

TIGER-VAC · 3D PRINTING / ADDITIVE MANUFACTURING

SS-20 DT (PRS-HEC)

Pneumatic PRS vacuum with integrated high-efficiency cyclone for continuous recovery and reuse of metal powder from powder bed fusion printers. Third-party certified for Zone 21 and Zone 22 — Zone 21 internally inside the recovery tank (ATEX II 2GD, IECEX). HEPA H14. Stainless steel SAE 304.

- No electric motor — continuous duty, no duty cycle limitation
- Integrated HEC cyclone — separates up to 98 % of the powder
- Zone 21 internally inside the recovery tank (LCIE 03 ATEX 6310 X)
- Dual certified: ATEX and IECEX (IECEX LCIE 17.0076 X)
- High vacuum pressure (4,570 mmH²O) — ideal for long hose runs
- Detachable SS 304 recovery tank — 25 L



Tiger-Vac SS-20 DT (PRS-HEC) – pneumatic PRS powder recovery system

ATEX II 2GD — Zone 21 and Zone 22 · LCIE 03 ATEX 6310 X · IECEX LCIE 17.0076 X · HEPA H14 — EN 1822 · EN 17348 — combustible dust

Quick facts	
Drive type	Pneumatic
Duty cycle	Continuous
ATEX external	II 2GD, Zone 21/22
ATEX internal	Zone 21 in tank
Certificate	LCIE 03 ATEX 6310 X
IECEX	IECEX LCIE 17.0076 X
Cyclone	HEC, up to 98 %
Filter	HEPA H14
Tank	25 L, detachable, SS 304
Airflow	204 m ³ /h
Vacuum pressure	4,570 mmH ² O
Noise	72 dB(A)
Weight	95 kg

Continuous duty without compromise

The SS-20 DT (PRS-HEC) is Tiger-Vac's pneumatic powder recovery system for additive manufacturing. Driven entirely by compressed air through the venturi principle, there is no electric motor — and therefore no thermal load, no duty cycle limitation, and no risk of motor failure during extended operation. This makes the SS-20 the natural choice when the production process demands uninterrupted running.

The integrated high-efficiency cyclone (HEC) separates up to 98 % of the metal powder into the detachable stainless steel SAE 304 recovery tank, while a HEPA H14 filter acts as a secondary safety barrier. The high vacuum pressure of 4,570 mmH²O makes the unit particularly well suited to long hose runs between printer and vacuum.

The SS-20 is third-party certified by LCIE for Zone 21 and Zone 22 externally, and Zone 21 internally inside the recovery tank, under both ATEX (LCIE 03 ATEX 6310 X) and IECEx (IECEx LCIE 17.0076 X) for conductive dusts.

Technical specifications

Parameter	Value
Filter class	HEPA H14 (EN 1822)
Filter efficiency	99.995 % at 0.3 µm
Cyclone separation	Up to 98 % (before filter)
Drive type	Pneumatic — single venturi, Ø6 mm
Minimum compressor	15 HP
Air line size	1/2" (12.7 mm)
Air consumption	21.2 L/s
Operating pressure	5.5 bar
Airflow	204 m³/h
Vacuum pressure	4,570 mmH ₂ O
Noise level	72 dB(A)
Suction inlet	Ø50 mm (2" camlock)
Recovery tank	25 L — detachable, SS 304
Weight (without accessories)	95 kg
Dimensions	H 135 × W 56 × L 112 cm
Duty cycle	Continuous

Compliance standards: EN 17348 • EN ISO 80079-36:2016. Specifications subject to change without notice.

Included accessories



3D Tool Kit for SS-20 – hose and nozzles

3D Tool Kit

Static conductive crushproof hose Ø38 mm × 3 m with 2" camlock + air supply hose 15 m. Conical nozzle, round brush and crevice tool (ESD-safe).



Wand set and floor tool (optional)

Wand set and floor tool

Optional. Double-bend wands in chrome (2 pcs) with conductive floor tool.



Extra recovery tank with lid, Part# 223001-ASM1 (optional)

Extra recovery tank

Optional. Tank with closing lid and 4 conductive wheels (Part# 223001-ASM1).



SS-20 DT (PRS-HEC) side view with pressure gauge

Side view

CONTACT

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