

DELFIN · II 1/3D EX H TB IIIC T80°C (INT) /T95°C (EXT) DA/DC

Delfin DM2 1/3D INERT



The Delfin DM2 1/3D INERT is the larger model in the DM2 series: 37 litres of neutralising liquid bath (44 L total tank) in AISI 304, 360 m³/h airflow from a single-phase bypass motor at 2.3 kW, and HEPA H14 final filtration with 26,000 cm² filter surface. ATEX-certified for Zone 22 with internal Zone 20 (II 1/3D Ex h tb IIIC). Used where collection volume and airflow are critical -- central cleanups after light-metal machining, larger ammunition facilities, and process plants with pyrophoric powders where Zone 22 is the norm.

APPLICATIONS

- Larger ammunition facilities and military production sites
- Central cleanup after 3D printing and powder metallurgy in Zone 22
- Light-metal machining in aerospace: aluminium and titanium grinding
- Process plants with pyrophoric powders and Zone 22 classification
- Battery production with reactive anode metals in ATEX areas

Technical specifications

ATEX marking	II 1/3D Ex h tb IIIC T80°C (Int) /T95°C (ext) Da/Dc
Internal / external zone	20 / 22
Motor type	1-faset bypass-motor (2,3 kW, 10 A)
Airflow	360 m ³ /h
Vacuum	245 mbar (2500 mmH ₂ O)
Container	44 L
Sound pressure	74 dB(A)
Filter class	H class
Filter type	HEPA H14 (EN 1822-5), 99,995 % MPPS, 26.000 cm ² filterflade
Primary filter	Stjerne/taske polyester ANT M-klasse antistatisk, 30.000 cm ² , diameter 500 mm
Cleaning system	Manuel filterrensning + indikator for tilstopning
Collection system	INERT neutralisation bath
Material	AISI 304 rustfrit staal (beholder)
IP class	IP64
Power	2.3 kW
Current	10 A
Voltage	230 V / 50-60 Hz
Inlet	Diameter 50 mm
Dimensions (L x W x H)	770 x 660 x 1680 mm
Weight	90 kg

Questions and answers

What does INERT mean in this context?

INERT denotes a vacuum cleaner with a neutralising liquid bath in the collection tank. Dust is channelled directly into the liquid and inactivated immediately, so it cannot react with oxygen, heat or sparks. The technology is developed for reactive metallic dust (aluminium, titanium, magnesium, zirconium, lead dust from shooting ranges), where conventional dry collection would itself be an ignition source.

Is the INERT system tested to EN 17348:2022?

Yes. The entire Delfin INERT range is performance-tested to EN 17348:2022 -- the harmonized European standard for industrial vacuum cleaners in ATEX zones. The test confirms that the neutralisation bath actually inactivates reactive dust under real operating conditions, not just in a lab setup. Documentation available on request.

What types of dust is INERT technology intended for?

Reactive metallic dust: aluminium and aluminium alloys, titanium, magnesium, zirconium, fine iron powder, lead dust and primer residue from shooting ranges, and pyrophoric powders from aerospace and defense. For non-reactive dust (organic process dust, plastics, etc.) the INERT technology adds no further safety -- a standard ATEX or ACD model without liquid bath is selected instead.

How does the HEPA H14 final filter work together with the liquid bath?

The neutralisation bath inactivates dust at the moment of collection, but there will always be a fine aerosol fraction that passes the liquid surface. The HEPA H14 filter captures 99.995 % of particles down to 0.3 micrometres per EN 1822-5 (MPPS method) before exhaust. The combination secures both safe collection (no reactive dry particle) and clean exhaust (no health-hazardous aerosol). The filter is Included/Incluso as standard on all INERT models.

Contact and advisory

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