


Policy

 LABORATORY ACCREDITATION BUREAU	Subject: Major Field Parameters with Related Disciplines	Policy 002.1
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PURPOSE

The purpose of this document is to provide the definitions for the Major Field Parameters with Related Disciplines for the Testing, Calibration, Dimensional Measurement, and L-A-B specific accreditation programs. These major fields with related disciplines are utilized to define the requirements of L-A-B Policy 002 - Proficiency Testing, Assessor Qualifications and Scope Definitions.

Calibration Fields with Related Disciplines


Accelerometry	
a. Acceleration	Accelerometers
b. Vibration	Sine Tables, Vibration Meters
c. Other	

Acoustics	
a. Acoustic Impedance	Sound Attenuators
b. Sound Pressure Level	Sound Level Meters, Noise Dosimeters
c. Other	

Amount of Substance	
a. Chemical	
b. Gas	Gas Detectors
c. Particulate	Smoke Meters
d. pH/Conductivity	pH Meters and Conductivity Meters (with aqueous solutions)
e. Refractive Index	Refractometers
f. Other	

Electrical	Examples
a. Capacitance	Capacitor Artifacts, Decade Capacitors, RLC Bridges, Capacitance Meters
b. Current	Current Sources, Current Meters, Transconductance amplifiers
c. Impedance	Impedance Meters, RLC Bridges
d. Inductance	Inductance Artifacts, Decade Inductors, RLC Bridges

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e. Magnetic Properties	Gauss Meters
f. Power	AC/DC Power Meters
g. Resistance	Resistance Artifacts, Decade Resistors, Resistance Meters, RTD Temperature Meters, Thermistor Temperature Meters, Conductivity Meters (Resistance Simulation)
h. RF Attenuation	RF Attenuators, RF Attenuation Meters
i. RF Power	RF Power Meters, RF Power Sensors
j. Voltage	Voltage Sources, Voltage Meters, pH Meters (Millivolt Simulation) Thermocouple Millivolt Sources, Thermocouple Temperature Meters, Process Calibrators
k. Other	

Fluid Properties and Quantities	
a. Flow	Anemometers , Rotameters, Ultrasonic Flowmeters
b. Viscosity	Viscometers, Viscosity Standards
c. Volume	Pipettes, Volumetric Flasks
d. Other	

Ionizing Radiation	
a. Dosimetry	Radiation Dosimeters
b. Radioactivity	Geiger Counters
c. Other	

Length	
1. Artifacts and Standards 1D	Gage Blocks, Thread Wires, Plugs, Torque Arms
2. Artifacts and Standards 2D	Angle Blocks, Radius Gages, Surface Plates, Threaded Plugs/Rings, Roughness Specimens
3. Artifacts and Standards 3D	Fixture Coordinates (with Coordinate Measuring Machine)
4. Hand tools and precision gages 1D	Micrometers, Calipers, Bore Gages (2 point)
5. Hand tools and precision gages 1D Non-Contact	Laser Micrometers,, Protractors (with optical comparator)
6. Hand tools and precision gages 2D Contact and Non Contact	Bore Gages (3 point), Levels, Optical Comparators, Profilometers, Optical Flatness, Optical Parallelism
7. Hand tools and precision gages 3D	Coordinate Measuring Machines (with artifacts)

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8. Hand tools and precision gages 3D Non Contact	Coordinate Measuring Machines (with lasers)
9. Other	

Luminous Intensity	
a. Gloss	Gloss Artifacts, Gloss Meters
b. Luminous Intensity	Light Level Meters, Photometers
c. Other	Radiometers

Mass	
a. Density	Density Scales, Hydrometers
b. Force	Load Cells, Proving Rings
c. Hardness	Brinell, Rockwell, Knoop, Vickers Hardness Testers, Durometers, Hardness Blocks
d. Mass Artifacts	Mass Artifacts, Weights
e. Pressure / Low Vacuum	Pressure Gages/Transducers, Vacuum Gages/Transducers to 3kPa (29.5 inHg)
f. Medium / High Vacuum	McLeod Gages, Thermal Vacuum Sensors, Capacitive Vacuum Sensors (beyond 3kPa)
g. Scales and Balances	Analytical Balances, Weigh Scales
h. Torque	Torque Transducers, Torque Wrenches
i. Other	

