



500PSI / 34.5 BAR
ENGINEERED FIRE SUPPRESSION

Using 3M™ Novec™ 1230 Fire Suppression Fluid



Flammable Materials



Transportation



Wind Energy



Mining



Airports



THE NEWEST EVOLUTION IN ENGINEERED FIRE SUPPRESSION

E⁴ Engineered Clean Agent systems are the newest evolution in total flooding fire suppression solutions from Firetrace, a longstanding innovation leader in the fire suppression industry. The E⁴ systems are shattering traditional design limitations using 500psi / 35 bar pressure in lower-cost, low pressure equipment while achieving the performance of more costly high-pressure or “nitrogen driver” systems.

75% OF EXISTING HALON DISTRIBUTION NETWORKS CAN BE EASILY REFITTED WITH FIRETRACE, MINIMIZING DOWNTIME AND CLIENT BUSINESS INTERRUPTION.

— NFPA 2001, 2012 EDITION COMPLIANT ACTUATION SUPERVISORY —

SMASHING CONVENTIONAL LIMITATIONS

New Design Conventions for a New Agent

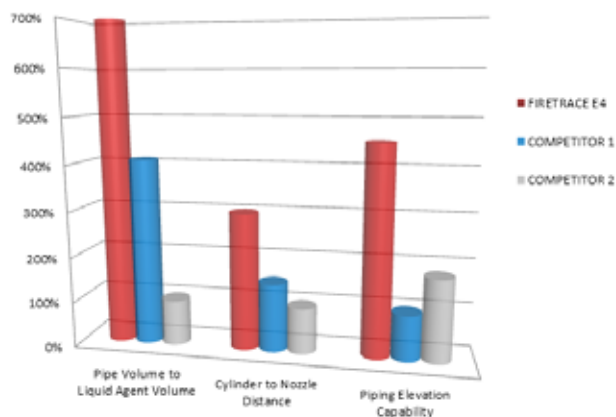
By taking full advantage of the unique characteristics of 3M® Novec™ 1230 Fire Suppression Fluid, Firetrace’s E⁴ has set new expectations for system design limitations, rather than simply conforming to conventions developed for Halon in the 1980s. Approval testing has demonstrated incredible performance enhancements as compared to traditional systems. These enhancements result in less complex pipe networks, dramatically increased design flexibility, and lower labor, piping and installation costs. Welcome to the 4th evolution of clean agent fire suppression systems – E⁴!

E⁴ systems offer far lower design limitations, resulting in greater design flexibility and lower overall hardware and installation cost.

- ✦ Uses less piping – Typical savings on distribution network of 25-40%
- ✦ Bull T’s up to 88/12 split, Side T’s up to 55/45 & 93/7 split – critical for HALON retrofits
- ✦ 300%+ greater distance cylinder to nozzle
- ✦ 700%+ liquid agent to pipe volumes – largest networks possible with no extra equipment needed
- ✦ 400%+ increased vertical distance capability
- ✦ Higher fill density – more agent in the same hardware
- ✦ Capable of massive piping volume capabilities with no expensive N2 driver systems
- ✦ Stackable actuation systems

Firetrace E4 Novec 1230 System Performance Comparison

Versus Competitive Novec Systems Utilizing Low-Pressure Hardware



SYSTEM SIZES

E⁴ system cylinders are available in eight capacities with fill volumes ranging from 8 to 1300 lbs. (4 to 590 kg). Each of these cylinders can be under-filled in one pound/one-half kilogram increments to meet the exact amount of Novec™ 1230 required. E⁴ systems can be activated either manually or automatically using mechanical, pneumatic or electrical activation. E⁴ nozzles are available in center and side discharge patterns for pipe sizes ranging from ½ inch to 2½ inch.

