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## eLearning

## BUILDING AND CONSTRUCTION

## Asphalt

## eLearning Program: Asphalt eLearning

- [Emulsified Asphalt](#)
- [Asphalt Binder](#)
- [Asphalt Mixture](#)
- [Performance Grade Bitumen \(NEW\)](#)

**ASTM D5** — Standard Test Method for Water and Sediment in Crude Oil by the Centrifuge Method (Laboratory Procedure)

**ASTM D6** — Standard Test Method for Loss on Heating of Oil and Asphaltic Compounds

**ASTM D36** — Standard Test Method for Water and Sediment in Crude Oil by the Centrifuge Method (Laboratory Procedure)

**ASTM D70** — Standard Test Method for Density of Semi Solid Bituminous Materials (Pycnometer Method)

**ASTM D244** — Standard Test Methods and Practices for Emulsified Asphalts

**ASTM D1140** — Standard Test Methods for Determining the Amount of Material Finer than 75- $\mu$ m (No. 200) Sieve in Soils by Washing

**ASTM D2041** — Standard Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures

**ASTM D2166** — Standard Test Method for Unconfined Compressive Strength of Cohesive Soil

**ASTM D2171** — Standard Test Method for Viscosity of Asphalts by Vacuum Capillary Viscometer

**ASTM D2488** — Standard Practice for Description and Identification of Soils (Visual-Manual Procedures)

**ASTM D2726** — Standard Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures

**ASTM D2872** — Standard Test Method for Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin-Film Oven Test)

**ASTM D3203** — Standard Test Method for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures

**ASTM D3549** — Standard Test Method for Thickness or Height of Compacted Asphalt Mixture Specimens

**ASTM D4402** — Standard Test Method for Viscosity Determination of Asphalt at Elevated Temperatures Using a Rotational Viscometer

**ASTM D4867** — Standard Test Method for Effect of Moisture on Asphalt Concrete Paving Mixtures

**ASTM D5361** — Standard Practice for Sampling Compacted Asphalt Mixtures for Laboratory Testing

**ASTM D5444** — Standard Test Method for Mechanical Size Analysis of Extracted Aggregate

**ASTM D6752** — Standard Test Method for Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Automatic Vacuum Sealing Method

**ASTM D6925** — Standard Test Method for Preparation and Determination of the Relative Density of Asphalt Mix Specimens by Means of the Superpave Gyratory Compactor

**ASTM D6933** — Standard Test Method for Oversized Particles in Emulsified Asphalts (Sieve Test)

**ASTM D6934** — Standard Test Method for Residue by Evaporation of Emulsified Asphalt

**ASTM D6938** — Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

**ASTM D6997** — Standard Test Method for Distillation of Emulsified Asphalt

**ASTM D6999** — Standard Practice for Miscibility of Emulsified Asphalts

**ASTM D7227** — Standard Practice for Rapid Drying of Compacted Asphalt Specimens Using Vacuum Drying Apparatus

**ASTM D8225** — Standard Test Method for Determination of Cracking Tolerance Index of Asphalt Mixture Using the Indirect Tensile Cracking Test at Intermediate Temperature

**ASTM D7906** — Standard Practice for Recovery of Asphalt from Solution Using Toluene and the Rotary Evaporator



## Performance of Buildings

### eLearning Program

#### – [Building Enclosure Testing](#)

**ASTM E283/E283M (NEW)** — Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen

**ASTM E331 (NEW)** — Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference

**ASTM E783 (NEW)** — Standard Test Method for Field Measurement of Air Leakage Through Installed Exterior Windows and Doors

**ASTM E1105 (NEW)** — Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors, and Curtain Walls, by Uniform or Cyclic Static Air Pressure Difference

