

Other considerations

When using industrial vacuum cleaners or dust extractors to capture dust from power tools:

- make sure the machine has sufficient power and capacity to keep up with the amount of dust and the speed at which it is generated
- choose machines with on-demand start and automatic filter clearing/knocking for use with on-tool dust extraction
- for heavy dust loads, use an in-line dust separator (cyclone) between the tool and the machine to extend the life of the filter.

Worker information and training

Provide workers with information, instruction and training on how to use the machine and the type of dust, including the safe method of removal and disposal of the material collected.

What to expect from an inspector

Inspectors will take enforcement action where substandard machines are used, such as using an L-class machine to capture respirable crystalline silica dust. An inspector will expect to see a safe work method statement has been prepared and followed for all construction tasks where respirable crystalline silica dust may cause airborne contamination.

Further information

Visit worksafe.qld.gov.au and search:

- H-class vacuum cleaners
- local exhaust ventilation
- respirable crystalline silica.



Selecting the right portable extractor or industrial vacuum cleaner for hazardous dusts

Capture and contain dust in the workplace

Many work processes generate dust. The more hazardous the dust, the more important it is to contain it before it can be breathed in. Using power tools fitted with dust extraction and vacuuming up settled dust are two effective ways to minimise the risk of dust being breathed in.

Use an industrial-rated vacuum or dust extractor

Dust extractors and industrial vacuum cleaners must be properly designed and rated to make sure the dust is safely captured and contained. Domestic-rated vacuums, even those fitted with HEPA filtration, are neither guaranteed to provide a suitable level of protection, nor designed to be used in a commercial environment.


Select the right class for the type of dust

Industrial vacuums and dust extractors rated for use with hazardous dusts are classed as L, M or H.

 Note: HEPA does not mean H-class.



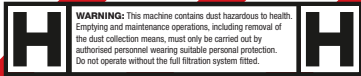
M and H-class machines have features which improve safety when handling medium and high hazard dusts including:

- the safe removal of dust collection bags
- an alarm indicator when the air flow falls below 20 metres per second
- the prevention of accidental entry and release of hazardous dust when not in use.

 Note: L-class machines cannot be upgraded to an M or H-class by adding a better filter.

The table below provides examples of hazardous dusts and the required class of machine.

Classes, filtration and suitability of industrial vacuum cleaners (AS/NZS60335.2.69)

L (light hazard) dust class	M (medium hazard) dust class	H (high hazard) dust class
		
99% filtration efficiency	99.9% filtration efficiency	99.995% filtration efficiency
<p>Suitable for:</p> <ul style="list-style-type: none"> • dusts with a workplace exposure standard > 1 mg/m₃ (8-hour TWA*) • gypsum/plaster • aluminium • general dust and dirt. 	<p>Suitable for:</p> <ul style="list-style-type: none"> • dusts with a workplace exposure standard ≥ 0.1 mg/m₃ (8-hour TWA*) • wood dusts (e.g. MDF). 	<p>Suitable for:</p> <ul style="list-style-type: none"> • dusts with a workplace exposure standard < 0.1 mg/m₃ (8-hour TWA*) • dusts contaminated with carcinogens or pathogens • respirable crystalline silica (RCS) • lead dust and fumes • asbestos.
<p>Note: H Class vacuum is required under the <i>Managing respirable crystalline silica dust exposure in the stone benchtop industry Code of Practice 2019</i>. Both M and H-class machines are accepted for construction dust containing RCS.</p>		

*8-hour time-weighted average (TWA) is the maximum average airborne concentration of a substance when calculated over an eight-hour working day, for a five-day working week. Further guidance on workplace exposure standards is available at safeworkaustralia.gov.au/exposure-standards.