Thermodynamics	
a. Infrared (IR) Temperature	IR Temperature Meters, IR Blackbodies
b. Humidity	Humidity Meters, Thermo Hygrometers (humidity function)
c. Thermometers and Probes	Liquid in Glass, PRT Probes, RTD Probes, Thermistor Probes, Thermocouple Probes, Thermo Hygrometers (temperature function)
d. Thermodynamic Sources	Temperature Baths, Drywells
e. Other	

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Time and Frequency	
a. Time Dissemination	Clocks, Stopwatches, Timers
b. Frequency / Period	Electronic Counters, Frequency Meters, Signal Generators
c. Modulation	AM/FM/PM Modulation Meters
d. Oscilloscopes	Vertical Deflection, Horizontal Deflection, Risetime, Bandwidth Functions
e. Other	

Dimensional Measurement Major Fields with Related Discipline

1. Length – Dimensional Measurement	
a. Dimensional Measurement 1D	
b. Dimensional Measurement 2D	
c. Dimensional Measurement 3D	
d. Other	


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Testing Major Fields with Related Disciplines


1. Acoustical	
a. Acoustic Characteristics of Structures and Materials	
b. Acoustic Performance	
c. Field Measurement of Sound	
d. Sound Absorption	
e. Sound Power	
f. Sound Transmission Loss	
g. Other	
2. Biological	
a. Aquatic Biology	
b. Cell Culture	
c. Commodity Seed Testing	
d. DNA Analysis	
1. Extraction	
2. Quantitation	
3. Specimen Collection	
4. Electrophoresis	
5. PCR Amplification	
e. Ecotoxicology	
f. Effective Tests on Biocides	
g. Effectiveness of Pesticides (insecticides, fungicides, herbicides)	
h. Insect infestation	
i. Industrial Cultures	
j. Maintenance of Culture Collections	
k. Meat and Fish Species Testing	

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l. Media Quality Control (accreditation applicable only to the suppliers of media)	
m. Pharmacological and Biochemical Tests on Foods, Stockfoods and their Additives	
n. Pharmacological Tests on Other Materials	
o. Plant Growth Regulating Substances	
p. Plant Pathogens	
q. Plants and Plant Material for Presence of Disease	
r. Qualitative Analysis of GMO	
s. Quantitative Analysis of GMO	
t. Resistance to Microbial Attack (textile, fabric, paper, paints and coatings)	
u. Seed Testing	
v. Sensory Evaluation Tests on Foods	
w. Sterility Test on Pharmaceuticals	
x. Testing of Surfaces in Abattoirs	
y. Tests on Human Pharmaceutical and Biological Products	
z. Tests on Veterinary Pharmaceutical and Biological Products	
aa. Terrestrial Biology	
bb. Tests on Substances for Potential Genetic Activity	
cc. Waters, Including Effluents	
dd. Other	
3. Microbiology	
a. Bacteriology (Identification, enumeration and / or classification)	
b. Mycology (Identification, enumeration and / or classification)	
c. Phycology (Identification, enumeration and / or classification)	
d. Tests on Cosmetics, Perfumes and Essential Oils	
e. Tests on Foods and Waters (Including Beverages)	
f. Tests on Surgical Materials	

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g. Tests on lubricants, Fuels and Oils	
h. Tests on Pulp, Paper, Packaging Material	
i. Other	
j.	
k.	
l.	
m.	
n.	
o.	
p.	
q.	
r.	
s.	
t.	
u.	
v.	
w.	
x.	
4. Chemical	
a. Spectroscopy	
1. Atomic Absorption	
2. Optical Emission (OES)	
3. Inductively Coupled Plasma (ICP)	
4. Direct Current Plasma (DCP)	
5. Fluorimetric	
6. Infrared	
7. Fourier Transform Infrared (FTIR)	

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8. Luminescence	
9. UV / Visible	
10. X-Ray Diffraction	
11. X-Ray Fluorescence	
12. Nuclear Magnetic Resonance (NMR)	
13. Electron Spin Resonance (ESR)	
14. Mass Spectroscopy	
15. Nuclear Activation Analysis	
16. Raman	
17. Other	
b. Surface Analysis Techniques	
1. Auger Electron Spectroscopy	
2. Electron Microprobe Spectroscopy	
3. Electron Spectroscopy for Chemical Analysis (ESCA)	
4. Secondary Ion Mass Spectroscopy (SIMS)	
5. Other	
c. Physical Properties	
1. Density	
2. Particle Size	
3. Porosity	
4. Colligative Properties	
5. PH	
6. Viscosity	
7. Specific Gravity	
8. Other	
d. Microscopy	
1. Light Microscopy	