## Construction Materials

**Concrete Field and Concrete Strength are now available in English, Spanish and Portuguese**

### eLearning Program: Construction Materials eLearning

- [Aggregate Base](#)
- [Aggregate](#)
- [Asphalt Aggregate Laboratory Technician](#)
- [Cement](#)
- [Concrete Field](#)
- [Concrete Laboratory](#)
- [Concrete Strength](#)
- [Rock Mechanics](#)
- [Self-Consolidating Concrete](#)
- [Soil Compaction Quality Control](#)
- [Soil Laboratory Technician \(NEW\)](#)

**ASTM C29/C29M** — Standard Test Method for Bulk Density (“Unit Weight”) and Voids in Aggregate

**ASTM C31/C31M** — Standard Test Practice for Making and Curing Concrete Test Specimens in the Field

**ASTM C39/C39M** — Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

**ASTM C40/C40M** — Standard Test Method for Organic Impurities in Fine Aggregates for Concrete

**ASTM C70** — Standard Test Method for Surface Moisture in Fine Aggregate

**ASTM C78/C78M** — Standard Test Method for Flexural Strength of Concrete (Using Simple Beam with Third Point Loading)

**ASTM C88/C88M** — Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate

**ASTM C109/C109M** — Standard Test Method for Comprehensive Strength of Hydraulic Cement Mortars

**ASTM C117** — Standard Test Method for Materials finer than 75- $\mu\text{m}$  (No. 200) Sieve in Mineral Aggregates by Washing

**ASTM C127** — Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Coarse Aggregate

**ASTM C128** — Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Fine Aggregate



**ASTM C131/C131M** — Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

**ASTM C136** — Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates

**ASTM C138/C138M** — Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete

**ASTM C143/C143M** — Standard Test Method for Slump of Hydraulic Cement Concrete

**ASTM C172/C172M** — Standard Practice for Sampling Freshly Mixed Concrete

**ASTM C173/C173M** — Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method

**ASTM C185** — Standard Test Method for Air Content of Hydraulic Cement Mortar

**ASTM C187** — Standard Test Method for Amount of Water Required for Normal Consistency

**ASTM C188** — Standard Test Method for Density of Hydraulic Cement

**ASTM C191** — Standard Test Methods for Time of Setting Hydraulic Cement by Vicat Needle

**ASTM C204** — Standard Test Methods for Fineness of Hydraulic Cement by Air-Permeability



**ASTM C215** — Standard Test Method for Fundamental Transverse, Longitudinal, and Torsional Resonant Frequencies of Concrete Specimens

**ASTM C231/C231M** — Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method

**ASTM C266** — Standard Test Method for Time of Setting of Hydraulic-Cement Paste by Gillmore

**ASTM C305** — Standard Practice for Mechanical Mixing of Hydraulic Cement Pastes and Mortars of Plastic Consistency

**ASTM C430** — Standard Test Method for Fineness of Hydraulic Cement by the 45- $\mu$ m 325 Sieve

**ASTM C451** — Standard Test Method for Early Stiffening of Hydraulic Cement (Paste Method)

**ASTM C490** — Standard Practice for Use of Apparatus for the Determination of Length Change of Hardened Cement Paste, Mortar, and Concrete

**ASTM C566** — Standard Test Method for Total Evaporable Moisture Content of Aggregate by Drying

**ASTM C617** — Standard Practice for Capping Cylindrical Concrete Specimens

**ASTM C666** — Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing

**ASTM C702/C702M** — Standard Practice for Reducing Samples of Aggregate to Testing Size

**ASTM C1064/C1064M** — Standard Test Method for Temperature of Freshly Mixed Hydraulic Cement Concrete

**ASTM C1202** — Standard Test Method for Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration

**ASTM C1231/C1231M** — Standard Practice for Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders

**ASTM C1260** — Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)

**ASTM C1293** — Standard Test Method for Determination of Length Change of Concrete Due to Alkali-Silica Reaction

**ASTM C1437** — Standard Test Method for Flow of Hydraulic Cement Mortar

**ASTM C1567** — Standard Test Method for Determining the Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method)

**ASTM C1611/C1611M** — Standard Test Method for Slump Flow of Self-Consolidating Concrete

**ASTM C1621/C1621M** — Standard Test Method for Passing Ability of Self-Consolidating Concrete by J-Ring

**ASTM C1712** — Standard Test Method for Rapid Assessment of Static Segregation Resistance of Self-Consolidating Concrete Using Penetration Test

