

**SPARKSHIELD**



Protect your extraction system  
against sparks



SparkShield mounted into ductwork, including two inspection hatches.

## DO YOU CONTROL SPARKS?

**We do.** Plymovent presents the cyclone spark arrester: SparkShield. SparkShield provides virtually 100% protection against sparks and other potential hazards, such as molten debris, and cigarette butts. The SparkShield can be used as a preventive fire measure in welding fume extraction systems to reduce the risk of fire to a minimum.

For over 35 years Plymovent has been specializing in the extraction and filtration of welding and cutting fumes. Being experts in air cleaning we know about the work, the discomforts, and risks welders face on a daily basis. As a result of this, we have come up with solutions in accordance with existing guidelines.

SparkShield is a fire safety product, developed to reduce the risk of fire and to increase the filter's lifespan.

## FIRE PREVENTION

Sparks are a well-known source of fire in the metalworking industry. Extraction systems without a specific spark arrester allow sparks, spatters and dust to reach the combustible filter cartridge and debris in the dust bin. In response, Plymovent developed the SparkShield.

In addition, the SparkShield is also very suitable as pre-separator for high-dust applications.

## HOW DOES IT WORK?

Centrifugal acceleration ensures that sparks are being removed from the continuous airflow. A dustbin collects all remaining sparks at a safe distance from the main filter and away from the main ductwork.

The dustbin can easily be separated and emptied, even during hours of operation.

## COMPACT DESIGN

SparkShield is a compact in-line spark arrester which requires little to no floor space. The patent pending design of the SparkShield ensures almost 100% efficiency\*.

\* removal of well-known fire sources, such as welding and grinding sparks and cigarette butts.

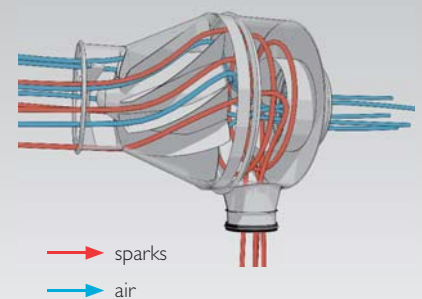
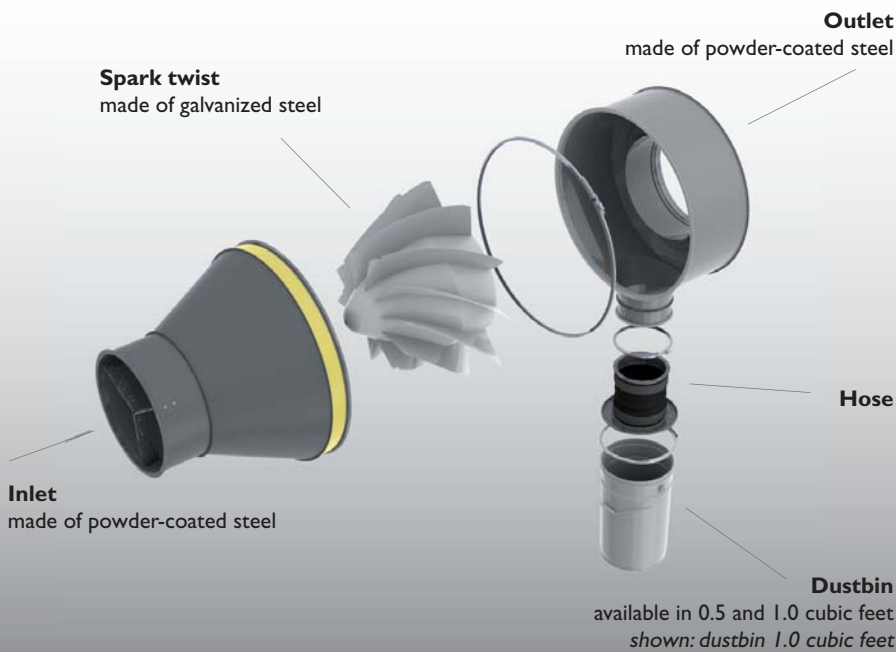


