

DEPURECO · II 1/2D C T100°C

Depureco AC 100 Z20/21



The AC 100 Z20/21 is the large 1/2D variant: same pneumatic Venturi tube drive, same H14 absolute filter (28,000 cm² fiberglass) included as standard, same ATEX marking II 1/2D c T100°C (Zone 20 internal + Zone 21 external) -- but a 100 L container instead of 65. Noteworthy is that Depureco builds the larger collection into the *same* chassis height (1200 mm) and practically the same weight (66 kg) by widening the container diameter inward rather than stacking upward. It is the model for pharma production lines where collection fills fast, or for long-running CIP/WIP cleaning campaigns where the operator does not want to stop for emptying mid-procedure. Flow (480 m³/h), vacuum (500 mbar), air consumption (1233 NI/min at 6-8 bar) and sound level (70 dB) are unchanged from the AC 65 Z20/21 -- the only thing that grows is the container volume.

APPLICATIONS

- Pharma production line with long campaigns (1 empty per shift)
- Continuous clean-in-place on battery electrode mastering
- Central user installation where multiple process points empty into the same vac
- Operation in Zone 20 internal where service interval must be maximised
- Replacement of a static dust collector in a maintenance central

Technical specifications

ATEX marking	II 1/2D c T100°C
Internal / external zone	20 / 21
Motor type	Venturi tube (enkelt), pneumatisk drift (trykluft 6-8 bar)
Airflow	480 m ³ /h
Vacuum	500 mbar (5097 mmH ₂ O)
Container	100 L
Sound pressure	70 dB(A)
Filter class	H class
Filter type	Stjernefilter antistatisk polyester klasse M, 24.000 cm ² + H14 absolutfilter 28.000 cm ² fiberglass (inkluderet som standard)
Primary filter	Stjernefilter antistatisk polyester klasse M, 24.000 cm ²
Cleaning system	Manuel filterrens
Collection system	Detachable container
Material	Lakeret staalkonstruktion, AISI 304 stoev- og kammerbeholder
Air consumption	1233 nl/min
Supply pressure	6-8 bar
Air supply hose	Diameter 12 mm
Venturi units	1 pcs
Inlet	Diameter 80 mm
Dimensions (L x W x H)	660 x 800 x 1200 mm
Weight	66 kg

Questions and answers

Can the AC 100 Z20/21 be operated by a single operator?

Yes for normal emptying. The chassis weighs 66 kg empty -- only 2 kg more than the AC 65 Z20/21 despite 35 L extra container volume -- and it is fitted with larger wheels and a handle designed for single-operator manoeuvring. The container is hook-based and can be rolled out of the chassis; fully loaded weight depends on the substance but rarely exceeds 110 kg in full collection -- where a hydraulic tip bracket can be fitted as an option. If the emptying unit exceeds 100 kg daily, we recommend Depureco's auto-detach kit (A1120).

Is it over-dimensioned for Zone 22?

Only if your installation is pure Zone 22 (internal + external) and you have no CMR or lithium content. Zone 22 with a HEPA requirement is still a good use for the 1/2D variant because the H14 is standard. Over-dimensioning is only an economic concern -- technically the unit is unambiguously safe.

How much dust can the container hold?

100 L will typically contain 30-80 kg of dust depending on particle size and density. For lithium powder (bulk density 0.5 kg/L) this is around 50 kg; for metal grinding swarf (2.5 kg/L) around 250 kg -- but the container typically signals for emptying at around 60 % fill via the dust sensor. Count on 60-80 L as real serviceable capacity.

Must the compressor be ATEX-certified?

Normally no -- the compressor stands outside the ATEX zone and delivers compressed air via hose to the vacuum inside the zone. The key certification is that the air hose and quick-coupler can withstand being in internal Zone 20 (antistatic + grounded). Depureco supplies antistatic hoses as standard, but verify installation if you are retrofitting your own.

Contact and advisory

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