



Crystal[®] M1 Filling Station **Manual equipment for AT-Closed Vials[®]**

Filling process

Optimized for batch size ranging from a few up to 1,500 vials, the **Crystal[®] M1** Filling Station is designed to fill typically research lots, stability batches and niche commercial products.

The full process is made of the following steps:

1. Filling

- The ready-to-fill AT-Closed Vial[®] is placed manually on its supporting base;
- Piercing of the stopper is accurately achieved by simple action on the lever;
- Filling is performed using a peristaltic (or other pump) before needle withdrawal.



2. Laser re-sealing

- The vial is manually transferred into the laser safety cabinet;
- The laser control unit, installed outside the ISO5 containment, is activated via the embedded remote;
- The puncture trace is re-sealed by a 1 second laser shot on the stopper surface.



- #### **3. Capping** is performed by simple snap-fit of a plastic cap.



Crystal[®] M1 laser control unit's touch screen



Crystal[®] M1 Filling Station in a BSC

Key facts

Crystal[®] M1 Filling Station	
Applications	Aseptic filling of liquid parenterals. All types of products.
Output (2ml vials)	Manual operations, up to 1,500 vials per shift (*).
Filling volume	0.1 ml to 50 ml + overfill.
Filling accuracy	Typically 1% (over 1 ml, for water-like viscosity).
Dimensions	Core equipment is easily placed inside a safety cabinet or an isolator.
Utilities	Electricity only. No water, no compressed air.
Materials	AISI 316L.

(*) With two operators.

Versions

The **Crystal[®] M1** Filling Station can be installed in following types of containment with various features:

Containment systems

- Bio Safety Cabinet (BSC);
- Isolator.

Optional features

- Peristaltic dispensing pump;
- Foot switch for the pump;
- Casters for the laser controller.

Cleaning

The exposed surfaces of the filling tool, the laser housing and the capping tool are made of stainless steel and polymer materials compatible with classical sanitizing agents and H₂O₂ decontamination.

Validation Package

The **Crystal[®] M1** Filling Station is delivered with a full Validation Master Plan. The table of content is available on our website www.aseptictech.com in the chapter Compliance > Validation > AT-Closed Vial[®] Technology.



Crystal[®] M1 Filling Station in a PSI-M isolator from SKAN



Aseptic Technologies S.A. reserves the right to make any changes to the described equipment and characteristics without notice.