## Fume Extraction for Mild Steel Welding Processes

In January 2020 weld fume from mild steel was reclassified as a "Possible Carcinogen" as a result the exposure limits have changed and Fume extraction must be in place for all indoor welding activities. The HSE have made us aware that part of their strategy for 2021/22 is to carry out strict enforcement of the new requirements.

There are some excellent solutions out there but they all have their pros and cons.



Portable & Fixed Extraction Systems

Portable and fixed extractors are a great solution for bench work but they rely on the user positioning the hood over the weld, this can be tricky when working on longer sections such as structural steel sections or tank work. Smaller units are available for on site welding.



**Fume Extraction Torches** 



**Fume Bench Solution** 

Fume benches are great for smaller components such as small frames but are costly to install and take up a lot of space relative to the pieces.

The challenge for larger manufacturers working in large open shops and working on large pieces is how do we find a solution that requires minimal positioning, can reach either end of larger sections and will not affect the integrity of the weld?

Fume extraction torches are a good compromise solution. Hoses connected to both a portable filter unit and direct to the torch using a vented shroud you can be sure the extraction is always at the source of the fume. The torches are light enough to use all day and the quality of weld is not affected.

## **Key Points:-**

- There is no "one size fits all" solution to the weld fume extraction problem and most welding consumable providers will offer trials of different systems but there are solutions out there to keep welders safe.
- Please also be aware the systems should be used in conjunction with Powered Respirators where you cannot be sure you are extracting 100% of the Fume.

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