

DEPURECO · II 1/2D EX HTC IIIC T140°C DA/DC

# Depureco PUMA 15 SP DEX 1/2D



The PUMA 15 SP DEX 1/2D is the mid-size 24/7 machine for Zone 21: 11 kW drives 950 m<sup>3</sup>/h at 300 mbar with an automatic reverse-jet-cleaned star filter (120,000 cm<sup>2</sup>). ATEX II 1/2D Ex htc IIIC T140°C Da/Dc, H14 HEPA (110,000 cm<sup>2</sup>) included, TUEV panel, remote control. Well suited for food and pharma production where hygiene rules prohibit manual filter handling and operation runs in two-three shifts. Larger filter surface + reverse jet means filter replacement can be deferred to scheduled annual servicing.

## APPLICATIONS

- Food production in 2-3 shifts with hygiene requirements (filter handling is regulatorily complex)
- Pharma production with CIP cycles (GX stainless option recommended)
- Chemical production with varying products and dust profiles
- Automated lines without operator supervision
- Replacement of PUMA 10 SP when production scale rises 25-50%

# Technical specifications

|                                 |  |
|---------------------------------|--|
| <b>ATEX marking</b>             | II 1/2D Ex htc IIIC T140°C Da/Dc   |
| <b>Internal / external zone</b> | 20 / 21  |
| <b>Motor type</b>               | Sidekanalblaeser 3-fase (11 kW), TUEV-certificeret el-panel + remote control   |
| <b>Airflow</b>                  | 950 m <sup>3</sup> /h  |
| <b>Vacuum</b>                   | 300 mbar (3059 mmH <sub>2</sub> O)   |
| <b>Container</b>                | 175 L  |
| <b>Sound pressure</b>           | 74 dB(A)   |
| <b>Filter class</b>             | M class  |
| <b>Filter type</b>              | Stjernefilter antistatisk polyester klasse M, 120.000 cm <sup>2</sup> , reverse jet cleaning (automatisk) + H14 absolutfilter 110.000 cm <sup>2</sup> (inkluderet) |
| <b>Primary filter</b>           | Stjernefilter antistatisk polyester klasse M, 120.000 cm <sup>2</sup>  |
| <b>Cleaning system</b>          | Automatisk reverse jet cleaning  |
| <b>Collection system</b>        | Detachable container   |
| <b>Material</b>                 | Lakeret staalkonstruktion, AISI 304 stoevbeholder  |
| <b>IP class</b>                 | IP65   |
| <b>Power</b>                    | 11 kW  |
| <b>Voltage</b>                  | 400 V / 50-60 Hz   |
| <b>Inlet</b>                    | Diameter 100 mm  |
| <b>Dimensions (L x W x H)</b>   | 850 x 1550 x 1980 mm   |
| <b>Weight</b>                   | 270 kg   |

# Questions and answers

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## When does it make sense to pay extra for SP over DEX standard?

Three scenarios: (1) You run 24/7 or 2-3 shifts where a filter-cleaning stop would cost production. (2) Your dust loading is so high that the DEX 45,000 cm<sup>2</sup> star filter hits max pressure drop in under 4-6 hours. (3) Filter handling is regulatorily difficult (e.g. food or radioactive). In 1-shift operation with moderate dust, DEX standard is often the right choice -- a 5-minute end-of-shift cleaning is cheaper than the ~EUR 3,000 SP surcharge.

## How does the PUMA 15 SP differ from the PUMA 15 DEX in daily operation?

Visible differences: (1) No manual filter-cleaning handle on SP -- everything automatic. (2) Display shows reverse-jet pulse frequency in real time. (3) Compressed-air connection on the back of SP. (4) Filter pressure drop stays low (30-50 mbar on SP vs 50-150 mbar on a loaded DEX). Invisible: same motor, same container, same inlet -- SP is a filter-system upgrade, not a motor upgrade.

## Can the star filter be swapped for a cartridge?

No -- the chamber geometry differs. PUMA SP is designed around the star filter and its reverse-jet geometry. If you want a cartridge upgrade, it has to be a factory-built machine. Note: for most industrial dust, a reverse-jet star filter is at least as effective as a cartridge -- surface is 120,000 vs 90,000 cm<sup>2</sup> -- and is more robust against coarse dust.

## Is a GX option (AISI 304 chamber) available?

Yes -- the GX option costs EUR 1,060 and upgrades both container AND filter chamber to AISI 304 stainless steel. Strongly recommended for food, pharma or chemical industries where CIP cleaning or corrosive dust is involved. Also relevant if the machine stands outdoors or in a humid environment. Not needed for purely organic dust in dry industrial settings.

# Contact and advisory

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