

DEPURECO . .

Depureco FILTERING PRE-SEPARATOR 450 WB



A **pre-separator** is installed upstream of the main filter unit (DV AIR / DV AIR WB) and catches coarse particles **before** they reach the main filter's cartridges. This significantly extends the main filter's life, reduces pressure drop in the system and saves compressed air for the pulsejet cleaning. The Depureco FILTERING PRE-SEPARATOR 450 WB is a **passive pre-separator with integrated 65 L painted steel container** (non-ATEX) for central vacuum systems. The unit has a **star filter class M** (24,000 cm² antistatic polyester), inlet Ø70 mm on the vacuum unit side and Ø80 mm on the vacuum spot side. Dust is collected directly in the integrated 65 L container, which can be emptied manually or via an automatic option -- **no separate discharge system needed**. SP-Reverse jet pulsejet cleaning is **optional** at this size. The unit is **passive** and **must be mandatorily combined with a vacuum unit** (CVS Z22 or CVS ROOTS Z22). Footprint 450 x 450 mm, height 1514 mm. Note: **not ATEX-certified**.

APPLICATIONS

- Upstream pre-separator for central vacuum systems with smaller dust volumes
- Integrated painted steel container -- no separate discharge system needed
- Combined with CVS Z22 or CVS ROOTS Z22 vacuum unit + DV AIR/DV AIR WB main filter
- Star filter class M (24,000 cm²)
- SP-Reverse jet cleaning optional
- Turn-key for simple duty cycles -- manual or automatic container emptying
- Non-ATEX -- for non-explosive dust environments

Technical specifications

ATEX marking	-
Internal / external zone	- / -
Motor type	Ingen motor -- passiv pre-separator; luftflow leveres af tilknyttet sugeaggregat
Container	65 L
Filter class	M class
Filter type	Star-filter klasse M (24.000 cm ² antistatisk polyester, EN 60335-2-69 / IFA-BGIA M-PES)
Primary filter	Star-filter (antistatisk polyester), 24.000 cm ² total
Cleaning system	SP-Reverse jet pulsejet-rens (trykluft-drevet, differenstryk-styret) -- **valgfrit tilvalg**
Collection system	Detachable container
Material	Lakeret staal-kabinet, 65 L malet staal-beholder
IP class	-
Voltage	-
Dimensions (L x W x H)	450 x 450 x 1514 mm

Questions and answers

What is a pre-separator and why use one?

A pre-separator is a passive filter unit placed between the suction point and the main filter unit. Its role is to **catch the coarse particles first**, so the main filter unit (e.g. DV AIR or DV AIR WB) only has to handle the fine residual dust. This gives three concrete benefits: (1) the main filter's cartridges last longer (less load), (2) pressure drop in the plant is lower and more constant (less pulsejet cleaning needed), and (3) the bulk of the dust is already collected at the pre-separator level where it is easier to handle. The catalogue is explicit: pre-separators **must be mandatorily combined with a suction unit** (CVS Z22 or CVS ROOTS Z22).

What is Depureco FILTERING PRE-SEPARATOR 450 WB, and how does it work in practice?

Depureco FILTERING PRE-SEPARATOR 450 WB is a passive pre-separator with star filter class M (24,000 cm² antistatic polyester). It has an **integrated 65 L painted steel container** where the collected dust falls directly -- no separate discharge system needed, the customer empties the container manually or via an automatic option. The vacuum unit's air flow enters via the Ø70 mm inlet (on the vacuum unit side) or Ø80 mm (on the vacuum spot side) and passes through the star filter area. SP-Reverse jet pulsejet cleaning is **optional** on this model.

What does 'Star filter' mean compared to cartridge filter?

Star filter is a **star-folded filter geometry** -- the filter media is folded in a star shape around a central channel. It gives a filter-surface-to-volume ratio between a flat-bag solution and a cartridge filter. Star filters are typically less expensive and suited to less aggressive dust types, but have lower surface area than a comparable cartridge filter and are therefore more sensitive to rising pressure drop if not cleaned adequately. The catalogue specifies SP-Reverse jet pulsejet cleaning as **optional** at this size -- for continuous operation with high dust volumes we recommend the option to keep the filter clean.

Is Depureco FILTERING PRE-SEPARATOR 450 WB ATEX-certified?

No. The catalogue lists this family of pre-separators **WITHOUT ATEX** marking -- they are thus non-ATEX and must not be used in explosive atmospheres (Zone 20/21/22). If your plant requires ATEX operation, the pre-separator solution must be specifically engineered (and combined with DV AIR Z22 / DV AIR WB Z22 as the main filter). The antistatic polyester media reduces electrostatic buildup but does not replace ATEX type approval.

Contact and advisory

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