

**Diesel Engine Safety Solutions** 









## **Exhaust Spark Arrestors**







# How does your Spark Arrestor compare?



Chalwyn



Brand A



Brand B

# NEW OFFSHORE/MARINE STANDARDS Are you in compliance?

#### Old Standard: USDA Forestry Certification



## New Standard for Oil & Gas Industry: ASTM F2876-10

"Exhaust systems shall be fitted with a spark arrestor, or other equipment designed and tested to perform the functions of a spark arrestor. EN 1834-1 should be consulted."

#### **Chalwyn Spark Arrestors**

- EN 1834-1 certified
- Deployed globally
- Constructed from Stainless Steel
- Available from 5 HP to 1100 HP
- Meet engine manufacturers' published back pressure specification

### **Exhaust Spark Arrestors**

Chalwyn Spark Arrestors are designed specifically for preventing the risk of fire due to the ignition of flammable materials caused by spark emission from the exhausts of diesel engines.

Exhaust sparks present a high risk of fire in areas containing flammable materials. Countries including the United States, the European Union, Malaysia, Trinidad, and Australia have enacted legislation requiring spark arrestors in the oil and gas drilling and processing, refining, petrochemicals, mining, forestry, agriculture, rail transportation, and pulp and paper, where a stray spark may cause ignition of combustible material. The risk is greatest with diesel engines, where carbon can build up and be ignited. Without a spark arrestor, the high ratio of oxygen in the exhaust pipe when the engine goes off load maintains the heat of partially burnt carbon particles which are then discharged as highly dangerous sparks.

### Efficient Design

Chalwyn Spark Arrestors are designed on the centrifugal principle, which has the effect of spinning the live carbon particles in the exhaust gas at high velocity against the outer casing, and retaining them until they are burnt, rendering them inert before discharge (the use of mesh or gauze with its attendant risk of blocking or burning out has therefore been avoided).

Most Chalwyn Spark Arrestors can replace an existing silencer. They will maintain sufficient noise attenuation for normal industrial use, with no significant increase in back pressure. Where further noise attenuation is required, the units can be fitted in series with a normal silencer. The compact secondary range has minimal silencing and is ideal for mounting end-of-line after an existing muffler. They can be used instead of a muffler in offshore and remote locations where less noise attenuation is acceptable.

Each model of Chalwyn Spark Arrestor has been designed and tested for a level of back pressure to meet engine manufacturers' published back pressure specifications.

### **Tested and Approved**

AMERICAN & INTERNATIONAL STANDARDS MET ASTM F2876-10 Section 5.2.11 SIRA 00ATEX M060.

All Chawyn Spark Arrestors have been stringently tested for their spark arresting abilities. Both the Primary and the Secondary ranges have been independently tested and approved to the latest American, European and International Safety standards for explosive atmospheres.

### Long-lasting

Chalwyn Spark Arrestors are manufactured from **Stainless Steel** (SAS type from carbon steel with stainless steel inner components), ensuring longevity in the harshest conditions for life time cost savings.

#### Low Maintenance

With a well maintained engine the Chalwyn Spark Arrestor design is virtually maintenance free, with no moving or serviceable parts.

## **Quality Company**

Chalwyn's production is quality assessed to ISO 9001.

#### Models available

**Primary - SSL** - silencer replacement type, from 10 to 750 hp **Secondary - SSE** - add-on units, from 5 to 165 hp **Compact - SAS** - suitable for small engines, up to 10 hp **Higher HP** - for units over 750 hp contact factory **Custom** - special units produced to customers' requirements

Detailed datasheets are available upon request for each range.

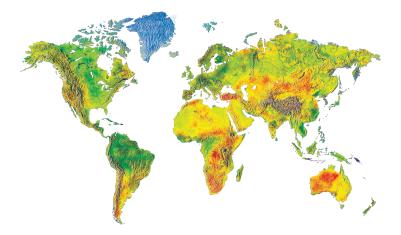








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Chalwyn has a history of almost 40 years in manufacturing engine safety shut down valves to support the oil and gas industry.

In 2008 Chalwyn was acquired by AMOT, a global manufacturer of valves, controls and monitoring solutions for the protection of engines, compressors, turbines and heavy equipment. AMOT has served a wide variety of markets since 1948 including industrial, marine, oil and gas, power generation and transportation.

Together, the AMOT, Roda Deaco and Chalwyn brands offer an extensive family of engine safety solutions.

To find your nearest distributor for Diesel Engine Safety Solutions, please visit the home page of our website and select 'distributors'.

Made in U.K.

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