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2. Phase Contrast (PC)	
3. Polarized Light Microscopy (PLM)	
4. Chemical Microscopy	
5. TEM (Transmission Electron Microscopy)	
6. SEM (Scanning Electron Microscopy)	
7. Other	
e. Chromatography	
1. GC (Gas Chromatography)	
2. HPLC (High Performance Liquid Chromatography)	
3. GPC (Gel Permeation Chromatography)	
4. Ion Chromatography	
5. GC / MS (Gas Chromatography / Mass Spectroscopy)	
6. LC / MS (Liquid Chromatography / Mass Spectroscopy)	
7. Thin Layer / Paper Chromatography	
8. Electrophoresis	
9. Other	
f. Wet Chemistry Measurements	
1. Gravimetric	
2. Titrametric (Volumetric)	
3. Other	
g. Radio Activity Measurements	
1. Liquid Scintillation Counting	
2. Gamma Counting	
3. Other	
h. Electrochemical	
1. Polarography	
2. Electrochemical Deposition	

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3. Potentiometric Analysis	
4. Other	
i. Thermal Analysis	
1. DTA (Differential Thermal Analysis)	
2. DMTA (Dielectric Mechanical Thermal Analysis)	
3. DETA (Dielectric Thermal Analysis)	
4. DSC (Differential Scanning Calorimetry)	
5. Calorimetry	
6. TGA (Thermogravimetric Analysis)	
7. TMA (Thermomechanical Analysis)	
8. Other	
j. Microchemical Elemental Analysis	
k. Miscellaneous	
1. Specific Ion Electrode Analysis	
2. TOC (Total Organic Carbon)	
3. TOX (Total Organic Halogen)	
4. Assaying	
5. Fire Assaying	
6. Emissions	
7. Other	
5. Construction Materials	
a. Cements & Cementitious Materials	
1. Sampling	
2. Portland Cement	
3. Blended Cement	
4. Masonry Cement	
5. Building Lime	

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6. Supplementary Cementitious Material	
7. Masonry Mortar	
8. Other	
b. Concrete	
1. Sampling	
2. Mixing Concrete in the laboratory	
3. Consistence	
4. Air Content of Freshly Mixed Concrete	
5. Mass Per Unit Volume of Freshly Mixed Concrete	
6. Bleeding	
7. Making and Curing Test Specimens in the Field	
8. Making and Curing Test Specimens in the Laboratory	
9. Compression Tests on Moulded Specimens	
10. Compression Tests on Hardened Concrete Cores	
11. Indirect Tensile Tests	
12. Flexural Strength Tests	
13. Mass Per Unit Volume of Hardened Concrete	
14. Drying Shrinkage	
15. Securing Cores from Hardened Concrete	
16. Cement Content of Hardened Concrete	
17. Creep Tests	
18. Modulus of Elasticity Determinations	
19. Setting Time	
20. Mixer Uniformity Tests	
21. Admixtures	
22. Other	
c. Cement and Clay Based Products	

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1. Roofing Tiles	
2. Clay Pipes and Fittings	
3. Concrete Culverts	
4. Concrete Pipes	
5. Fibre Cement Pipes & Fittings	
6. Fibre Cement Flat Sheet	
7. Fibre Cement Corrugated Sheet	
8. Other	
d. Refractories	
1. Sampling	
2. Cold Compressive Strength	
3. Cold Modulus Strength	
4. Other	
e. Aggregates	
1. Sampling	
2. Sample Preparation	
3. Bulk Density	
4. Particle Density and Water Absorption	
5. Sieve Analysis	
6. Material Finer than 75mm	
7. Material Finer than 2mm	
8. Particle Shape Tests	
9. Flakiness Index	
10. Angularity Number	
11. Fine Particle Size Distribution in Road Materials	
12. Aggregate Crushing Value	
13. Wet / Dry Strength Variation	

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14. Los Angeles Value	
15. Soundness Tests	
16. Light Particles	
17. Weak Particles	
18. Clay and Fine Silt	
19. Organic Impurities other than Sugar	
20. Sugar	
21. Sulphur in Slag Aggregates	
22. Potential Alkali Reactivity by Mortar Bar	
23. Potential Alkali Reactivity by Chemical Method	
24. Petrographic Examination of Slag Aggregate	
25. Degradation Tests	
26. Moisture Content	
27. Polished Stone Value	
28. Coarse Aggregate Quality by Visual Comparison	
29. Apparent Particle Density	
30. Voids in Dry Compact Fillers	
31. Iron Unsoundness	
32. Resistance to Stripping	
33. Frictional Resistance	
34. Crushed Faces	
35. Other	
f. Bituminous Materials	
1. Sampling	
2. Bitumens	
3. Tars	
4. Fillers	

