CUSTOMIZED TRAINING COURSES AND SPECIALTY SERVICES

□ **TECHNICAL TRAINING**

- API 510 Inspector Training - Pressure Vessel Inspector - 80 hours
- API 653 Inspector Training - Aboveground Storage Tank Inspector - 40 hours
- API 570 Inspector Training (In Development by API) - Piping Inspector - 40 hours
- Non-destructive Examination Training and Certification
- ASME Boiler, Pressure Vessel and Piping Codes (All Codes) - 40 hours
- Mechanical Integrity / Reliability / OSHA 1910.119
- National Board Inspector Training
- Quality Assurance / Quality Control
- Pressure Vessel and Piping Inspection (On-stream & New Construction)
- AWS CWI Training and Basic / Advanced Welding Inspection
- ASME / EPA Boiler Operator Training
- EPA Title X Lead Abatement Training (In Development by EPA)
- Boiler Inspections and Texas Boiler Law & Rules
- Heat Treatment / Stress Relieving
- Certified Overhead Crane Inspection

□ **ENVIRONMENTAL**

- Lender Liability Issues in Property Transactions
- Volatile Organic Compounds (VOC) Rules and Record Keeping Requirements
- Regulatory Framework for Hazardous Materials
- Basics of HAZMAT Compliance
- Air Quality Compliance Issues (for Coast Guard)
- Hazardous Waste Site Operations and Emergency Response (Hazwoper)
- Petroleum Terminal Environmental Compliance (CA, OR, WA, AK, HI, AZ, NV)
- Basics of Hazardous Waste Compliance
- Compliance Training Program for Small Business
    - Industrial Boiler
    - Auto Body Shop
    - Auto Repair Shop
    - Architectural Coating
    - Printers
    - Dry Cleaners
    - Metal Finishers
    - Furniture Makers
- Environmental Health and Safety Auditing

□ **SAFETY PROGRAMS**

40 Hour HAZWOPER
Bloodborne Pathogens
Confined Space Entry
Employee "Right-to-Know"
Fire Watch
Fork Lift
Hazard Communication
Hazardous Material Transport
Hazardous Material Identification Systems
Lead Awareness
Lockout/Tagout
Respirator (Air Purifying & SCBA)

□ **OPERATIONS TRAINING**

Advanced Operations Training - This 40-hour course is designed to present power plant personnel with an improved understanding and appreciation of the concepts behind plant efficiency and heat rate improvement. The student is provided with the principles of efficient power plant operation and how operator actions and controllable parameters affect plant efficiency.

Basic Power Plant Operations - A complete 40-hour course formulated to introduce power plant employees, including operators, engineers, technicians, and maintenance personnel, to the fundamentals of electrical power production. The student is provided with design, operation, and maintenance concepts, as well as demonstrated practical application.

Boiler Operations, Safety and Efficiency - This 24-hour course is designed to provide operations and performance personnel an understanding of boiler performance and safety considerations. This course covers the principles of boiler design and operation from an efficiency and safety point of view. Emphasis is placed on operating practices, as well as unit safety, capacity and reliability. Case studies of actual boiler efficiency and capacity problems are reviewed. Applicable ASME and NFPA codes are covered.

Electricity for Power Plant Personnel - A comprehensive 40-hour course designed to help operators perform electrical operations more efficiently, and respond quickly and effectively to abnormal conditions. This course presents fundamentals and operating theory of plant electrical systems and equipment. It emphasizes the relationship between plant equipment and the interconnected power system. Power generation theory is thoroughly discussed to help operators understand the critical role between power generation, power system loading and operation. Abnormal generator operating conditions and protective relay schemes are discussed focusing on cause, effect and proper operator response.

Steam Turbine Operation - This 24-hour course provides the operator with comprehensive turbine-generator and support system operational training. Extensive emphasis is placed on how to identify, prevent or reduce the effects of turbine water induction. Actual case histories are reviewed in detail.

□ PERSONNEL DEVELOPMENT

Interpersonal Workshops
Effective Communications Techniques
Productivity Management
Improving Management Styles
Team Building Strategies
Motivational Needs

Corporate Workshops
Advanced Sales and Presentation
Conflict Resolution
Compelling Identity Development
Stress Management

Instructor Skills Courses
Classroom Presentation Skills
OJT Trainer / Evaluator Skills
Design / Development Skills

Apprenticeship Program for Mechanics
Bearings and Seals
Blueprints and Mechanical Drawings
Carpentry
Compressors
Coupling Alignment
Fans
Gears
Hand Tools
Hydraulics
Insulation
Lubrication and Greases
Machine Shop Equipment
Mathematics
Measuring Tools
Mechanical Seals
Packing and Gaskets
Pipes and Pipefitting
Plumbing
Power Tools
Pumps
Relief and Safety Valves & Steam Traps
Rigging
Scaffolding
Sheet Metal Layout
Soldering
Trigonometry
Turbines
V-Belt Drives
Valves
Welding Fundamentals
Work Procedures

