

# INDUSTRIAL SKILLS TRAINING

## DVD / Videotape Series

### MECHANICAL SERIES

#### Air Conditioning and Refrigeration

- Introduction to Air Conditioning and Refrigeration, 1001
- Vapor Compression Cycle Designs and Refrigerants, 1002
- Test and Maintenance Equipment, 1003
- System Operation Checks, 1004
- Pump Down, Evacuation, and Charging, 1005
- Mechanical Troubleshooting, 1006
- Electrical Controls and Circuits, 1007
- Electrical Troubleshooting, 1008

#### Equipment Operation

- Techniques and Practices for Equipment Operators, 2501
- Centrifugal Pumps, 2502
- Steam Turbines, 2503
- Valves, 2504
- Reciprocating Air Compressors, 2505
- Heat Exchangers, 2506
- Positive Displacement Pumps, 2507
- Boilers, 2508
- Water Chemistry and Chemical Handling Practices, 2509
- Electrical Equipment, 2510
- Demineralizers, 2511
- Vacuum Pumps, Air Ejectors, Strainers, and Traps, 2512
- Lubrication for Equipment Operators, 2513

#### Hydraulic Systems

- Introduction to Hydraulic Systems, 3501
- Pressure Controls, 3502
- Directional Flow Controls, 3503
- Fluids, Filters, and Reservoirs, 3504
- Hydraulic Pumps, Pumping Principles, and Accumulators, 3505
- Variable Volume Hydraulic Pumps, 3506
- Actuators, 3507
- Hydraulic System Troubleshooting, 3508
- Electrohydraulic Servo Systems, 3509

#### Maintenance Management

- The Maintenance Organization, 4001
- Maintenance Systems and Documentation, 4002
- Maintenance Safety and Efficiency, 4003
- Planning, 4004
- Scheduling, 4005
- Preventive and Predictive Maintenance, 4006
- Parts & Materials, 4007
- Work Execution, 4008

- Evaluating the Maintenance Program, 4009
- Computerized Maintenance Systems, 4010

#### Mechanical Drive Maintenance

- Gear Boxes (2 tape set), 45221 and 45222
- Mechanical Drives, Couplings, & Alignment (2 tape set), 45061 - 45062\*
- Advanced Alignment, 4519\*
- Vibration Analysis, 4517\*

#### Mechanical Maintenance Fundamentals

- General Shop Practices (3 tape set), 45031 - 45033\*
- Hand Tools (2 tape set), 45011 - 45012 \*
- Measuring Instruments, 4502\*
- Mechanical Print Reading, 4504
- Bolting and Fastening, 4526
- Rigging and Lifting (4 tape set), 45051 - 45054\*
- Bearings and Lubrication (3 tape set), 45081 - 45083\*

#### Other Mechanical Maintenance Subjects

- Boilers and Boiler Equipment (2 tape set), 45141 - 45142\*
- Auxiliary Steam Turbines (3 tape set), 45241 - 45243
- Coal and Ash Handling Equipment (2 tape set), 45151 - 45152\*
- Diesel Engines (3 tape set), 45161 - 45163\*
- Hydraulic Equipment (2 tape set), 45201 - 45202\*

#### Mechanical Troubleshooting

- Principles of Mechanical Troubleshooting, 6501
- Troubleshooting Centrifugal Pumps, 6502
- Troubleshooting Positive Displacement Pumps, 6503
- Troubleshooting Reciprocating Air Compressors, 6504

#### Piping and Valve Maintenance

- Piping (4 tape set), 45111 - 45114\*
- Advanced Pipefitting (4 tape set), 45211-45214\*
- Valves (4 tape set), 45121 - 45124\*
- Motorized Valve Actuators (2 tape set), 45231 - 45232
- Relief Valves (2 tape set), 45181 - 45182\*

#### Pump and Compressor Maintenance

- Centrifugal Pumps (4 tape set), 45091 - 45094\*
- Specialized Centrifugal Pumps, 4510\*
- Air Compressors and Blowers (3 tape set), 45131- 45133\*

- Centrifugal Air Compressors (3 tape set), 45251 - 45253
- Packing and Seals (2 tape set), 45071 - 45072\*

