

WELDING
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Basic Measurement	Walking and Working Surfaces	Introduction to Metals	PPE for Welding	Welding Ferrous Metals
Calibration Fundamentals	Fire Safety and Prevention	Ferrous Metals	Welding Fumes and Gases Safety	Welding Nonferrous Metals
Intro to OSHA	Flammable/Combustible Liquids	Nonferrous Metals	Electrical Safety for Welding	Overview of Weld Types
Personal Protective Equipment	Safety for Lifting Devices	Lean Manufacturing Overview	Introduction to Welding	Electrical Power for Arc Welding
Noise Reduction/Hearing Conservation	Powered Industrial Truck Safety	ISO 9001:2015 Review	Introduction to Welding Processes	
Lockout/Tagout Procedures	Introduction to Physical Properties	5S Overview	Math Fundamentals for Welding	
SDS and Hazard Communication	Introduction to Mechanical Properties	Welding Safety Essentials	Geometry Fundamentals for Welding	

WELDING FUNDAMENTALS

Units of Measurement	Lockout/Tagout Procedures	Hand and Power Tool Safety	Welding Safety Essentials	Welding Symbols and Codes
Blueprint Reading	SDS and Hazard Communication	Safety for Lifting Devices	PPE for Welding	Thermal Cutting Overview
Intro to OSHA	Bloodborne Pathogens	Powered Industrial Truck Safety	Welding Fumes and Gases Safety	Plasma Cutting
Personal Protective Equipment	Walking and Working Surfaces	Confined Spaces	Electrical Safety for Welding	Oxyfuel Cutting Applications
Noise Reduction and Hearing Conservation	Fire Safety and Prevention	Environmental Safety Hazards	Math Fundamentals for Welding	Machine Guarding
Respiratory Safety	Flammable/Combustible Liquids	Safety for Metal Cutting	Geometry Fundamentals for Welding	
	Ergonomics	intro to CAD and CAM for Machining	Overview of Weld Defects	

GMAW FCAW SUB ARC

Introduction to Metals	Introduction to Circuits	AC Power Sources	Material Tests for Welding	Advanced GMAW Applications
Ferrous Metals	Introduction to Magnetism	Conductor Selection	Welding Ferrous Metals	FCAW Applications
Nonferrous Metals	DC Circuit Components	Series Circuit Calculations	Welding Nonferrous Metals	Personal Effectiveness
Approaches to Maintenance	NEC Overview	Parallel Circuit Calculations	Overview for Weld Types	Essentials of Communication
Total Productive Maintenance	AC Fundamentals	Battery Selection	Electrical Power for Arc Welding	
Troubleshooting	Electrical Instruments	Safety for Mechanical Work	Introduction to GMAW	
Electrical Units	Electrical Print Reading	Introduction to Welding	Introduction to FCAW	
Safety for Electrical Work	DC Power Sources	Introduction to Welding Processes	GMAW Applications	

GTAW

Introduction to Physical Properties	Total Productive Maintenance	AC Fundamentals	Battery Selection	Introduction to GTAW
Introduction to Mechanical Properties	Troubleshooting	Electrical Instruments	Safety for Mechanical Work	GTAW Applications
Introduction to Metals	Electrical Units	Electrical Print Reading	Introduction to Welding	Personal Effectiveness
Classification of Steel	Safety for Electrical Work	DC Power Sources	Introduction to Welding Processes	Essentials of Communication
Ferrous Metals	Introduction to Circuits	AC Power Sources	Material Tests for Welding	
Nonferrous Metals	Introduction to Magnetism	Conductor Selection	Welding Ferrous Metals	
Exotic Alloys	DC Circuit Components	Series Circuit Calculations	Welding Nonferrous Metals	
Approaches to Maintenance	NEC Overview	Parallel Circuit Calculations	Overview of Weld Types	

SMAW

Introduction to Physical Properties	Troubleshooting	AC Fundamentals	Parallel Circuit Calculations	Welding Nonferrous Metals
Introduction to Mechanical Properties	Electrical Units	Electrical Instruments	Battery Selection	Overview of Weld Types
Introduction to Metals	Safety for Electrical Work	Electrical Print Reading	Safety for Mechanical Work	Electrical Power for Arc Welding
Ferrous Metals	Introduction to Circuits	DC Power Sources	Introduction to Welding	Introduction to SMAW
Nonferrous Metals	Introduction to Magnetism	AC Power Sources	Introduction to Welding Processes	SMAW Applications
Approaches to Maintenance	DC Circuit Components	Conductor Selection	Material Tests for Welding	Personal Effectiveness
Total Productive Maintenance	NEC Overview	Series Circuit Calculations	Welding Ferrous Metals	Essentials of Communication

FABRICATION AND REPAIR

Introduction to Workholding	Math: Fractions and Decimals	Trigonometry: Sine, Cosine, Tangent	Fabrication Process	Conflict Resolution for Different Groups
Supporting and Locating Principles	Algebra Fundamentals	Trigonometry: Sine Bar Applications	Intro to Assembly	Team Leadership
Locating Devices	Geometry: Lines and Angles	Statistics	Safety for Assembly	
Fixture Body Construction	Geometry: Triangles	Classification of Steel	Applied and Engineering Sciences	
Fixture Design Basics	Geometry: Circles and Polygons	Essentials of Heat Treatment of Steel	Essentials of Leadership	
Math Fundamentals	Trigonometry: The Pythagorean Theorem	Band Saw Operation	Conflict Resolution Principles	