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5. Cutback Bitumens	
6. Bitumen Emulsions	
7. Polymer Modified Bitumens	
8. Asphalts	
9. Other	
g. Soils	
1. Sampling	
2. Classification Tests	
3. Chemical Tests	
4. Compaction and Density Tests	
5. Strength and Consolidation Tests	
6. Reactivity Tests	
7. Other	
h. Masonry Units and Segmental Pavers	
1. Sampling	
2. Dimensional Tests	
3. Strength Tests	
4. Resistance Tests	
5. Density and Moisture Tests	
6. Permeability and Absorption Tests	
7. Other	
i. Gypsum and Gypsum Products	
1. Sampling	
2. Gypsum Plaster for Building Purposes	
3. Gypsum Plaster Board	
4. Fibrous Plaster Products	
5. Glass Fibre Reinforced Gypsum Plaster	

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6. Other	
j. Road Pavement and Surfaces	
1. Vehicle Count and Classification	
2. Surface Profile Tests	
3. Surface Characteristics	
4. Structural Tests	
5. Other	
k. Rocks	
1. Moisture Content Tests	
2. Porosity and Density Tests	
3. Chemical Tests	
4. Petrographic Examination	
5. Strength Tests	
6. Swelling and Slake Durability Tests	
7. Other	
l. Masonry	
1. Structural Tests	
2. Other	
m. Road Making Material	
1. Glass	
2. Geotextiles	
3. Paint	
4. Other	
n. Pedestrian Surfaces	
1. Wet Pendulum Frictional Resistance	
2. Dry Floor Frictional Resistance	
3. Other	

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o. Construction Materials Testing Equipment	
1. Nuclear Moisture Testing Equipment	
2. Liquid Limit Base	
3. Dial Gauge and Electronic Indicators	
4. Elastic Force Measuring Devices	
5. Load Cells	
6. Other	
p. Other Materials	
q. Other Tests	
6. Electrical	
a. Measure	
1. Alternating Current (AC)	
2. Direct Current (DC)	
3. Resistance	
b. Alternating Voltage	
c. Capacitors	
d. CDMA / TDMA / GSM / OTA	
e. Cells and Batteries	
f. Conducting Materials, Conductors and Conductivity	
g. Dielectric	
h. Direct Voltage	
i. Electric Field Intensity	
j. Electromagnetic Compatibility - Emission	
k. Electromagnetic Compatibility - Immunity	
l. Electronic Components	
m. EMC / EMI	
n. Environmental Simulation	

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o. High power	
p. High Voltage / High Power Testing	
q. High Voltage Impulse and Disturbance	
r. Indicating and Recording Instruments	
s. Inductors and Transformers	
t. Insulating Materials and Insulators	
u. Magnetic Field Flux Density	
v. Magnetic Materials and Instruments	
w. NEBS	
x. Other	
y. Partial Discharge	
z. Physical Properties	
aa. Precision Transfer Instruments	
bb. Product Safety	
cc. Resistors, Resistance Materials and Resistivity	
dd. RF and microwave radiation hazard	
ee. RG Shielding Effectiveness	
ff. Sequence Impedance	
gg. Signal Source	
hh. Spark	
ii. Specific Absorption Rate	
jj. Temperature Coefficient	
kk. Voltage Standards	
ll. Wireless	
7. Electromagnetic Compatibility (EMC) / Electromagnetic Interference (EMI)	

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8. Energy Consumption	
a. Appliances	
1. Battery Charging Systems	
2. Clothes Washers	
3. Dehumidifiers	
4. Dishwashers	
5. Refrigerators	
6. Room Air Conditioners	
7. Room Air Cleaners	
8. Water Coolers	
b. Heating & Cooling	
1. Boilers	
2. Ceiling Fans	
3. Central AC & Air-Source Heat Pumps	
4. Furnaces	
5. Geothermal Heat Pumps	
6. Light Commercial HVAC	
7. Programmable Thermostats	
8. Ventilating Fans	
c. Home Envelope	
1. Roof Products	
2. Windows, Doors, Skylights	
d. Home Electronics	

