

eSUPPRESSOR™

HIGH RATE DISCHARGE SUPPRESSOR



IEP TECHNOLOGIES
HOERBIGER Safety Solutions



CMC TECHNOLOGIES

PTY LIMITED ACN: 085 991 224, ABN: 47 085 991 224

Engineering & Industrial Instrumentation
Phone: +61 2 9669 4000
Fax: +61 2 9669 4111
Email: sales@cmctechnologies.com.au
Web Site: <http://www.cmctechnologies.net.au>

Unit 19, 77 Bourke Road,
Alexandria, NSW, 2015
AUSTRALIA

PRODUCT INFORMATION SHEET

Description

The IEP Technologies eSUPPRESSOR™ is a high-rate discharge suppressor used for explosion suppression and isolation systems. Its electro-mechanical operation is unique to the industry, as no pyrotechnic devices are required for activation. The eSUPPRESSOR has standard features that include pressure monitoring, lock out-tag out capability and LED indication of device status. A key benefit is that all the safety functions are fully monitored, which is not possible for any device employing pyrotechnic actuators. The eSUPPRESSOR design and manufacture is compatible with SIL2 third party certification (pending).

Upon detection of an explosion event, the Explosion Protection Control Unit sends an actuation signal to the eSUPPRESSOR valve mechanism. The highly specified trigger mechanism allows the valve flap to open extremely rapidly (less than 10ms), which allows the suppressant to be discharged through the nozzle system into the protected volume.

Advantages

- Unsurpassed reliability due to continuous monitoring of all safety functions
- Electromechanical actuation (no pyrotechnic actuators which cannot be monitored)
- Monitored Lock-Out-Tag-Out (LOTO)
- Cylinder pressure monitoring with temperature compensation
- Non-explosive operation increases safety, and reduces storage, licensing, and transportation concerns
- Third party certification to SIL-2 (pending)
- Can be mounted on existing IEP flanges to potentially replace all members of IEP's existing family of suppressors
- Integrated LEDs to indicate suppressor status
- Valve housing: IP67, NEMA 4x
- Rating: Ex II 3G/2D, Class 1, Div 2, Class I, Div. 1.
- Transportation licenses: TPED and UN-DOT

eSUPPRESSOR™



Application

The IEP Technologies eSUPPRESSOR is designed to discharge suppressant in milliseconds within a process vessel or to mitigate the propagation of flame through interconnected ductwork. It is used in conjunction with IEP Technologies' range of control panels and detectors. IEP Technologies sophisticated computer modeling techniques determine the expected reduced explosion pressure (Pred) and the quantity and size of suppressors to be employed.

Contact Information



CMC TECHNOLOGIES

PTY LIMITED ACN: 085 991 224, ABN: 47 085 991 224

Engineering &
Industrial
Instrumentation

Phone: +61 2 9669 4000
Fax: +61 2 9669 4111
Email: sales@cmctechnologies.com.au
Web Site: <http://www.cmctechnologies.net.au>

Unit 19, 77 Bourke Road,
Alexandria, NSW, 2015
AUSTRALIA

Specifications

Valve body:	Corrosion resistant materials including stainless steel and aluminum.
Spun cylinder:	Painted carbon steel (blue)
Actuation:	Electro-mechanical
Product Certifications:	<p>ATEX pending</p> <p>EPS 18 ATEX 1 187 X</p> <ul style="list-style-type: none"> • Dust – ATEX II 2 D Ex tb IIIC T95°C Db • Gas – ATEX II 3 G Ex ec ic IIC T5 Gc <p>IECEX EPS 18.0069X</p> <ul style="list-style-type: none"> • Dust – tb IIIC T95°C Db • Gas – ec ic IIC T5 Gc <p>HazLoc rating</p> <ul style="list-style-type: none"> • Class I Zone 2 Aex ec ic IIC T5 Gc • Class I Division 2 Group ABCD • Class II Zone 21 Aex tb IIIC T95°C Db • Class II Division 1 Group EFG

Weights & Dimensions

Parameter	76 mm (3in)			127 mm (5in)
	5	20	31	45
Cylinder Volume (liters)	5	20	31	45
Suppressor mass (full, with safety plate)	27kg/ 59.4lb	56.5kg/ 124.3lb	77kg/ 169.4lb	110 kg/243lb