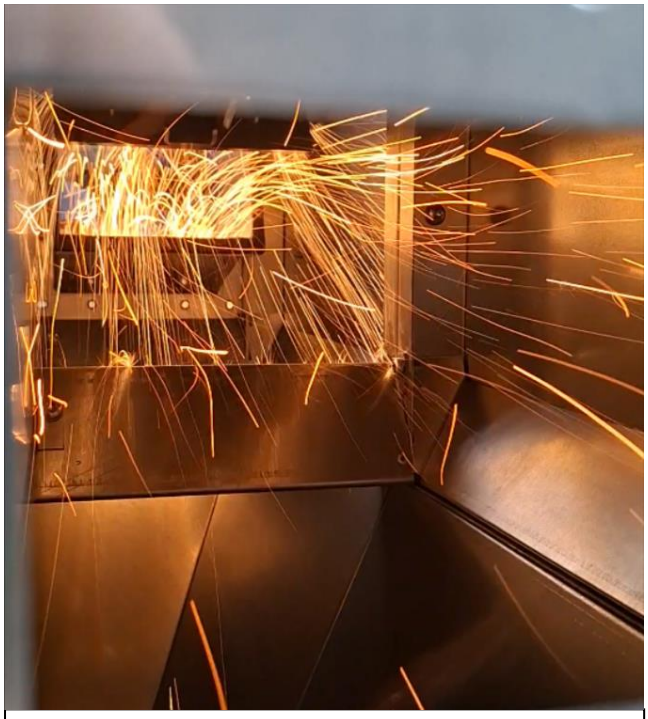
MCP-12S-APT Spark Screen Kit

The spark screen kit is a passive protection accessory designed for use with the MCP-12S-APT ambient air filter. Its primary function is to reduce the ingress of sparks and hot particulate generated during metal grinding and welding operations into the filter unit.

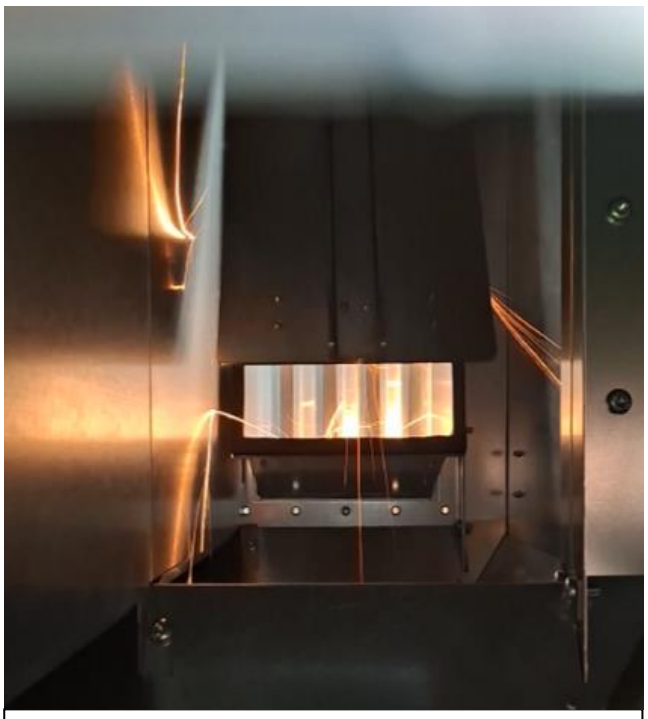
Design and Operation

The kit is installed as a box mounted directly on the filter inlet. Inside, it features two rows of baffles that create a labyrinth structure. This internal geometry disrupts airflow, causing sparks and hot particles to lose energy, change direction, and be captured before they can proceed into the filter housing. The design achieves this with limited additional pressure drop and without any significant increase in system noise levels

Integrated apertures in the lower frame allow the captured particles to fall safely onto the workshop floor. From there, they can be easily collected, vacuumed, or disposed of as part of standard housekeeping procedures.



Inside the dust collector without spark screen



Inside the dust collector with spark screen fitted.

Technical data

specification	standard
Part number	73009790
No of elements in the kit	2
Pressure drop at full airflow	150 Pa
Dimensions as installed L x W x H [mm]	723x563x140
Weight	19,8kg

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Installation and Compatibility

- Can be ordered as an option with new MCP-12S-APT units
- Fully compatible as a retrofit solution for all existing installations, including early-generation units
- Configurable for installation on any inlet arrangement, allowing adaptation to site-specific layouts and application requirements

Operational Limitation

The spark screen provides effective reduction of spark carryover while maintaining airflow performance. It significantly decreases the probability of sparks entering the filter housing.

However, the device operates as a passive mechanical separator and does not constitute an active spark detection or suppression system. As such, it cannot eliminate the risk of fire.

To further mitigate risk, it is recommended to:

- Maintain adequate distance between grinding operations and the unit
- Avoid direct alignment between grinding stations and inlet openings
- Optimize inlet positioning relative to process layout