**ASTM C1758/C1758M** — Standard Practice for Fabricating Test Specimens with Self-Consolidating Concrete



**ASTM D75/D75M** — Standard Practice for Sampling Aggregates

**ASTM D421** — Standard Practice for Dry Preparation of Soil Samples for Particle-Size Analysis (Withdrawn)

**ASTM D422** — Standard Test Method for Particle-Size Analysis (Withdrawn)

**ASTM D698** — Standard Test Methods for Laboratory Compaction of Soil Standard Effort

**ASTM D1557** — Standard Test Methods for Laboratory Compaction of Soil Modified Effort

**ASTM D2216** — Standard Test Methods for Lab Determination of Water Content of Soil

**ASTM D2419** — Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate

**ASTM D2435 (NEW)** — Standard Test Methods for One-Dimensional Consolidation Properties of Soils Using Incremental Loading

**ASTM D2850 (NEW)** — Standard Test Method for Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils

**ASTM D4318** — Standard Test Methods for Liquid Limit, Plastic Limit and Plasticity Index of Soils

- Soil Compaction Quality Control: Laboratory Compaction Tests

- Soil Compaction Quality Control: Means, Methods, and Mechanics of Compaction

- Soil Compaction Quality Control: Quality Control and the Coordinated Use of Lab and In-Place Tests

- Soil Compaction Quality Control: Tests for Determining Density or Unit Weight of Soil In-Place

- Soil Compaction Quality Control: Tests for Determining the Water Content of Soils

**ASTM D4318** — Standard Test Methods for Liquid Limit, Plastic Limit and Plasticity Index of Soils

**ASTM D4543** — Standard Practices for Preparing Rock Core as Cylindrical Test Specimens

**ASTM D4791** — Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate

**ASTM D5084 (NEW)** — Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter

**ASTM D5607** — Standard Test Method for Performing Laboratory Direct Shear Strength Tests of Rock Specimens Under Constant Normal Force

**ASTM D5821** — Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate

**ASTM D7012** — Standard Test Methods for Compressive Strength and Elastic Moduli of Intact Rock Core Specimens under Varying States of Stress and Temperatures

**ASTM D7928** — Standard Test Method for Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis

## Masonry

eLearning Program: [Masonry eLearning](#)

**ASTM C140** — Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units

**ASTM C780** — Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry

**ASTM C1019** — Standard Test Method for Sampling and Testing Grout for Masonry

**ASTM C1314** — Standard Test Method for Compressive Strength of Masonry Prisms

**ASTM C1552** — Standard Practice for Capping Concrete Masonry Units, Related Units and Masonry Prisms for Compression Testing



## eLearning CANNABIS

### eLearning Programs:

- [Cannabis Laboratory Testing \(NEW\)](#)
- [Quality Management Systems for the Cannabis Industry \(also available in Spanish\)](#)
- [Security for the Cannabis Industry](#)

Cannabis Science: Understanding the Role of Water Activity in Safety and Quality

Introduction to Corrective Action Preventive Action, CAPA, for the Cannabis Industry

**ASTM D8205** — Standard Guide for Video Surveillance System

**ASTM D8217** — Standard Guide for Access Control System

**ASTM D8220** — Standard Guide for Conducting Recall/Removal Procedures for Products in the Cannabis Industry

**ASTM D8222** — Standard Guide for Establishing a QMS for Consumer Use of Cannabis/Hemp Complaints

**ASTM D8250** — Standard Practice for Applying a Hazard Analysis Critical Control Points (HACCP) System for Cannabis Consumable Products

**ASTM D8286** — Standard Guide for Processing Cannabis Product Complaints

**ASTM D8308** — Standard Practice for Cannabis/Hemp Operation Compliance Audits

**ASTM D8320** — Standard Practice for Implementing an Information Security Program in a Cannabis Operation

**ASTM D8375 (NEW)** — Standard Test Method for Determination of Cannabinoid Concentration in Dried Cannabis and Hemp Raw Materials using Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS)

