

On-Demand Courses for the Aluminum Casting Industry

THORS Academy courses reflect industry processes from start to finish. Every step of the way, **Think THORS™** for solutions that accelerate learning and improve effectiveness.



RAW MATERIALS

Steel Basics
Steel Fundamentals



PATTERN AND DIE TOOLING

Gating and Riser Basics
Vertical Machining Center Lightning Learning
EDM Lightning Learning*



RAW MATERIALS

Aluminum Fundamentals: Casting
Destructive Metallurgical Testing
Non-Destructive Testing



MELTING PROCESS

Aluminum Melting Fundamentals



MOLDING

Bonded Sand Horizontally Parted Molds
Bonded Sand Mold Patterns
Bonded Sand Vertically Parted Molds
Green Sand Defects
Green Sand Equipment and Process
Green Sand Properties
Green Sand System Testing



CLEANING/FINISHING AND MACHINING

Foundry Cleaning Room Equipment
Abrasive Grinding Wheel Safety
Fixturing Fundamentals for Machining
Hole Process Fundamentals
Machine Tool Fundamentals
Surface Process Fundamentals
Turning Tool and Process Basics
Lightning Learning:
Horizontal Machining Center
Turning Center I
Vertical Machining Center



QUALITY ASSURANCE

Engineering Drawings Fundamentals	Contingency Planning
Engineering Drawings for Castings	Process Flow Diagrams
Engineering Drawings for Machining	Affinity Diagrams
GD & T Fundamentals	7QC Tools: Check Sheets
Measurements: Basic Concepts	7QC Tools: Control Charts
Measurements: Measurement Math	7QC Tools: Fishbone Diagrams
Measurements: Measuring Processes	7QC Tools: Histograms
Measurements: Measuring Tools	7QC Tools: Pareto Charts
Destructive Metallurgical Testing	7QC Tools: Scatter Diagrams
Non-Destructive Testing	7QC Tools: Stratification
Quality Inspection for Steel Castings	8D Problem-Solving Basics
	5S Workplace Organization Method
	Process Failure Mode and Effects Analysis
	Value Analysis Value Engineering



SAFETY

PPE Selection
Lockout Tagout



PLANT MAINTENANCE

Bolted Joint Basics	Electrical Power Introduction
Bearing Fundamentals	Electronic Terminology
Belt Classifications: Poly V Belts	Gearbox Basics
Belt Classifications: V Belts	Hydraulic System Fundamentals
Chain Fundamentals: Industrial	Threaded Fastener Testing and Defects
Compressors: Ancillary Equipment	Threaded Fastener Terminology and Components
Compressor Fundamentals: Positive Displacement	Robotic Fundamentals
Electric Motor Fundamentals	Threaded Fastener Specifications
	Oil Seal Fundamentals: Rotary Applications



Our solution creates value for the following functions:

Design Engineering	Purchasing
Manufacturing Engineering	Quality
Manufacturing Operations	Sales

* to be released shortly