



from Associated Equipment Corp.

## www.aceindustrialproducts.com

## Filter Selection Guide Mobile Welding Fume Extractors

## **PROGRESSIVE FILTRATION**

Most Ace fume extractors employ a method called progressive filtration. Progressive filtration utilizes a low efficiency pre filter to first capture large particles, such as dust, dirt, rust, mill scale, etc., and then passes the finer particulate on to a high efficiency main filter. Progressive filtration helps ensure that the main filter is optimized for the capture and containment of the finest, and potentially most hazardous, particulate.

Exceptions to this method are found in our cleanable filter extractors 73-851 and 73-851DA.

FILTER TYPE	<b>APPLICATION</b>	73-601	73-601DA	73-701	73-801	73-801DA	73-851	73-851DA
Pre Filter	All Welding <sup>1</sup>	91-956-3	91-956-3	91-955-6	91-956-3	91-956-3	NA	NA
Pre Filter	Odor Control <sup>2</sup>	91-937	91-937	91-937	91-937	91-937	NA	NA
Pre Filter	Oil Mist³	91-958	91-958	91-958	91-958	91-958	NA	NA
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Main Filter	Stainless Steel⁴ (HEPA)	91-999	91-999	91-799	91-999	91-999	NA	NA
Main Filter	Carbon Steel⁵ (95%)	91-853	91-853	91-795	91-853	91-853	NA	NA
Main Filter	Large Particle <sup>6</sup> (65%)	91-854	91-854	NA	91-854	91-854	NA	NA
Cleanable	All Welding <sup>7</sup> (99%)	NA	NA	NA	NA	NA	91-990	91-990

<sup>&</sup>lt;sup>1</sup> Pleated pre filters should be used in virtually all filtering applications, except where indicated below. Ace standard pleated pre filters are rated at 40% efficiency @ 5 microns, equivalent to MERV 9.

<sup>&</sup>lt;sup>2</sup> Odor control pre filters are very low efficiency pre filters used especially for the control of weld smoke odors. 91-937 are to be used in pairs, or in conjunction with a 91-955-6 standard pleated pre filter.

<sup>&</sup>lt;sup>3</sup> Oil control pre filters are very low efficiency pre filters used for the control of light oil mist. The filter is washable. 91-958 is to be used in pairs, or in conjunction with a 91-955-6 standard pleated pre filter. Do not use for machining operations.

<sup>&</sup>lt;sup>4</sup> HEPA filters should be used for stainless steel welding or for processes where the highest degree of filtration is necessary.

Stainless steel welding produces Hexavalent Chromium, and HEPA filtration is an important tool for the capture and containment of this substance. Avoid using HEPA filters in general welding applications, as HEPA filters tend to consume at a faster rate than less efficient filters.

Ace HEPA filters are rated 99.97% @ .3 microns.

<sup>&</sup>lt;sup>5</sup> Carbon steel filters, otherwise known as 95% filters, should be used for most all welding operations except where HEPA or 65% filtration is necessary. Ace 95% filters are rated at 95% efficiency @ 5 microns, equivalent to MERV 15.

<sup>&</sup>lt;sup>6</sup> Large particle filters, otherwise known as 65% filters, should be used when welding on dirty or rusty material, where flaking would quickly clog a higher efficiency filter. Ace 65% filters are rated at 65% efficiency @ 5 microns, equivalent to MERV 11.

<sup>&</sup>lt;sup>7</sup> Cleanable filters are all purpose high efficiency filters specially designed to be cleaned after each use. These filters can only be used in Ace extractors that are designed for cleaning applications. They are not interchangeable with other Ace extractors. Do not use a cleanable filter extractor where HEPA filtration is advised. Ace cleanable filters are rated at 99% @ 5 microns, equivalent to MERV 16.