**ASTM D8399 (NEW)** — Standard Test Method for Multi-residue Analysis of Pesticides in Dried Cannabis and Hemp Raw Materials Using Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)

**ASTM D8442 (NEW)** — Standard Test Method for Determination of Cannabinoids in Cannabis Raw Materials and Resin Cannabis Products by Gas Chromatography and Flame Ionization Detection

**ASTM D8469 (NEW)** — Standard Test Method for Analysis of Multiple Elements in Cannabis Matrices by Inductively Coupled Plasma Mass Spectrometry (ICP-MS) -- eLearning Course

## eLearning EMERGING TECHNOLOGIES

### Exotechnology

- Applications for Exoskeletons Webinar OnDemand
- Exoskeleton and PPE Interface Challenges Roundtable OnDemand



### Additive Manufacturing

#### eLearning Programs:

- [Additive Manufacturing Data Management Program](#)
- [Additive Manufacturing Design Program](#)
- [Additive Manufacturing Processes Program](#)
- [Additive Manufacturing with Metals Program](#)
- [Additive Manufacturing: Laser Powder Bed Fusion](#)
- [Additive Manufacturing Testing Program](#)

Additive Manufacturing Data Management: Part 1 - Webinar OnDemand

Additive Manufacturing Data Management: Part 2 - Webinar OnDemand

Design for Additive Manufacturing: Part 1 - Webinar OnDemand

Design for Additive Manufacturing: Part 2 - Webinar OnDemand

Determining the Suitability of Parts for AM - Webinar OnDemand

Multi-Material Processing in Additive Manufacturing - Webinar OnDemand

AM Feedstock Part 1: Metal Powder Characterization and Specification - Webinar OnDemand

AM Feedstock Part 2: Developing Strategies for Metal Powder Reuse - Webinar OnDemand

Metallurgical Principles for PBF Processes - Webinar OnDemand

Microstructural Control during Metal Additive Manufacturing - Webinar OnDemand

Understanding Qualification and Certification for Additive Manufacturing, with a Focus on Medical - Webinar OnDemand

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What's in a Word? The background and fundamental principles for standard terminology in additive manufacturing - Webinar OnDemand

Additive Manufacturing Processes: Principles of DED - Webinar OnDemand

Additive Manufacturing Processes: Principles of Polymer AM - Webinar OnDemand

Additive Manufacturing Processes: Principles of Binder Jetting - Webinar OnDemand

Sinter-based AM: Principles of Debinding and Sintering - Webinar OnDemand

Wire based DED - Part 1: Processes, Applications, and Systems - Webinar OnDemand

Wire based DED - Part 2: Material Properties and their Enhancements - Webinar OnDemand

AM Processes: Principles of Metal Powder Bed Fusion - Webinar OnDemand

In-situ Monitoring and Control in PBF Process - Webinar OnDemand

Metal AM - Hidden Challenges - Webinar OnDemand

NDT for Additive Manufacturing Parts - Webinar OnDemand

Novel Mechanical Test Methods for Additive Manufactured Materials - Webinar OnDemand

Multi-Scanner PBF-LB/M Processing - Webinar OnDemand

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Design for AM: Understanding Value - Webinar OnDemand

Overview of Cold Spray as a Manufacturing Process - Webinar OnDemand



## eLearning ENVIRONMENT

**ASTM E1527** — Environmental Site Assessments for Commercial Real Estate

**ASTM E1903** — Phase II Environmental Site Assessment

**ASTM E2091 (NEW)** — Standard Guide for Use of Activity and Use Limitations, Including Institutional and Engineering Controls

**Standard Guide for Vapor Encroachment Screening on Property**

- Standard Practice for Comprehensive Building Asbestos Surveys
- Environmental Liabilities Certificate Course
- Phase II Environmental Site Assessment