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1. Battery Charging Systems	
2. Cordless Phones	
3. Digital-to-Analog Converter Boxes (DTAs)	
4. End-Use Products with Qualified Adaptors	
5. External Power Adapters	
6. Audio / Video Equipment	
7. Set-Top Boxes	
8. Televisions	
e. Office Equipment	
1. Computers	
2. Copiers & Fax Machines	
3. Computer Servers	
4. Digital Duplicators	
5. Displays	
6. End-Use Products with Qualified Adaptors	
7. External Power Adaptors	
8. Mailing Machines	
9. Printers, Scanners & All-in-Ones	
f. Lighting	
1. Compact Fluorescent Light Bulbs (CFL's)	
2. Decorative Light Strings	
3. Residential Light Fixtures	
4. Solid State Lighting	
g. Commercial Food Service	
1. Commercial Dishwashers	
2. Commercial Fryers	
3. Commercial Griddles	

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4. Commercial Hot Food Holding Cabinets	
5. Commercial Ice Machines	
6. Commercial Ovens	
7. Commercial Refrigerators & Freezers	
8. Commercial Steamers	
h. Other Commercial Products	
1. Battery Charging Systems	
2. Computer Servers	
3. End Use Products with Qualified Adaptors	
4. External Power Adaptors	
5. Vending Machines	
9. Environmental	
a. Drinking Water	
1. Chemical Testing	
I. Organic	
II. Inorganic	
III. Physical	
IV. Miscellaneous	
2. Toxicity Testing	
3. Microbiology Testing	
4. Radiochemical Testing	
5. Asbestos Testing	
b. Non-Potable Water	
1. Chemical Testing	

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I. Organic	
II. Inorganic	
III. Physical	
IV. Miscellaneous	
2. Toxicity Testing	
3. Microbiology Testing	
4. Radiochemical Testing	
5. Asbestos Testing	
c. Solid and Chemical Material	
1. Chemical Testing	
I. Organic	
II. Inorganic	
III. Physical	
IV. Miscellaneous	
2. Toxicity Testing	
3. Microbiology Testing	
4. Radiochemical Testing	
5. Asbestos Testing	
d. Biological Tissue	
1. Chemical Testing	
I. Organic	
II. Inorganic	
III. Physical	
IV. Miscellaneous	
2. Toxicity Testing	
3. Microbiology Testing	
4. Radiochemical Testing	

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5. Asbestos Testing	
e. Air and Emissions	
1. Chemical Testing	
I. Organic	
II. Inorganic	
III. Physical	
IV. Miscellaneous	
2. Toxicity Testing	
3. Microbiology Testing	
4. Radiochemical Testing	
5. Asbestos Testing	
10. Information Technology	
a. Information Security Evaluation	
b. Gaming Software Tests	
c. Acceptance Tests	
d. Functionality Tests	
e. Software Products	
f. Software Systems	
g. Performance Tests	
h. Stability Tests	
i. Compatibility Tests	
j. Other	
11. Mechanical	
a. Abrasion	
a. Falling Sand	
b. Taber	
c. Wyzenbeek	

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d. Other	
b. Compression	
c. Conditioning	
d. Color	
e. Corrosion	
f. Creep / Creep Rupture	
g. Displacement	
h. Drop	
i. Ductility	
1. Bend	
2. Formability	
3. Drawability	
4. Flaring	
j. Durability and Cycle Testing	
k. Dynamometer Testing	
l. Environmental Simulation	
1. Accelerated	
2. Altitude	
3. Cyclic	
4. Durability Simulation	
5. Explosion	
6. Fungus	
7. Low Temperature	
8. High Temperature	
9. High Pressure	
10. Humidity	
11. Immersion	

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12. Radioactivity	
13. Salt Spray	
14. Sea Water Immersion	
15. Temperature Shock	
16. Sun Exposure	
17. Simulated Sun Exposure	
18. Other	
m. Extension	
n. Fatigue	
1. Axial	
2. Flexural	
3. Rotating Beam	
4. Torsional	
o. Flexural	
p. Force	
q. Friction	
r. Fracture	
1. Charpy	
2. IZOD	
3. Impact	
4. Plane Strain Fracture Toughness	
5. Crack Opening Displacement	
6. Nil Ductility Transition	
7. Drop Weight Tear	
s. Hardness	
t. Metallography	
1. Preparation of Samples	

