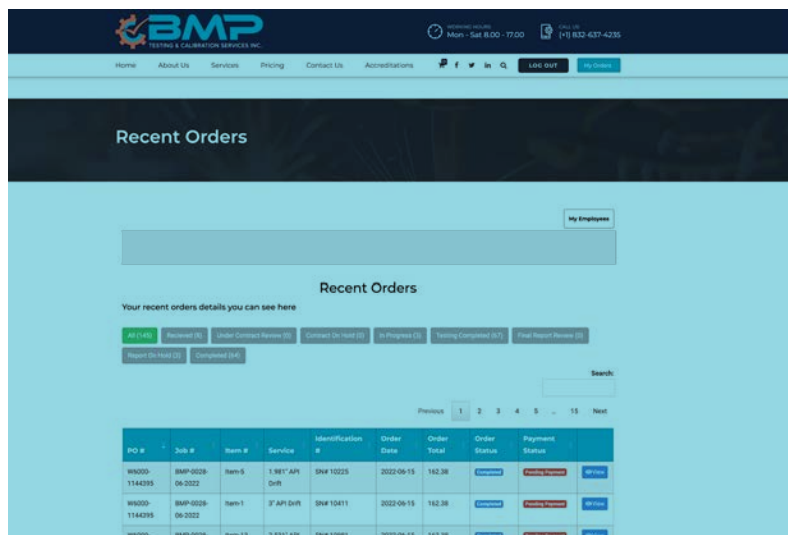
At BMP, our metallurgists, engineers, and inspectors help to answer customer-specific questions and situations. We do whatever it takes to get your job done accurately and timely and we always notify you at the completion to keep your commitment satisfied.

STATE OF THE ART TECHNOLOGY

- New and Advance Equipment
- Controlled Environment
- Nice and Clean Work Areas
- New Building with Plenty of Workspace

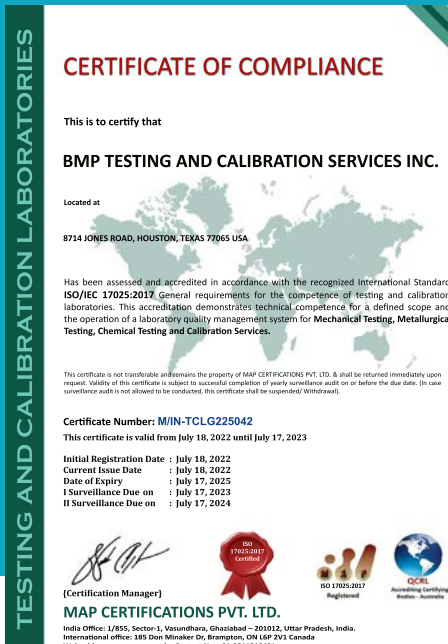
SPECIFICATIONS

- ISO 9001/ ISO/IEC 17025
- ASME/ASTM/AWS/API
- Customer Engineering Specifications



ACCREDITATION AND APPROVAL

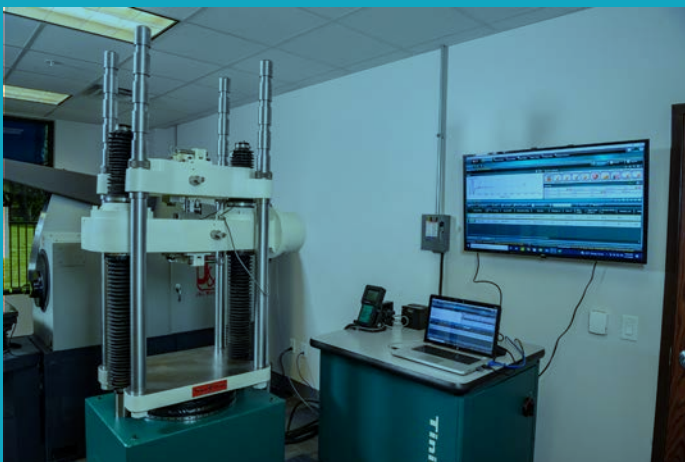
BMP Testing and Calibration Services Inc. is an ISO 9001:2015 and ISO/IEC 17025 Accredited corporation for Mechanical, Chemical, Metallurgical, and Calibration Services. The scope of our testing and calibration services is specified in the scope of each area which is available upon request and also available on our website for customer reference. BMP holds the accreditation and approvals to comply with stringent industry requirements. We have the technical expertise, quality management system, BMP Order Management System, and latest state-of-the-art equipment to meet the customer's specific service needs.



INDUSTRY FOCUSED



BMP Testing and Calibration Services inc. are currently providing services to the Oil and Gas Pipeline Industries, Aerospace, Automotive, Coating and Plating, Steel Casting and Forging, Petrochemicals, Mining, Nuclear, and other Metal Industries for the improvement in the performance of the material covering corrosion resistance, toughness and quality control, and assurance needs.





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