## eLearning

# LAB AND FIELD FUNDAMENTALS

- ASTM 101: An introduction to ASTM Standards
- Pre-Math Basics
- Math Basics for Asphalts
- Math Basics for Concrete
- Math Basics for Concrete Strength
- Math Basics for Soil
- Test Sieving
- Quality Management 101 Series
- The Art of Perfect Analysis
- Precision and Bias
- Trips, Slips, and Falls Interactive Learning Experience



## 360 Immersive

**eLearning Courses offered by ASTM International, In partnership with 360 Immersive:**

### eLearning Programs:

- [My Virtual Safety Trainer for Construction](#)
- [My Virtual Safety Trainer for General Industry](#)
- Bloodborne Pathogens
- Caught in and Caught between Awareness
- Confined Spaces & PRCS: General Awareness
- Confined Spaces & PRCS: Types & Rescue Requirements
- Confined Spaces & PRCS: The Permit
- Earthmoving Equipment
- Electrical Equipment Inspection
- Electrical Hazards & Be Safe Part 1 and Part 2
- Electrocution Awareness
- Electrical GFCI & AEGCP Awareness
- Emergency Action Plan & Medical Services
- Emergency Planning: Exits and Egress
- Fall Protection Systems Awareness
- Fall Protection Systems Donning
- Fall Protection Systems Inspection
- Fire Extinguisher Inspection
- Fire Extinguisher Use
- Fire Prevention Awareness
- Fire Protection Awareness
- Focus Four: Struck-by Awareness
- Forklift General Safety
- Forklift Key Off Inspection
- Forklift Key On Inspection
- Forklift Operator Awareness Part 1 and Part 2
- Hazard Communication

- Ladder Use
- Ladder Inspection
- Lockout/Tagout
- Machine Guarding
- Occupational Noise: Hearing Conservation
- PPE Awareness
- PPE Body, Hands, Feet
- PPE Eyes, Face, Head
- PPE: Hazardous Environments
- PPE Respiratory Protection
- Scaffolding Awareness
- Trenching Awareness
- Welding and Hot Works Part 1 and Part 2

## eLearning

# LIGHT SPORT AIRCRAFT

- ASTM Standards for Light Sport Aircraft



## eLearning

# METALS AND MECHANICAL TESTING

### eLearning Programs:

#### [Mechanical Testing and Definitions](#)

**ASTM A370** — Standard Test Methods and Definitions for Mechanical Testing of Steel Products

**ASTM E10** — Brinell Hardness of Metallic Materials

**ASTM E18** — Standard Test Method for Rockwell Hardness of Metallic Materials

**ASTM E23** — Notched Bar Impact Testing of Metallic Materials

**ASTM E384** — Standard Test Method for Knoop and Vickers Hardness of Materials

- Failure Analysis of Metals
- Principles of Metallurgy



## ASTM International

**eLearning courses offered by ASTM International, in partnership with ASM:**

- Corrosion Testing and Monitoring
- Materials Characterization and the Selection Process
- Mechanical Properties and Their Measurement
- Types of Corrosion
- Metallographic Techniques, Part 1
- Metallographic Techniques, Part 2
- Basics of Welding



**American Welding Society**

## American Welding Society

**eLearning courses offered by ASTM International, in partnership with AWS:**

- API 1104 Code Clinic
- Destructive Testing
- Economics of Welding
- Fabrication Math I
- Fabrication Math II
- Safety in Welding
- The Science of Nondestructive Testing
- Understanding Welding Symbols
- Welding Fundamentals II
- Welding Sales Representative
- WPS/PQR Explained



## CASTI

- ASTM Standards: Carbon & Alloy Steel
- ASTM Standards: Making Wrought Products
- ASTM Standards: ASTM Steel Standards Structure

