



# Choosing a Fume Arm

A fume extraction system is only effective when it efficiently removes indoor pollution. APC extraction arms have been designed to reduce potentially dangerous airborne pollutants by capturing them at source. Careful selection of an APC arm must be made to best provide the solution to the fume issues. Extraction capacity and correct positioning of an arm are both paramount to efficient extraction, and certain processes and applications can require specific arm lengths and diameters.

## Diameter

The diameter of an arm affects airflow and 'pickup velocity', and therefore determines the process for which a certain arm is suitable.

Diameter (mm)	Low / High Vacuum	Velocity (m <sup>3</sup> /hr)	Comments
125/160/200	Low	1,000	Extraction arms with a relatively wide diameter will extract fumes, airborne dust and gases from an area of 0.5m <sup>3</sup> when the extraction hood is positioned 0.3-0.4mtr from the source. The hood can thus be less precisely positioned. We recommend 200mm arms for gases and vapours.
75/100	Low	150-500	Extraction arms with a medium size diameter can be used for low volume applications, such as soldering, laboratory fumes and spot welding. Used with a higher airflow, these arms are suitable for dust, welding in restricted spaces and oil mist applications.
Up to 50	High	~ 150	Arms with narrower diameters or with small nozzles will extract only at a distance of 5-10cm from the nozzle. As the positioning of arms of this diameter must be very precise, they are suitable only for portable units.

## Length

The length of an arm determines where it will be mounted for efficient extraction of the areas around the work station. Wall or column mounted extraction arms are easier to position and less subject to the kind of wear and tear associated with portable or mobile units.