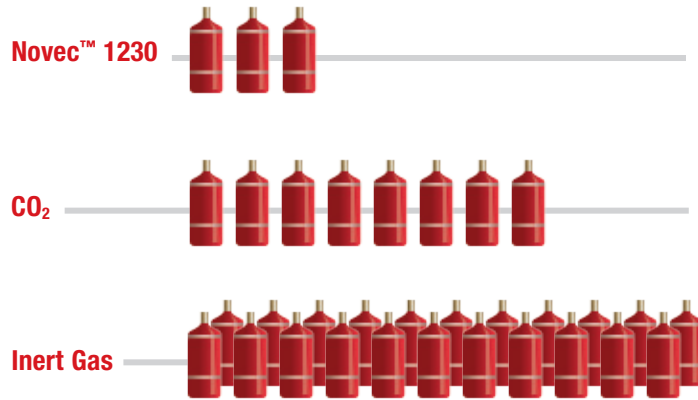
QUALITY YOU CAN COUNT ON

E⁴ equipment is manufactured in an AS9100C/ISO 9001:2008-certified facility. Firetrace is dedicated to delivering product that precisely meets or exceeds our customers’ delivery requirements, so you can meet your deadlines.

APPLICATIONS:

- ✦ Computer Facilities
- ✦ Telephone Equipment Facilities
- ✦ Radio and TV Communications Facilities
- ✦ Cellular Telecommunications Facilities
- ✦ Storage of Documents and other Valuables
- ✦ Hospital Facilities
- ✦ Control Rooms
- ✦ Libraries
- ✦ Test Facilities
- ✦ Museums
- ✦ Flammable Material Storage
- ✦ Wind Turbines

RELATIVE SYSTEM CYLINDER/ SPACE REQUIREMENTS



NOVEC™ 1230 CYLINDER FILL RANGE

Base Cyl	Nominal Cylinder Size	Max. Fill	Min. Fill
FTF000015	35lb (15L)	38lb (17kg)	8lb (3.5kg)
FTF000029	75lb (29L)	76lb (34.5kg)	16lb (7.5kg)
FTF000062	160lb (62L)	164lb (74kg)	33lb (15kg)
FTF000103	270lb (103L)	271lb (123kg)	55lb (25kg)
FTF000153	400lb (153L)	406lb (184kg)	82lb (37.5kg)
FTF000227	600lb (227L)	601lb (272.5kg)	121lb (55kg)
FTF000368	975lb (368L)	975lb (442kg)	196lb (89kg)
FTF000490	1300lb (490L)	1297lb (588.5kg)	260lb (118kg)

System temperature limits are 0° F (-17.8° C) to 130° F (54.4° C) and system operating pressure is 500 psi (34.5 bar) at 70° F (21.1° C).

The cylinders are UL Listed and are manufactured, tested and stamped in accordance with DOT 4BW500 or DOT 4BA500.

Clean Agent Decision Criteria	Novec™ 1230
Clean	✓
Effective	✓
Fast Acting	✓
Broad Spectrum Fire Effectiveness	✓
Safe for People	✓
Safe for the Planet	✓
Safe for Equipment	✓
Economical	✓
Space Efficient	✓
Ability to Retrofit Halon Systems	✓
Commercially Available	✓
Long-term Sustainability	✓

Refineries



Telecommunications



Computer Servers



FIRETRACE®

AUTOMATIC FIRE SUPPRESSION SYSTEMS

Our worldwide network of over 300 authorized Firetrace distributors provides hazard analysis, quotations, installations, service and support on Firetrace systems, to reliably and effectively protect your assets.

Firetrace International systems are currently safeguarding over 250,000 pieces of equipment world-wide, including:

- ✦ Electrical control panels
- ✦ Laboratory fume/exhaust cabinets
- ✦ EDM & CNC machining centers
- ✦ UPS units
- ✦ Computer/data storage cabinets
- ✦ Wind energy turbines
- ✦ Transformer cabinets
- ✦ Flammable chemicals storage cabinets
- ✦ Generator enclosures
- ✦ Mass transit and specialty vehicles
- ✦ Vending machines
- ✦ Book, bank and video depositories

Firetrace also offers smaller pneumatically operated systems that perfectly complement our line of engineered systems. These smaller systems can be used in elevated risk areas to control a small fire, preventing the activation of the engineered system – and the release of large amounts of expensive suppression agent.



Firetrace currently has more than 20 international approvals and listings, including: UL, CE, FM, ULC & ISO9001. Approvals and listings vary by system type and agent.

Firetrace is available exclusively through our worldwide distributors, each of which has been properly trained in the installation and maintenance of Firetrace systems. To locate the Firetrace distributor nearest you please contact us at:

World Headquarters

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