## eLearning OXYGEN

- Fire Hazards In Oxygen Systems
- Oxygen Systems Operations and Maintenance

## eLearning PETROLEUM

### eLearning Programs:

- [#2 Diesel Fuel](#)
- [#6 Fuel Oil](#)
- [Aviation Jet Fuel](#)
- [Base Oil](#)
- [Cetane](#)
- [Biodiesel](#)
- [Crude Oil](#)
- [Engine Oil Lubricants](#)
- [Fuel Ethanol](#)
- [Motor Gasoline](#)
- [Reformulated Gasoline](#)
- [Ultra-Low Sulfur Diesel](#)

**ASTM D56** — Standard Test Method for Flash Point by Tag Closed Cup Tester

**ASTM D86** — Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure

**ASTM D92** — Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester

**ASTM D93** — Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester

**ASTM D95** — Standard Test Method for Water in Petroleum Products and Bituminous Materials

**ASTM D97** — Standard Test Method for Pour Point of Petroleum Products

**ASTM D129** — Standard Test Method for Sulfur in Petroleum Products (General High Pressure Decomposition Device Method)

**ASTM D130** — Standard Test Method for Corrosiveness to Copper from Petroleum Products by Copper Strip Test

**ASTM D156** — Standard Test Method for Saybolt Color of Petroleum Products

**ASTM D189** — Standard Test Method for Conradson Carbon Residue of Petroleum Products

**ASTM D240 (NEW)** — Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter

**ASTM D287** — Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)

**ASTM D323 (NEW)** — Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)

**ASTM D381** — Standard Test Method for Gum Content in Fuels by Jet Evaporation

**ASTM D445** — Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids

**ASTM D482** — Standard Test Method for Ash from Petroleum Products

**ASTM D524** — Standard Test Method for Ramsbottom Carbon Residue of Petroleum Products



**ASTM D525** — Standard Test Method for Oxidation Stability of Gasoline (Induction Period Method)

**ASTM D611** — Standard Test Methods for Aniline Point and Mixed Aniline Point of Petroleum Products and Hydrocarbon Solvents

**ASTM D613** — Standard Test Method for Cetane Number of Diesel Fuel Oil

**ASTM D664** — Standard Test Method for Acid Number of Petroleum Products by Potentiometric Titration

**ASTM D874** — Standard Test Method for Sulfated Ash from Lubricating Oils and Additives

**ASTM D974** — Standard Test Method for Acid and Base Number by Color-Indicator Titration

**ASTM D1298** — Standard Test Method for Density, Relative Density, or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method

**ASTM D1319** — Standard Test Method for Hydrocarbons Types in Liquid Petroleum Product by FIA

**ASTM D1322** — Standard Test Method for Smoke Point of Kerosene and Aviation Turbine Fuel

**ASTM D1500 (NEW)** — Standard Test Method for ASTM Color of Petroleum Products (ASTM Color Scale)

**ASTM D1744** — Standard Test Method for Determination of Water in Liquid Petroleum Products by Karl Fischer Reagent

**ASTM D1840** — Standard Test Method for Napthalene Hydrocarbons in Aviation Turbine Fuels by US

**ASTM D2007** — Standard Test Method for Characteristic Groups in Rubber Extender and Processing Oils and Other Petroleum-Derived Oils by the Clay-Gel Absorption Chromatographic Method

**ASTM D2386** — Standard Test Method for Freezing Point of Aviation Fuels

**ASTM D2500** — Standard Test Method for Cloud Point of Petroleum Products

**ASTM D2622** — Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry

**ASTM D2624** — Standard Test Methods for Electrical Conductivity of Aviation and Distillate Fuels

**ASTM D2699 (NEW)** — Standard Test Method for Research Octane Number of Spark-Ignition Engine Fuel : Procedure C -- eLearning Course

**ASTM D2709** — Standard Test Method for Water and Sediment in Middle Distillate Fuels by Centrifuge

**ASTM D2896** — Standard Test Method for Base Number of Petroleum Products by Potentiometric Perchloric Acid Titration

**ASTM D3227** — Standard Test Method for Sulfur in Gasoline, Kerosene, Aviation Turbine and Distillate Fuels

**ASTM D3230** — Standard Test Method for Salts in Crude Oil

**ASTM D3241** — Standard Test Method for Thermal, Oxidation Stability of Aviation Turbine Fuels

**ASTM D3242** — Standard Test Method for Acidity in Aviation Turbine Fuel

**ASTM D3606** — Standard Test Method for Determination of Benzene and Toluene in Spark Ignition Fuels by Gas Chromatography Procedure B Only

