



Arete HazMat & Pressurized Systems Trainers are advanced training platforms developed to simulate realistic chemical incidents, gas leaks, oil spills, and pressurized system emergencies under fully controlled conditions.

Designed for professional emergency response teams, our systems allow personnel to train with hydraulic and manual tools in highly realistic scenarios — while maintaining the highest safety standards. Each trainer is custom-engineered to meet specific customer requirements in terms of dimensions, configuration, fuel type, and mobility options.



HazMat & Pressurized Systems Trainers

Professional Firefighter Training Simulators



REALISTIC TRAINING FOR REAL-WORLD EMERGENCIES

Our systems enable responders to practice:

- Gas and LPG leak control
- Oil spill containment
- Pressurized pipeline rupture scenarios
- Liquid fuel fire suppression
- Industrial hazardous material incidents
- Emergency shutdown procedures
- Complex multi-point fire scenarios

Specially designed replaceable structural elements allow repeated use of hydraulic cutting and rescue tools, ensuring fast scenario reset and long operational lifespan.

ARETE “LOGIC” CONTROL SYSTEM

At the core of every trainer is the proprietary Arete “Logic” Control System — an intelligent integration of:

- PC-based control software
- PLC automation systems
- Microelectronic monitoring sensors
- Manual operator panel
- Remote interface via PC or tablet

The system enables:

- Full real-time scenario control
- Adjustable flame intensity and leak simulation
- Automated safety monitoring
- Emergency shutdown functions
- Operator override capabilities

This ensures both operational realism and uncompromised safety.



KEY ADVANTAGES

- ✓ Wide variety of customizable training scenarios
- ✓ LPG and liquid fuel-operated fire points
- ✓ Pressurized system simulation capability
- ✓ Double-level integrated safety system
- ✓ Modular and replaceable training components
- ✓ Mobile or permanent installation options
- ✓ Lightweight yet robust steel construction
- ✓ Stainless steel version available
- ✓ Long service life with low maintenance

FLEXIBLE INSTALLATION OPTIONS

- Permanent ground-mounted installation
- Trailer-mounted mobile unit
- Hook lift platform configuration

DESIGNED TO ADAPT TO TRAINING CENTERS, INDUSTRIAL SITES, AND MOBILE RESPONSE PROGRAMS.

TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATION
Operating Temperature	-25°C to +60°C
Power Supply	220V / 230V, 50Hz, Single Phase
Control System	Arete "Logic" (PC + PLC + Sensors)
Fire Sources	LPG or Liquid Fuel
Structural Type	Robust Welded Steel Construction
Material Options	Coated Carbon Steel / Stainless Steel
Installation	Ground / Trailer / Hook Lift Platform
Safety System	Double-Level Protection
Scenario Control	Manual Panel + PC/Tablet Interface
Customization	Dimensions & Functional Features on Request

SAFETY FIRST — ALWAYS

Safety is integrated into every stage of operation.

The trainer incorporates:

- Automated emergency shut-off system
- Continuous sensor-based monitoring
- Controlled fuel delivery system
- Overpressure protection
- Manual override control

Our systems are designed to provide maximum realism without compromising operator or trainee safety.

CERTIFICATION & COMPLIANCE

HazMat & Pressurized Systems Trainers are manufactured in accordance with applicable international industrial and safety standards.

Available documentation includes:

- CE conformity (where applicable)
- Compliance with Machinery and Electrical Directives
- Industrial safety system documentation
- Structural and material quality certificates
- Pressure system compliance documentation
- Factory Acceptance Testing (FAT) protocols

Systems can be adapted to meet specific national regulatory requirements.

APPLICATION AREAS

- Fire & Rescue Services
- Industrial Emergency Response Teams
- Oil & Gas Facilities
- Chemical Processing Plants
- Civil Protection Agencies
- Military & Specialized Units
- Training Academies

