

# Your Drilling Site Is At Risk From Engine Explosion

Understand the hazard  
Select the right solution



## Diesel Engine Safety Overview

## Hydrocarbon Release and Diesel Engine Runaway

A hydrocarbon release can occur at any time in drilling, production and refining environments. A large number of diesel engines are used in equipment for daily operations at these sites, including vehicles, lighting towers, power generators and construction equipment.

Operating a diesel engine in a hydrocarbon environment can be a serious safety risk to personnel and equipment. A hydrocarbon vapor can be drawn into the air intake system of a diesel engine and act as an uncontrolled fuel source. This can cause the engine to accelerate and overspeed or runaway, leading to dangerous mechanical failure and potential ignition source for an explosion. An operator cannot shut down a runaway engine by turning off the ignition because the engine is running on an external fuel source.

The most effective way of shutting down a runaway diesel engine is with an air intake shutoff valve system. This system completely blocks the engine intake system, cutting off both the external fuel source and the air required to keep the engine running.

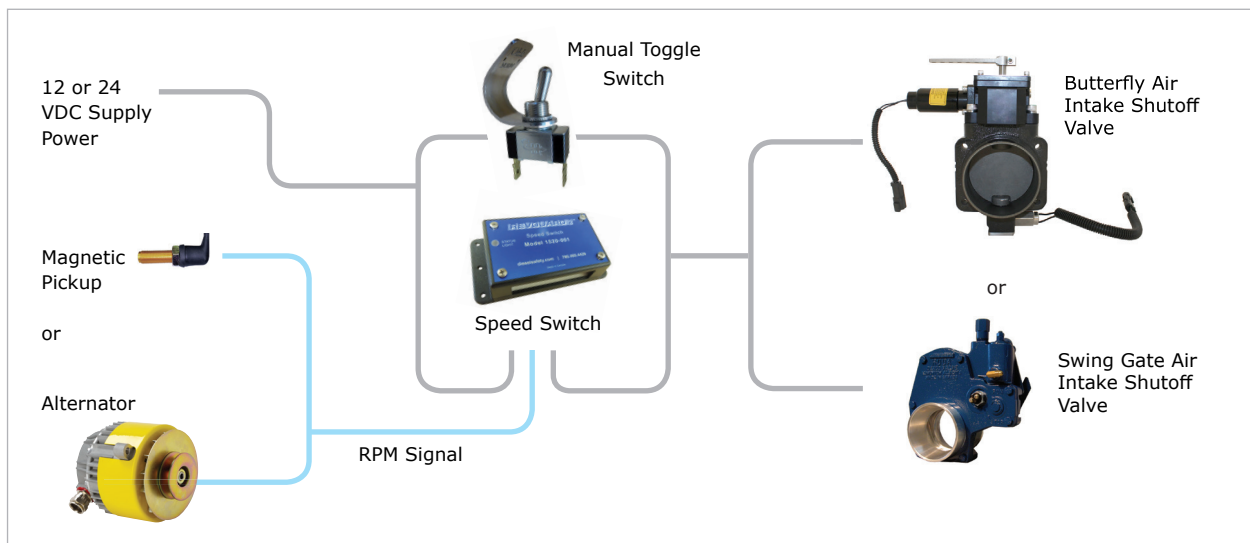


## Complete Solutions

AMOT offers a broad range of diesel engine safety solutions, including AMOT, Chalwyn and Roda Deaco Air Intake Shutoff Valves that provide emergency overspeed shutdown of a diesel engine. AMOT has the solution to meet the specific requirements of each customer.

- Automatic, self-contained valves
- Complete shutdown systems
- Custom engineered valves and systems

## Automatic Shutdown System



## Selecting the right Air Intake Shutoff Valve

Selecting the right air intake shutoff valve requires specific information about the application and engine.

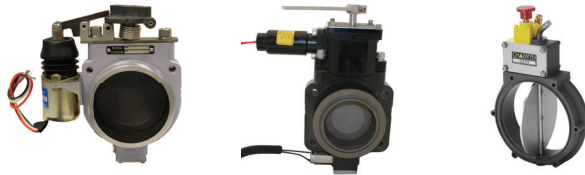
- Application type
- Environment - Inland / Offshore
- Actuation method
- Piping diameter
- Charge air temperature
- Ambient temperature environment
- Position Indication



## Valve Type and Features

### Butterfly Valves

- Compact, light weight design
- Fast acting closure
- Anodized aluminum & stainless steel construction



### Swing Gate Valves

- Wide range of sizes available
- Fast acting positive spring closure
- Wide variety of inlet pipe connections
- High temperature options



### Hazardous Area ATEX Certified Valves

- ATEX Zone 1 IIB T4 applications
- Compact, lightweight butterfly design
- Fail-safe energize to open and
- Energize to close actuation options



### Automatic Self-contained Valves

- Simple, cost effective design
- No power input or speed signal required
- Automatic reset after engine stops
- Easy to install



### Custom Engineered Valves

- Design and manufacture shutoff valves to meet specific engine and application requirements



## Accessories

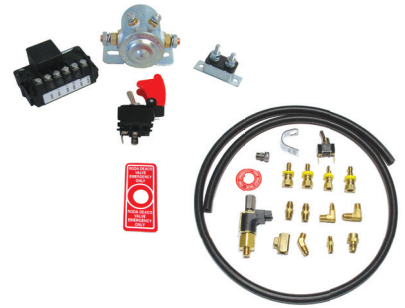
### Installation Kits



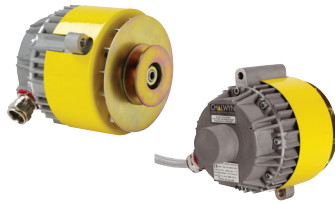
### Speed Switch & Magnetic Pick up



### Actuation Kits



### Flameproof Alternators



### Spark Arrestors



### Wiring Harness Kit



## About us

We have more than 40 years of experience and are the industry leader in manufacturing and providing engine safety shutoff valves and systems to support the oil and gas industry. We have worldwide sales offices with manufacturing facilities in England, Canada and the United States to serve our global markets.

Our broad range of engine safety solutions include AMOT, Chalwyn, Rigsaver and Roda Deaco brands. Find more information about Diesel Engine Safety Solutions on our website.

Contact us or visit [www.dieselsafety.com](http://www.dieselsafety.com).

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