**ASTM D3828** — Standard Test Methods for Flash Point by Small Scale Closed Cup Tester

**ASTM D3948** — Standard Test Method for Determining Water Separation Characteristics of Aviation Turbine

**ASTM D4006** — Standard Test Method Water in Crude Oil by Distillation

**ASTM D4052** — Standard Test Method for Density, Relative Density, and API Gravity of Liquids by Digital Density Meter

**ASTM D4294** — Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry

**ASTM D4308** — Standard Test Method for Determination of Electrical Conductivity of Liquid Hydrocarbon by Precision Meter

**ASTM D4377** — Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy

**ASTM D4530** — Standard Test Method for Determination of Carbon Residue (Micro Method)

**ASTM D4629** — Standard Test Method for Trace Nitrogen in Liquid Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection

**ASTM D4684** — Standard Test Method for Determination of Yield Stress and Apparent Viscosity of Engine Oils at Low Temperature

**ASTM D4739** — Standard Test Method for Base Number Determination by Potentiometric Hydrochloric Acid Titration

**ASTM D4741** — Standard Test Method for Measuring Viscosity at High Temperature and High Shear Rate by Tapered-Plug Viscometer

**ASTM D4807** — Standard Test Method for Sediment in Crude Oil by Membrane Filtration

**ASTM D4815** — Standard Test Method for Determination of MTBE, ETBE, TAME, DIPE, Gas Chromatography

**ASTM D4860** — Standard Test Method for Free Water and Particulate Contamination in Middle Distillate Fuels (Clear and Bright Numerical Rating)

**ASTM D4928** — Standard Test Method for Water in Crude Oils by Coulometric Karl Fisher Titration

**ASTM D4952 (NEW)** — Standard Test Method for Qualitative Analysis for Active Sulfur Species in Fuels and Solvents (Doctor Test)

**ASTM D5001** — Standard Test Method for Measurement of Lubricity of Aviation Turbine Fuels by the Ball-on-Cylinder Lubricity Evaluator (BOCLE)

**ASTM D5002** — Standard Test Method for Density, Relative Density, and API Gravity of Crude Oils by Digital Density Analyzer

**ASTM D5185** — Standard Test Method for Multielement Determination of Used and Unused Lubricating Oils and Base Oils by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES)

**ASTM D5191** — Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method)

**ASTM D5293** — Standard Test Method for Apparent Viscosity of Engine Oils and Base Stocks Between -10 °C and -35 °C Using Cold-Cranking Simulator

**ASTM D5453** — Standard Test Method for Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel

**ASTM D5481** — Standard Test Method for Measuring Apparent Viscosity at High-Temperature and High-Shear Rate by Multicell Capillary Viscometer

**ASTM D5501** — Standard Test Method for Determination of Ethanol and Methanol Content in Fuels Containing Greater than 20% Ethanol by Gas Chromatography

**ASTM D5599** — Standard Test Method for Determination of Oxygenates in Gasoline by Gas

**ASTM D5708** — Standard Test Methods for Determination of Nickel, Vanadium, and Iron in Crude Oils and Residual Fuels by Inductively Coupled Plasma (ICP) Atomic Emission

**ASTM D5762** — Standard Test Method for Nitrogen in Liquid Hydrocarbons, Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence

**ASTM D5762** — Standard Test Method for Nitrogen in Liquid Hydrocarbons, Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence

**ASTM D5769** — Standard Test Method for Determination of Benzene, Toluene, and Total Aromatics in Finished Gasolines by Gas Chromatography/Mass Spectrometry