Image: separation of sparks

**SparkShield** prevents sparks, spatters and cigarette butts from entering the ductwork and reaching the filter cartridge and debris in the dust bin. The main components are:



## FEATURES

- Virtually 100% efficiency: in removing sparks and cigarette butts.
- Patent pending, compact in-line design.
- Divisible body: for easy maintenance.
- Duct clamp connections: for easy installation, service and dismantling.
- Optional: inspection hatches for regular checks.



## HIGH-RISK APPLICATIONS

All welding and cutting applications represent a potential fire hazard. SparkShield is recommended to be used in applications<sup>1</sup> with a high risk of fire:

- **Robotic welding of oily stamped parts**, which can produce welding fumes with a low flash point<sup>2</sup>. These can easily be ignited by sparks in the dustbin.
- **Manual, robotic and automatic welding of oily products.** Maintenance is often underestimated in slightly oily applications, which can cause fire even years after installing the system.
- **Cutting tables:** glowing materials from the cutting process entering the ductwork can cause fire.
- **Welding schools:** where (burning) cigarette butts disappear 'unseen' in the extraction system.

<sup>1</sup> Please note that this list is not exhaustive.

<sup>2</sup> Flash point is the lowest temperature at which a liquid produces enough vapors to constitute an ignitable mixture.

<sup>3</sup> The installation of any product(s) not included in the initial design of an extraction system could add additional static pressure to the overall system design. By doing so, the result may be a reduction of airflow at the extraction point.

*Disclaimer: The operation of the extraction and filtration systems can be affected by various factors including proper design, operation, and service/maintenance. Exposure levels should be checked upon installation, periodically thereafter to ensure they fall within applicable OSHA and ACGIH guidelines. Additionally, it is recommended to periodically inspect and when necessary perform maintenance to ensure the lowest possible risk against a fire.*

## EASY INSTALLATION

It is easy to install the SparkShield in existing extraction systems, as SparkShield contains two duct clamps<sup>3</sup>. The duct clamps not only make the mounting part easy, but dismantling can be done easily as well and in sections.

## MAINTENANCE

Unfortunately, lack of maintenance is one of the most common causes of fire. A spark arrester, just like any other equipment, requires maintenance. Unlike competitive products, SparkShield is designed with maintenance in mind. Inspection hatches can be placed around it. They make it possible to look inside the duct work and check whether cleaning is necessary. The devisable body is designed for easy maintenance.



# PLYMOVENT®

clean air at work

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Your authorized Plymovent distributor:

## PLYMOVENT OFFERS TOTAL SOLUTIONS FOR AIR CLEANING

For over 35 years, Plymovent has been gaining experience in the field of air cleaning. We not only have extensive knowledge of the extraction and filtration of welding fumes, grinding dust and oil mist in the metalworking industry, but we are also specialized in the extraction of vehicle exhaust fumes, the removal of tobacco smoke and other indoor air pollution.

Plymovent Corp. is ISO 9001:2008 Certified



## FIRE RISK UNDER CONTROL

Plymovent understands the causes of fire at different welding applications in the metalworking industry better than anyone. SparkShield is part of Plymovent's *SHIELD fire safety solutions*. This is a total concept to prevent, detect and suppress fires in welding fume extraction and filtration systems. Our SHIELD program, combined with our know-how and field experience, makes it possible for us to offer you a tailor-made solution that will keep fire risks under control.

For more information please contact your authorized Plymovent distributor or visit [www.plymovent.com](http://www.plymovent.com).

*Plymovent cares about the air you breathe. We offer products, systems and services which ensure clean air at work, anywhere in the world.*

*We respect the environment and we deliver high-quality products. Our expertise gained over many years and our genuine commitment to customer requirements enable us to provide precisely the solutions you need.*