

3D PRINTING • ELECTRIC • ATEX II 1/2D • ZONE 20 (INTERNAL) / ZONE 21 (EXTERNAL)

MTL 301 1/2D

Compact electric ATEX vacuum cleaner for combustible plastic powder from medical and dental 3D printing. Zone 20 internal tank protection and Zone 21 external (Db) — the broadest external dust zone certification in Delfin's MTL range. HEPA H14, AISI 304 and M-class antistatic disposable bag included. Certified by IMQ and IECEX.

- ATEX II 1/2D — Zone 20 internal (Da) • Zone 21 external (Db) • IMQ + IECEX
- HEPA H14 — 99.995 % at MPPS • EN 17348 (Dry Type DT)
- ESD safe • Dust Tight IP64 • M-class antistatic disposable bag included
- Full stainless steel AISI 304 construction • 40 L
- Bypass motor 1.1 kW • 215 m³/h • 74 dB(A) • brushless motor available
- Manual filter shaking • filter indicator • accessory kit included



MTL 301 1/2D — compact electric ATEX vacuum cleaner with Zone 20 internal and Zone 21 external for 3D printing

ATEX 2014/34/EU — II 1/2D • T80°C (Int) Da / T95°C (ext) Db • IMQ Certified (NB 0738) • IECEX — 3rd party • EN 17348 — Dry Type DT • Dust Tight IP64 • HEPA H14 — EN 1822-5 • M-class filter (IEC 60335-2-69)

Quick facts	
ATEX	II 1/2D
Zone (internal)	Zone 20 (Da) • T80°C
Zone (external)	Zone 21 (Db) • T95°C
Certification	IMQ (NB 0738) + IECEX
HEPA filter	H14 — 99.995 %
Airflow	215 m³/h
Vacuum pressure	2250 mmH ₂ O
Power	1.1 kW
Noise level	74 dB(A)
Tank capacity	40 L
Weight	26 kg
Voltage	115–230 V

Zone 21 external — the broadest external dust zone certificate in the class

The MTL 301 1/2D is Delfin's ATEX vacuum cleaner with the broadest combined zone certification in the MTL range for 3D printing: Zone 20 internal (category 1D, EPL Da) and Zone 21 external (category 2D, EPL Db). This makes it the only model in the range that may be placed in production environments classified as external Zone 21 — areas where an explosive dust atmosphere may occasionally be present in the surroundings under normal operating conditions. Zone 21 is more stringent than Zone 22 and demands a higher external protection level (Db over Dc).

The unit is 3rd party certified by both IMQ (NB 0738) and IECEx, providing both EU ATEX coverage and international recognition in more than 30 countries including Norway, Switzerland, Australia and the Gulf States. The Dust Tight IP64 rating on the motor unit ensures that neither dust nor liquid can reach the electrical system.

HEPA H14, M-class filter and brushless motor option

The filter system consists of a primary Star/Tasche filter in antistatic polyester class M (IEC 60335-2-69) and a HEPA H14 safety filter (99.995 % at MPPS, EN 1822-5). An M-class antistatic disposable bag is included as standard — the bag collects the vacuumed powder and can be changed hygienically without direct operator contact. Manual filter shaking dislodges accumulated dust from the filter without opening the machine.

The standard motor is a 1.1 kW bypass motor delivering 215 m³/h at 2250 mmH₂O vacuum pressure. A brushless motor is available as an option for environments requiring longer motor service life. Noise level is 74 dB(A) (EN ISO 3744). The unit operates on 115–230 V single phase, making it suitable for both European and international installations. At 26 kg, it is compact enough to move easily between 3D printers.

Technical specifications

Parameter	Value
ATEX marking	II 1/2D — Ex h tb IIIC T80°C (Int) / T95°C (ext) Da/Db
ATEX zones	Zone 20 internal (Da) • Zone 21 external (Db)
Certification	IMQ Certified (NB 0738) + IECEx — 3rd party
Harmonised standard	EN 17348 — Dry Type DT (combustible dust)
Dust protection	Dust Tight IP64
Primary filter	Star/Tasche — polyester ANT M (IEC 60335-2-69)
Primary filter area	4,000–360 cm ²
Safety filter	HEPA H14 (EN 1822-5) — 99.995 % at MPPS
HEPA filter area	11,000 cm ²
Filter cleaning	Manual shaking
Motor type	Bypass (brushless motor available)
Power	1.1 kW / 1100 W
Voltage	115–230 V, 50/60 Hz, single phase
Airflow	215 m ³ /h
Vacuum pressure	2250 mmH ₂ O
Noise level	74 dB(A) (EN ISO 3744)
Suction inlet	Ø50 mm
Tank capacity	40 L
Tank and construction	Stainless steel AISI 304
Collection system	M-class antistatic disposable bag (included)
Dimensions	44 × 42 × 84 cm (L×W×H)
Weight	26 kg
Duty cycle	Intermittent
Operating temperature	–5°C ≤ Ta ≤ +37°C
ESD safe	Yes — antistatic construction

Compliance and standards: ATEX Directive 2014/34/EU • EN 17348 (combustible dust, Dry Type DT) • EN 1822-5 (HEPA filter test) • IEC 60335-2-69 (M-class filter) • EN ISO 3744 (noise measurement). 3rd party certified by IMQ (NB 0738) and IECEx.

Accessories



Accessory kit TA.0527.0000 for MTL 301 1/2D — included

Accessory kit (TA.0527.0000)



M-class antistatic disposable bag for MTL 301 1/2D — included

M-class antistatic disposable bag (FI.0469.0000)

CONTACT

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