**ASTM D5800** — Standard Test Method for Evaporation Loss of Lubricating Oils by the Noack Method

**ASTM D6079** — Standard Test Method for Evaluating Lubricity of Diesel Fuels by the High Frequency Rig

**ASTM D6371** — Standard Test Method for Cold Filter Plugging Point of Diesel and Heating Fuels

**ASTM D6423** — Standard Test Method for Determination of pH<sub>e</sub> of Denatured Fuel Ethanol and Ethanol Fuel Blends

**ASTM D6426** — Standard Test Method for Determining Filterability of Middle Distillate Fuel Oils

**ASTM D6468** — Standard Test Method for High Temperature Stability of Middle Distillate Fuels

**ASTM D6560** — Standard Test Method for Determination of Asphaltenes in Crude Petroleum and Products

**ASTM D6584** — Standard Test Method for Determination of Total Monoglyceride, Total Diglyceride

**ASTM D6824** — Standard Test Method for Determining Filterability of Aviation Turbine Fuel

**ASTM D7042** — Standard Test Method for Dynamic Viscosity and Density of Liquids by Stabinger Viscometer (and the Calculation of Kinematic Viscosity)

**ASTM D7153** — Standard Test Method for Freezing Point of Aviation Fuels (Automatic Laser Method)

**ASTM D7224** — Standard Test Method for Determining Water Separation Characteristics of Kerosene-Type Aviation Turbine Fuels Containing Additives by Portable Separometer

**ASTM D7261** — Standard Test Method for Determining Water Separation Characteristics of Diesel Fuels by Portable Separometer

**ASTM D7318** — Standard Test Method for Existent Inorganic Sulfate in Ethanol by Potentiometric Titration

**ASTM D7319** — Standard Test Method for Determination of Existent and Potential Sulfate and Inorganic Chloride in Fuel Ethanol and Butanol by Direct Injection Suppressed Ion Chromatography

**ASTM D7321** — Standard Test Method for Particulate Contamination of Biodiesel B100 Blend Stock Biodiesel Esters and Biodiesel Blends by Laboratory Filtration

**ASTM D7328** — Standard Test Method for Determination of Existent and Potential Inorganic Sulfate and Total Inorganic Chloride in Fuel Ethanol by Ion Chromatography Using Aqueous Sample Injection

**ASTM D7501** — Standard Test Method for Determination of Fuel Filter Blocking Potential of Biodiesel

**ASTM D7688** — Standard Test Method for Evaluating Lubricity of Diesel Fuels by the High Frequency Rig

**ASTM D7795** — Standard Test Method for Acidity in Ethanol and Ethanol Blends by Titration

- Gasoline and Diesel Fuels Technology (**NEW**)
- Aviation Fuel-Quality Control Procedures: An Overview
- Flash Point: Apparatus and Auxiliary Equipment
- Flash Point: Explanation and Terminology
- Flash Point: Preparation, Verification, and Maintenance of Apparatus
- Flash Point: Sampling and Test Specimens
- General Fuel Handling
- Microbial Contamination Detection
- Filtration Equipment
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- ASTM D130: Section 10 Microlearning
- ASTM D86: Section 8 Microlearning
- ASTM D93: Annex A1 Microlearning
- ASTM D1319: Section 10 Microlearning
- ASTM D5191: Section 8 Microlearning
- Standards Comparison: ASTM D482 | ISO 6245
- Standard Comparison: ASTM D7688–18 | ISO 12156-1:2018 (Method B)
- Standard Comparison: ASTM D974–21 | ISO 6618: 1997 | UNE–EN 14104 : 2021
- Standard Comparison: ASTM D93–20 | ISO 2719:2016
- Standard Comparison: ASTM D2500-17a | ISO 3015:2019
- Standard Comparison: ASTM D6079-18 | ISO 12156-1:2018 (Method A)
- Standard Comparison: ASTM D3828–16a | ISO 3679:2015



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- D3700 Standard Practice for Obtaining LPG Samples Using a Floating Piston Cylinder
- D6667 Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence

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- Responses to Flame Exposure

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