

# Husqvarna dust extractor classifications.

Different applications and markets require different classifications. The most common are H-classified or HEPA-filter classified dust extractors. In this information sheet the **HEPA-filter classifications** and the **H-classification** are presented.

Please note that what the dust extractors can be used for differs in each market. This guide will only provide information about Husqvarna's dust extractors and the classifications, not what they can be used for in each individual market. For information regarding use and applications see www.husqvarnacp.com

#### HEPA (HIGH EFFICIENCY PARTICULATE AIR FILTERS)

HEPA is a strict standard (EN1822:2009) divided into eight different levels (Table A). Husqvarna provide level H 13 filters, which are designed to separate > 99.95 % of the particles hardest to capture (typically between  $0.15 - 0.30 \mu m$ ). All of Husqvarna's HEPA filters are DOP-tested to ensure a filtration level > 99.99 % at  $0.3 \mu m$ , surpassing the US standard MIL-STD-282.

### TABLE A

- EPA 10 EPA 12: Efficiency Particulate Air Filter
- HEPA 13 HEPA 14: High Efficiency Particulate Air Filter
- ULPA 15 ULPA 17: Ultra Low Penetration Filters

EN1822 - 2009				
FILTER CLASS	VALUE - EFFICIENCY (%)	VALUE – PENETRATION (%)		
E10	OE	15		
F11	95	5		
E12	99.5	0.5		
H13	99.95	0.05		
H14	99.995	0.005		
U15	99.9995	0.0005		
U16	99.99995	0.00005		
U17	99.999995	0.000005		

Husqvarna dust extractors that use HEPA H13 filter(s):

S 13, S 26, S 36, S 36 Propane, T 7500, T 8600, T 8600 Propane, T 10000, T 18000, A 600 / A 1000, A 1200 / A 2000 (W 70 / W 70 P and DC 6000 can also be equipped with

## **H-CLASSIFICATION**

The H-classification is an international standard that certifies the entire product, not only the filters (IEC-60335-2-69, EN-60335-2-69 Annex AA). The standard is categorized into three requirement levels: Low, Medium and High (Table AA.1). Certified Husqvarna dust extractors meet the High (H) standard since it's the most stringent and suitable when working with hazardous material such as silica dust.

Filtration requirements of a complete unit need to reach a filtration efficiency level of > 99.995 % of dust with a particle size distribution of 10 % <1 mm, 22 % <2 mm and 75 % <5 mm. The Husqvarna DOP-test filtration level > 99.99 % @ 0.3 mm surpasses this. The H-classification also requires dust free handling. Therefore, Husqvarna dust extractors use the Longopac<sup>®</sup> dust collection system to prevent user exposure to dangerous dust.

Note that just having an H-certified filter does not mean that the complete unit is approved.

The following Husqvarna dust extractors are H-classified, certified by a third party: S13, S26, S36, T7500

All H Class machines must be clearly labelled with the below sticker:



Figure AA.1 - Warning label for dust class H machines

## **TABLE AA.1 – PENETRATION LIMITS**

Dust class	Suitability for hazardous dust with limit values for occupational exposure mg × m <sup>-3</sup>	Degree of penetration D %	Essential filter material test	Essential filter element test	Assembled machine test method
L (light hazard)	>1	< 1	22.AA.201.1 or 22.AA.201.2	Not required	22.AA.201.3 if essential filter material test is not carried out
M (medium hazard)	≥ 0.1	≤ 0.1	22.AA.201.1 or 22.AA.201.2	Not required	22.AA.201.3
H (high hazard)	< 0.1 including carcinogenic dusts and dusts contaminated with carcinogens and/or pathogens	< 0.005	Not required	22.AA.201.2	22.AA.201.3

Machines of similar construction and with identical essential filter and mountings and with an identical airflow velocity may be treated equally.

Machines designed for picking up wood dust and mineral dust (containing quartz) shall be at least of dust class M.



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