

TIGER-VAC · II 2GD EX D IIA T3 GB / EX T IIIC T200°C DB IP6X -- LCIE 03 ATEX 6297 -- EN 17348

Tiger-Vac EXP1-20L (DT) RE HEPA (MFS)



The Tiger-Vac EXP1-20L (DT) RE HEPA (MFS) is built for production workflows where dust needs to come out fast and clean -- the 25 L detachable tank (DT) lifts off the cart in seconds and can be emptied without disturbing the filter assembly above. Certified II 2GD to EN 17348 DT for Zone 1 gas + Zone 21 dust. A manual filter shaker (MFS) resets airflow without filter change, and the 50 mm suction inlet gives headroom for coarser fractions than the 38 mm models in the range. H14 HEPA filter and ISO Class 4 cleanroom compatibility are standard.

APPLICATIONS

- Pharma production where filled tanks must be swapped without downtime
- Finely pulverised product residues after blending, granulation or filling
- Chemical batch production with changing fractions and frequent emptying
- Workflows using 50 mm hose (larger particles, faster emptying)
- Tall production-cell layouts where tank and motor section are handled separately

Technical specifications

ATEX marking	II 2GD Ex d IIA T3 Gb / Ex t IIIC T200°C Db IP6X -- LCIE 03 ATEX 6297 -- EN 17348
Internal / external zone	-- / 21
Motor type	1-faset TEFC-motor, eksplosionssikret (Ex d IIA T3 Gb / Ex t IIIC T200°C Db), 1.0 kW / 4.5 A
Airflow	224 m ³ /h
Vacuum	152 mbar (1550 mmH ₂ O)
Container	25 L
Sound pressure	78 dB(A)
Filter class	H class
Filter type	HEPA H14 (EN 1822-5, 99.995 % @ 0.3 µm MPPS), 211027B
Primary filter	Statisk ledende PTFE-hovedfilter 215177A med pakning, tætning og rustfri snore, koblet paa traadbur 214880B
Cleaning system	Manual Filter Shaker (MFS) -- manuel rystemekanisme paa motortoppen
Collection system	Detachable container
Material	AISI 304 rustfri staa
IP class	IP6X
Power	1.0 kW
Current	4.5 A
Voltage	230 V / 50 Hz / 1~
Inlet	Diameter 50 mm
Dimensions (L x W x H)	660 x 560 x 1090 mm
Weight	45 kg

Questions and answers

What does II 2GD mean in the ATEX marking?

II 2GD means category 2 for both gas and dust. The unit may be used in areas where explosive atmospheres OCCASIONALLY occur during normal operation -- that is external Zone 1 for gas and Zone 21 for dust. Category 2 does NOT cover the interior of the equipment (Zone 0/20) -- that requires category 1. EN 17348:2022 is the harmonised standard that specifies test requirements for vacuums in this category.

Can I use the model in Zone 0 or Zone 20?

No. II 2GD requires category 2 externally -- Zone 1 gas and Zone 21 dust. Zone 0 (gas continuously present) and Zone 20 (dust continuously present) require category 1 equipment, which for vacuums is typically marked II 1/2GD or II 1GD. Choose e.g. the Delfin AIREX 1/2D-2/2G range for internal Zone 20 + external Zone 1/21.

What is the advantage of the detachable tank (DT)?

The 25 L tank lifts off the cart in seconds. When the tank is full, it is swapped for a new one without dismantling the unit, opening the filter section or moving the motor head. This eliminates downtime in production and reduces exposure during emptying -- important in pharma, API production and other settings where time windows are tight and cross-contamination must be minimised.

How does the Manual Filter Shaker (MFS) work?

MFS is a manual shaking mechanism on the motor head. A lever or rod shakes the main filter for a few seconds and dislodges dust cake without removing the filter. This restores airflow instead of requiring a filter change -- especially effective on fine powders that quickly clog cloth or PTFE filters. No combustion, no vibration during operation, no electrical components.

Contact and advisory

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