

The Arete Smoke Immersion & Search Orientation System is a professional training solution designed to simulate realistic smoke-filled environments for firefighter and emergency response training. The system recreates high-density, low-visibility conditions, enabling trainees to safely develop orientation, search, navigation, and team coordination skills in controlled yet highly realistic scenarios.





REALISTIC SMOKE SIMULATION

The system generates dense, non-toxic training smoke to replicate:

- Zero-visibility interior fire conditions
- Confined space environments
- Industrial and warehouse layouts
- Multi-room and corridor navigation
- Emergency evacuation scenarios

Smoke density and flow can be precisely controlled to match various training levels.

Training Objectives

Designed to improve:

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- Search and rescue techniques
 - Orientation in low-visibility environments
 - Wall-following and systematic search patterns
 - Victim location and extraction
 - Communication and team coordination
 - Air management awareness
 - Stress response under limited visibility

Safe & Controlled Environment

The Arete system ensures maximum safety while maintaining realism:

- ✓ Non-toxic, training-grade smoke
- ✓ Adjustable visibility levels
- ✓ Emergency ventilation and rapid clearing system
- ✓ Remote control operation
- ✓ Durable, modular construction

Modular & Customizable Design

The system can be configured as:

- Container-based training unit
- Modular maze structure
- Fixed training facility installation
- Mobile training platform
- Multi-room orientation simulator



Ideal For

- Fire academies
- Industrial emergency response teams
- Oil & gas facilities
- Aviation emergency units
- Military and tactical rescue teams
- Corporate safety departments

Key Benefits

- ✓ Realistic low-visibility training
- ✓ Controlled and repeatable scenarios
- ✓ Enhances spatial awareness and confidence
- ✓ Improves decision-making under stress
- ✓ Reduces training risk while increasing effectiveness

Train in the smoke. Lead in the fire.

