

CLEAN ROOM — COMPACT MODEL

Tiger-Vac CR-1300WD

New generation cleanroom system for wet and dry recovery in electropolished AISI 316 stainless steel — ISO Class 4 compatible with dual ULPA U15 filtration and autoclavable liquid cut-off.

- Wet and dry recovery — autoclavable stainless steel float (liquid cut-off)
- Dual ULPA U15 filters (EN 1822 / IEST-RP-CC001) at working air and cooling air exhausts
- ISO Class 4 compatible (ISO 14644-1 / FED STD 209E Class 10)
- Electropolished AISI 316 — tank and wheels autoclavable to 121 °C
- 2-stage bypass motor — 194 m³/h — 2,504 mmH₂O
- Individually aerosol-leak tested before leaving the factory



Tiger-Vac CR-1300WD cleanroom wet and dry vacuum in electropolished AISI 316 stainless steel

2 × ULPA U15 — EN 1822 / IEST-RP-CC001 · ISO Class 4 (ISO 14644-1) · Class M (IEC 60335-2-69) · CE — Machinery Directive 2006/42/EC · CE — Low Voltage Directive 2014/35/EU · EMC Directive 2014/30/EU · GMP compatible

Quick facts	
Motor type	2-stage bypass
Power	1.2 kW
Airflow	194 m³/h
Vacuum pressure	2,504 mmH ₂ O
Sound level	65/75 dB(A)
Exhaust filter	2 × ULPA U15
Filter efficiency	99.9995 %
ISO class	Class 4
Recovery	Wet + dry
Tank	38 L
Material	AISI 316 EP
Autoclavable	Yes — 121 °C
Weight	28 kg
Cord	10.6 m

Cleanroom vacuum for wet and dry recovery

The Tiger-Vac CR-1300WD is a cleanroom vacuum for combined wet and dry recovery, developed for pharmaceutical manufacturing, semiconductor production, and microelectronics. Built in electropolished AISI 316 stainless steel, it meets the requirements for ISO Class 4 cleanrooms as defined in ISO 14644-1. The integrated stainless steel float system automatically shuts off liquid ingress before it reaches the motors, enabling reliable operation in both recovery modes. Two downstream ULPA U15 filters at the working air and

cooling air exhausts ensure that all discharged air meets cleanroom standards, and each unit is individually aerosol-leak tested before leaving the factory.

The float system — the heart of wet recovery

The float (liquid cut-off) is machined in stainless steel and acts as a mechanical valve: when the liquid level in the recovery tank reaches a set point, the float rises and closes the suction inlet before any liquid can reach the filter housing or motors. The float assembly is fully detachable for easy dismantling and cleaning, and it is autoclavable to 121 °C. Recovered liquids collect in the 38-litre stainless steel tank, and a bottle of defoaming liquid is included for handling foam-producing substances.

Multi-stage filtration

The CR-1300WD uses a multi-stage filtration system. During dry recovery, collected material first passes through a synthetic disposable filter bag (19 L, Class M, IEC 60335-2-69) and then through a polyester cloth filter before leaving the motor chamber. The two downstream ULPA U15 filters then clean both the working air and the cooling air from the 2-stage bypass motor, so that all discharged air — regardless of flow path — is filtered to ULPA standard with an efficiency of 99.999 % at 0.12 µm and 99.9995 % at 0.18 µm (MPPS, IEST-RP-CC001). A filter blockage indicator light signals when the collection bag is full.

During wet recovery, the disposable bag and cloth filter are removed from the airflow path, and the float takes over protection of the filter housing and motors. The two ULPA exhaust filters remain active throughout.

Materials and surface finish

The entire vacuum — filter housing, recovery tank, frame, and wheels — is manufactured in AISI 316 stainless steel with an electropolished finish. Electropolishing removes surface contamination and micro-roughness that might otherwise trap particulate contamination, creating a smooth, easy-to-clean surface. The recovery tank and white nylon wheels are autoclavable to 121 °C. Static-conductive grey wheels (non-autoclavable) are available on request. Static resistance is measured at below 10 Ω.

Technical specifications

Parameter	Value
Recovery type	Wet and dry (combination)
Power	1,200 W / 1.2 kW
Voltage	240 V, 50 Hz, single phase
Current	5 A
Airflow	194 m³/h
Vacuum pressure	2,504 mmH ₂ O
Sound level	65/75 dB(A)
Motor type	2-stage bypass
Suction inlet	Ø38 mm
Recovery tank	38 L — AISI 316 stainless steel
Disposable filter bag (dry)	19 L — synthetic (Class M, IEC 60335-2-69)
Liquid recovery capacity	38 L
Float (liquid cut-off)	Stainless steel, autoclavable, detachable (part 212710)
Exhaust filter rating	ULPA U15 (EN 1822 / IEST-RP-CC001)
Filter efficiency	99.999 % at 0.12 µm — 99.9995 % at 0.18 µm

Parameter	Value
Cleanroom class	ISO Class 4 (ISO 14644-1)
Surface finish	Electropolished
Static resistance	< 10 Ω
Autoclavable	Tank + wheels + float up to 121 °C
Wheel system	4-wheel cart (white nylon wheels)
Dimensions (H×W×L)	80 × 53 × 61 cm
Weight (without accessories)	28 kg
Cord length	10.6 m
ULPA filter surface area	20,253 cm ²
Cloth filter surface area	3,480 cm ²

Filters and accessories

The CR-1300WD is supplied with three included filters, an autoclavable float assembly, and defoaming liquid. Three optional tool kits are available in Ø32 mm (1.25") format.



Two downstream ULPA U15 filters for Tiger-Vac CR-1300WD — included

2 × Downstream ULPA U15 filters

Part no. 219372 • Included



Main cloth filter with cage for Tiger-Vac CR-1300WD — included

Cloth filter + cage

Part no. 215393A + 218390 • Included



Disposable filter bag for Tiger-Vac CR-1300WD — included

Disposable filter bag (5 pcs.)

Part no. 218063-5 • Included



Autoclavable stainless steel float liquid cut-off for CR-1300WD — included

Autoclavable float assembly

Part no. 212710 • Included



Basic tool kit for wet and dry recovery — optional

Kit #1 — Wet/dry basic kit

Part no. 323306WD • Ø32 mm • Optional



ESD safe tool kit for CR-1300WD — optional

Kit #2 — ESD safe accessories

Part no. 323602 • Ø32 mm • Optional



Autoclavable tool kit 3 for CR-1300WD — optional

Kit #3 — Autoclavable accessories

Part no. 323604 • Ø32 mm • Optional

Frequently asked questions

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