

3D PRINTING • WET MIX • ORDINARY LOCATIONS

2D-10 (IT-40L) CFE HEPA ORDLOC

Electric wet mix immersion vacuum for the safe collection of combustible metal powder from 3D printing in ordinary, unclassified locations. Water immersion inerting, coalescing HEPA filtration and ESD-safe accessories as standard. NFPA 484 compliant.

- Water immersion (wet mix) — combustible powder neutralised in immersion bath
- CFE coalescing HEPA filter — 99.97 % at 0.3 µm
- ORDLOC — certified for safe use in ordinary unclassified locations
- ESD safe — under 10 ohm • conductive accessories included
- AISI 304 container • 12.3 L water capacity
- Bypass motor • brushless motor available
- NFPA 484 • CE • 3D accessory kit included



Tiger-Vac 2D-10 (IT-40L) CFE HEPA ORDLOC — wet mix immersion vacuum for combustible metal powder from 3D printing

ORDLOC — Ordinary Locations · NFPA 484 — Liquid Precipitation Collector · CE · CFE HEPA — 99.97 % at 0.3 µm · ESD — under 10 ohm

Quick facts	
Certification	ORDLOC • NFPA 484
Inerting	Water immersion
Filter	CFE HEPA
Efficiency	99.97 % at 0.3 µm
Motor type	Bypass / brushless*
ESD	Under 10 ohm
Water capacity	12.3 L
Container	AISI 304

What is the Tiger-Vac 2D-10 (IT-40L) CFE HEPA ORDLOC?

The 2D-10 (IT-40L) CFE HEPA ORDLOC is Tiger-Vac's entry model for the safe collection of reactive and self-igniting metal powder from additive manufacturing processes — specifically for facilities that are not formally classified as ATEX hazardous zones. ORDLOC stands for Ordinary Locations: workplaces where a formal risk assessment has determined that Zone 20, 21 or 22 classification is not applicable, typically because ventilation is adequate and powder volumes are controlled. In these environments the 2D-10 ORDLOC provides a structured, compliant approach to metal powder handling without the cost and complexity of full ATEX-rated equipment.

The machine uses water immersion — also known as wet mix inerting. When metal powder is vacuumed into the machine, it is directed into a water bath inside the AISI 304 stainless steel container. Contact with the water immediately cuts off oxygen access to the powder particles, preventing the reactive chain that leads to ignition. The container is factory-filled with 12.3 L of water and ships with a conductive wet recovery bag (3 L) already installed, which facilitates emptying without dispersing wet powder slurry.

Filtration is a two-stage system. Working air passes through a CFE coalescing HEPA filter (Coalescing Filter Element) positioned upstream of the motor. The CFE filter captures water droplets and fine particles carried from the immersion bath, ensuring the air reaching the motor is dry. Filtration efficiency is 99.97 % at 0.3 µm (HEPA grade). The machine is ESD safe with a system resistance of less than 10 ohm, and all included accessories are static dissipating.

Important restriction: The 2D-10 ORDLOC is not ATEX certified and must not be used in environments classified as Zone 20, 21 or 22. For ATEX-classified areas, the EXP1-10, C-10 EX or ATEX-10A models are required. Water immersion is not suitable for metals that react more violently with water than with air — always consult the supplier's SDS for the specific powder in use.

Technical specifications

Parameter	Value
Certification	ORDLOC (ordinary locations) • CE • NFPA 484
Inerting method	Water immersion (wet mix) — not oil
Motor type	Bypass, heavy duty (brushless motor available)
Filter	CFE coalescing HEPA — 99.97 % at 0.3 µm
ESD safe	Under 10 ohm system resistance
Water capacity (container)	12.3 L (3.25 gal)
Recovery bag	Conductive wet recovery bag — 3 L (0.8 gal) — included
Container	AISI 304 stainless steel
Suction inlet	Ø38 mm (1.5" camlock)
Degassing vent	Included — automatic degassing
Liquid level indicator and drain valve	Included
3D accessory kit	Included — see below

Accessories and options

The machine ships complete with a 3D printing accessory kit for the 1.5" camlock suction inlet, consisting of a static dissipating crush-proof hose (3 m), round brush, crevice tool and conical nozzle with curved tip — all in conductive material. The conductive wet recovery bag (3 L) is factory-installed in the container. Degassing vent, liquid level indicator and drain valve are also included. Options include the brushless motor (always supplied with 2×HEPA H14 filters) and an extended wand set with floor tool.



3D accessory kit with 1.5 inch camlock hose, conical nozzle, crevice tool and round brush — included

3D accessory kit — hose, nozzles, brush



CFE coalescing HEPA filter upstream — 99.97 percent at 0.3 micron

CFE coalescing HEPA filter



Conductive wet recovery bag with bag retainer bracket installed in container

Conductive wet recovery bag



Liquid level indicator and drain valve on 2D-10 ORDLOC container

Liquid level indicator and drain valve



Degassing vent on 2D-10 ORDLOC — must remain open when not in use

Degassing vent



Optional: wand set with floor tool for 2D-10 ORDLOC

Wand set and floor tool

CONTACT

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