### Respiratory Protection

- Air-Purifying Respirators, 5301
- Atmosphere-Supplying Respirators, 5302

### Rotating Equipment Predictive Maintenance & Alignment

- Principles and Practices of Predictive Maintenance, 5401
- Vibration Analysis, 5402
- Lubricant and Trend Analysis, 5403
- Techniques for Extending Bearing Life, 5404
- Principles of Reverse Double Dial Alignment, 5405
- Reverse Double Dial Alignment Procedure, 5406
- Computerized and Laser Alignment, 5407

### Statistical Process Control

- Introduction to Statistical Process Control, 5501
- Introduction to Control Charts, 5502
- Control Charts for Variables, 5503
- Control Charts for Attributes, 5504
- Advanced Control Charts, 5505
- Machine and Process Capability Studies, 5506
- Problem Solving Techniques, 5507

### Welding

- Principles and Metallurgy, 7001
- Joint Design and Symbols, 7002
- General Techniques and Safety Practices, 7003
- Oxygen-Fuel Gas Cutting, 7004
- Brazing and Braze Welding, 7005
- Shielded Metal-Arc Welding Principles, 7006
- Shielded Metal-Arc Structural and Pipe Welding 7007
- Principles of TIG, 7008
- TIG Structural and Pipe Welding, 7009
- Principles and Techniques of MIG, 7010
- Weld Defects: Causes and Corrections, 7011
- Cutting: Plasma-Arc and Air Carbon-Arc, 7012

## ELECTRICAL SERIES

### Electric Motor and Control Maintenance

- Motors (5 tape set), 20071 - 20075\*
- Control Equipment (6 tape set), 20061 - 20066\*

### Electrical Maintenance Fundamentals

- AC/DC Theory (4 tape set), 20011 - 20014\*

- Electrical Print Reading (2 tape set), 20031 - 20032\*
- Electrical Connections (4 tape set), 20051 - 20054\*
- Solid-State Devices (4 tape set), 20121 - 20124\*

### Electrical Safety

- Electrical Safety, 24001

### Electrical Switchgear Maintenance

- Switchgear (2 tape set), 20091 - 20092\*
- Protective Relays, 2008\*
- Transformers, 2011\*
- Batteries, 2010\*

### Programmable Controllers

- Controllers, 5001
- Central Processing Unit, 5002
- Discrete I/O Modules, 5003
- Analog and Special I/O Modules, 5004
- Programming Devices and Peripheral Equipment, 5005
- Principles of Ladder Diagrams, 5006
- Interpreting Ladder Diagrams, 5007
- Numbering Systems, Numbering Codes, and Logic Concepts, 5008
- Principles of Ladder Logic Programming, 5009
- Programming: Timers and Counters, 5010
- Comparison and Arithmetic Functions, 5011
- Programming: Logical Operations and Data Manipulation, 5012
- Programming: Analog and PID, 5013
- Communication Fundamentals, 5014
- Networking, 5015
- Developing a Program, 5016
- Program Documentation, 5017
- Sizing and Selection, 5018
- Installation Considerations, 5019
- Troubleshooting Techniques, 5020
- Troubleshooting PC Malfunctions, 5021
- Troubleshooting Field Device Malfunctions, 5022

## BASIC SKILLS SERIES

### Training the Trainer

- The Elements of Effective Training, 6001
- Planning for Effective Training, 6002
- Developing and Writing Training Objectives, 6003
- Learning: How it Occurs, 6004
- Instructing to Facilitate Learning, 6005
- Methods for Teaching Skills, 6006
- Methods for Teaching Information, 6007
- Principles of Visual Training, 6008
- Using Visual Aids Effectively, 6009
- Measuring Instructional Effectiveness, 6010
- Developing and Using Lesson Plans, 6011
- On-the-Job Training, 6012

- Teaching Your First Class, 6013
- Administering the Training Program, 6014

\* Titles also available in Spanish

### Additional Information

The DVD/Videotape Series is \$119.00 per DVD and \$99.00 per Videotape. This price does not include shipping or handling. DVD/Videotapes purchased are non-refundable if DVD/Videotapes seal is broken.

More information can be obtained by calling the National Office at (413) 592-NAPE (6273) on the DVD/Videotape Series. The National Office is excited to be working in conjunction with ITC Learning in offering N.A.P.E. members new educational courses and on-line training.