Journeyman Courses for Mechanics

Air Compressors
Basic Math
Boiler (Zurn)
Centrifuges
Diesel Principles
EG&G Valves
Hypochlorite Generating Cell
Insulation
Interpreting Engineering Drawings (Advanced)
Large Steam Turbine Generator
Machine Alignment
Mobile Cranes
Motor Operated Valves
Multihearth Recalcining Furnace
Overhead Cranes
Pipefitting and Tubing Installation (Advanced)
Piping Inspections
Pressure Products Inc. HP Valves
Pumps
Refrigeration and Basic HVAC
Rigging
Snubbers
Surveillance Testing
Turbines
Valtek Control Valves
Valve Review, Inspections, & Repair Methods
Waste Water Centrifuges

Basic Primers for Operators

Breakers and Disconnects
Diesel Engines
Flow Detectors
Pressure Detectors
Pressure Relief Devices
Process Measurement
Pump Operation
Radiation Detectors
Relays
Storage Batteries
Temperature Detectors
Tritium Radiological Concerns

□ **FUNDAMENTALS FOR OPERATORS**

Mathematics

Algebra
Geometry
Higher Concepts
Review of Basic Math
Trigonometry

Chemistry

Chemistry Fundamentals
Corrosion
Hazards of Chemicals and Gases
Process Water Treatment
Reactor Water Chemistry

Classical Physics

Application of Newton's Laws
Energy, Work, and Power
Force and Motion
Unit Systems
Vectors

Nuclear Physics

Atomic / Nuclear Physics
Reactor Theory (Neutrons)
Reactor Theory (Operations)
Reactor Theory (Parameters)

Electrical Science

AC Motors
AC Power
AC Reactive Components
AC Generators
Basic DC Theory
Basic Electrical Theory
Basic AC Theory
Batteries
DC Generators
DC Circuits
DC Motors
Electrical Distribution Systems
Electrical Sciences Exam Bank
Test Instruments / Measuring Devices
Transformers
Voltage Regulators

Materials Science

Brittle Fracture
Plant Materials
Properties of Metals
Structure of Metals
Thermal Shock

Mechanical Science

Air Compressors
Boilers
Cooling Towers
Demineralizers
Diesels
Filters and Strainers
Heat Exchangers
Hydraulics
Mechanical Sciences Exam Bank
Pressurizers
Pumps
Steam Traps
Valves

Thermal Science

Fluid Flow
Heat Transfer
Thermodynamics

Instruments & Controls

Flow Detectors
Instrument & Controls Exam Bank
Level Detectors
Position Indicators
Pressure Detectors
Principles of Control Systems
Radiation Detectors
Temperature Indicators

Engineering Symbology, Prints, and Drawings

Architectural Drawings
Construction Drawings
Electrical Diagrams
Electronic Diagrams
Fabrication Drawings
Fluid Diagrams
Introduction to Print Reading
Logic Diagrams

□ MANAGEMENT AND LEADERSHIP

Individualized Executive Leadership Program

This special executive leadership program for CEO's and senior management is tailored to your personal or organizational requirements. Develops leadership by using new strategies and paradigms in Executive Decision Making, Power Team Building, Clear Outcome Development, and Going Beyond Excellence.

Supervisor's Workshop - A 40-hour introductory course designed for the new supervisor with less than two years of experience, and others who would benefit from learning essential leadership and supervisory skills. This program has proven to be especially helpful for the newly promoted supervisor as it provides the necessary tools to get the job done, effectively.

Improving Leadership Skills - This 24-hour course is designed to provide non-supervisory personnel the fundamentals of leadership. The workings of leadership, authority and supervision are discussed. Leadership styles and attributes are discussed in detail. Especially beneficial is the "Looking Ahead to Supervision" segment where participants are asked to analyze typical supervisor's responsibilities and to consider a future role in supervision.

Performance Evaluation Workshop - This 16-hour course provides supervisors with effective techniques proven to make the most of employee performance evaluations. Defining standards and expectations, practical methods of tracking employee performance, and how to prepare for and conduct an effective performance evaluation are covered in detail.

□ SPECIALTY SERVICES

- Complete Acoustic Emission Services
- Metallurgical Replication Service
- Tank Data™ User-friendly Storage Tank Inspection Program
- Crane Inspection and Assessment
- Structural Engineering & Failure Analysis
- Fastener Testing & Evaluation
- Project Management
- Finite Element Analysis / Fitness for Service Assessment
- Risk-Based Inspection Programs