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2. Microstructure	
3. Inclusion Content	
4. Grain Size	
5. Hydrogen Embrittlement	
6. Macroetching	
7. Microetching	
8. Depth of Decarburization	
9. Case Depth	
u. Material Properties	
1. Adhesion	
2. Ash Content	
3. Flexural	
4. Viscosity	
5. Chemical Resistance	
6. Chip Resistance / Gravelometer	
7. Cleanability	
8. Melt Flow Rate	
9. Melt Volume Rate	
10. Melt Point	
11. Tear Strength	
12. Shear Strength	
13. Viscosity	
14. Volatile Loss	
15. Deflection Temperature	
16. Peel	
17. Solvent Resistance	
18. Water Absorption	

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19. Shrinkage	
v. Pressure	
w. Shear	
x. Shock	
y. Speed	
z. Surface Roughness	
aa. Stress / Rupture	
bb. Tear	
cc. Tension	
1. High Temperature	
2. Low Temperature	
3. Poisson's Ratio	
4. Proof Load	
5. Wedge	
6. Ultimate Strength	
dd. Torsion	
ee. Torque	
ff. Vacuum	
gg. Other	
12. Non-Destructive	
a. Radiographic	
1. Digital	
2. Film	
3. Determination of Wall Thickness	
4. Interpretation of Radiographs	
b. Ultrasonic	
1. Examination of Ferritic Steels	

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2. Examination of Aluminum Alloys	
3. Examination of Austenitic Steels	
4. Examination of Clad Steels	
5. Examination of other Specified Metals	
6. Examination of specified non-metals	
7. Examination of Bonded Metals	
8. Examination of Components in Service	
9. Thickness Measurement	
10. Specialist	
11. Other	
c. Acoustic Emission Testing	
d. Magnetic Particle Testing	
e. Penetrant Testing	
f. Electromagnetic Testing	
g. Underwater Non-Destructive Tests	
h. Visual Inspection of Materials	
i. Visual Inspection of Specified Items (Supplementary to NDT)	
j. Thermography	
k. Leak Testing Using Differential Pressure Box	
l. X-Ray Thickness	
m. Other	
13. Vibration	
a. Acceleration	
b. Classic / Random Vibration	
c. Dynamic Balancing	
d. Shock	
e. Vibration Performance	

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f. Vibration Characteristics of Materials and Structure	
g. Other	
14. Optical & Radiometric	
a. Radiant flux	
b. Broad-Band Irradiance	
c. Luminous Intensity	
d. Distribution of Luminous Intensity	
e. Luminous Flux	
f. Luminance	
g. Illuminance	
h. Broad-Band Visible Light Measurements	
i. Retroreflection	
j. Performance Tests on Luminaries	
k. Performance of Lighting Installations	
l. Spectral measurements of light sources	
m. Spectrophotometry	
n. Detectors	
o. Ionizing radiation	
p. Performance Tests on Lasers and High Radiant Sources	
q. Other	
15. Thermal	
a. Determination of Thermal Properties of Materials	
b. Flammability	
c. Tests on Fire Protection Equipment	
d. Tests on Fire Detection Systems	
e. Fire Tests on Building Materials and Structures	
f. Fire Tests on Textiles and Related Materials	

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g. Fire Tests on Plastic and Plastic Products	
h. Hygrometry	
i. Motor Vehicle Safety Tests	
j. Environmental Tests	
k. Other	

Revision History

Revision	Date	Revised By	Brief Description of Revision
Original Issue	11/01/06	Jason Stine	Original Issue
1	1/12/07	Jason Stine	Added Outlined Numbering to Document Added "Other" to each Testing Related Discipline Added Testing Major Field Construction Materials Added Testing Major Field Environmental Added Testing Major Field Information Technology Changed Cal / Mass Fluid Flow to Flow
2	6/1/09	Jason Stine	Reformat; Re-Categorized Environmental Fields; Updated various Fields
3	12/14/2010	Randy Long/ Ryan Fischer	Moved oscilloscope to Electricity and Magnetism and clarified thermodynamic disciplines, added Fluid Properties and Quantities, moved viscosity and flow to Fluid Properties and Quantities from Mass, moved pH and Conductivity to Fluid Properties and Quantities from Amount of Substance-Chemical, renamed Amount of Substance-Chemical to Amount of Substance, added Gas, Liquid and Particulate disciplines to Amount of Substance, Reordered sections alphabetically
4	07/27/11	Randy Long	Terminology change from "Dimensional Inspection" to "Dimensional Measurement"