**Crystal® M1 Filling Station**  
**Laboratory equipment for AT-Closed Vials®**

**Filling process**

Optimized for batch size ranging from a few up to 1,500 vials, the Laboratory 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 remote controller located inside the containment;
   - The puncture trace is re-sealed by a laser 1 second 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

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(*) With two operators.

Versions

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

**Containment systems**
- Bio Safety Cabinet (BSC);
- Laminar airflow (LAF) cabinet with glove access into the filling area;
- CVFS\(^1\) with glove access into the filling area;
- Isolator.

**Material entry/exit systems**
- Direct entry during sanitization;
- Mousehole;
- Rapid Transfer Port (RTP);
- \(\text{H}_2\text{O}_2\) decontamination airlock.

**Laser control unit housing**
- Standard housing for ISO8 clean room environment;
- Special housing in closed box for ISO7 clean room environment.

More information available on www.aseptictech.com

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

\(^1\) “CVFS - Closed Vial Filling System” is defined as “An aseptic filling system providing an environment achieving uncompromised Class ISO 5 protection that surrounds containers which are delivered closed and sterile inside, are filled through their stoppers and then immediately re-sealed to preclude the possibility of microbial ingress”.

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