

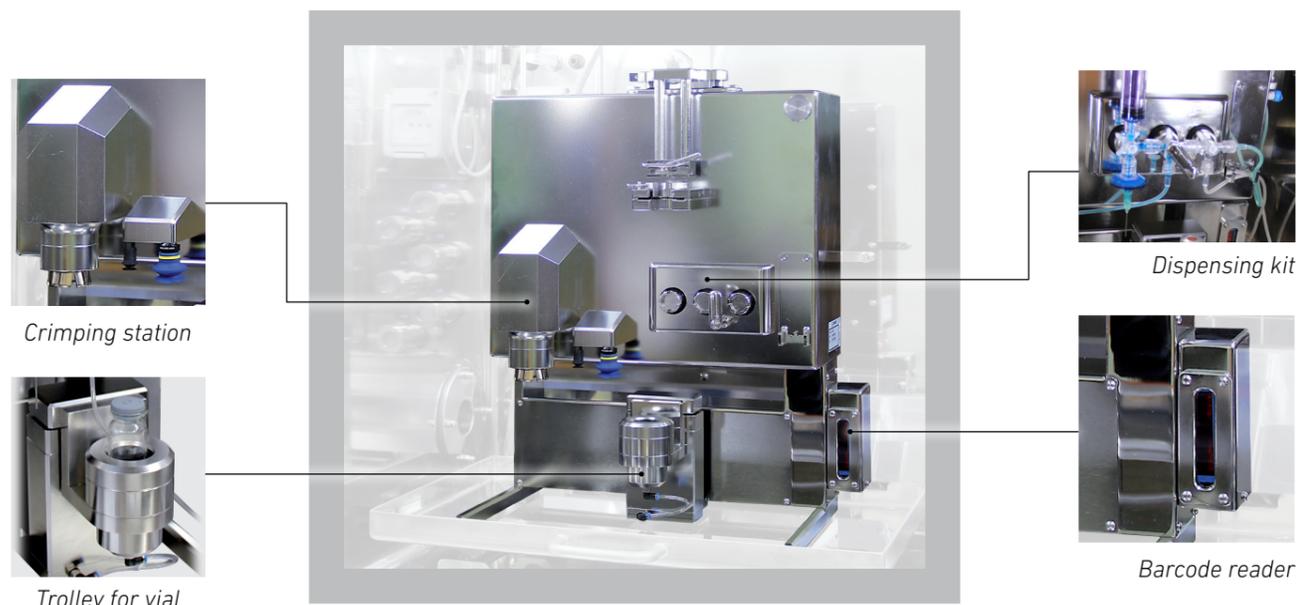
ARGO & CLIO

DISPENSING SYSTEMS FOR SYRINGES
AND VIALS



FLEXIBILITY | SPEED | PRECISION

Comecer offers a wide range of dispensing systems ideal for the preparation of single dose syringes and vials in nuclear medicine as well as radio-pharmacy. They can be installed inside the Comecer shielded cells so as to ensure high safety levels for the operator and precision of the dispensed dose.



ARGO - VIAL DISPENSING SYSTEM

- ✓ *Dispensing in open vials*
- ✓ *Complete filling cycle in 30 seconds*
- ✓ *Precision in the dispensed volume*
- ✓ *cGMP compliant*
- ✓ *Disposable sterile kit*

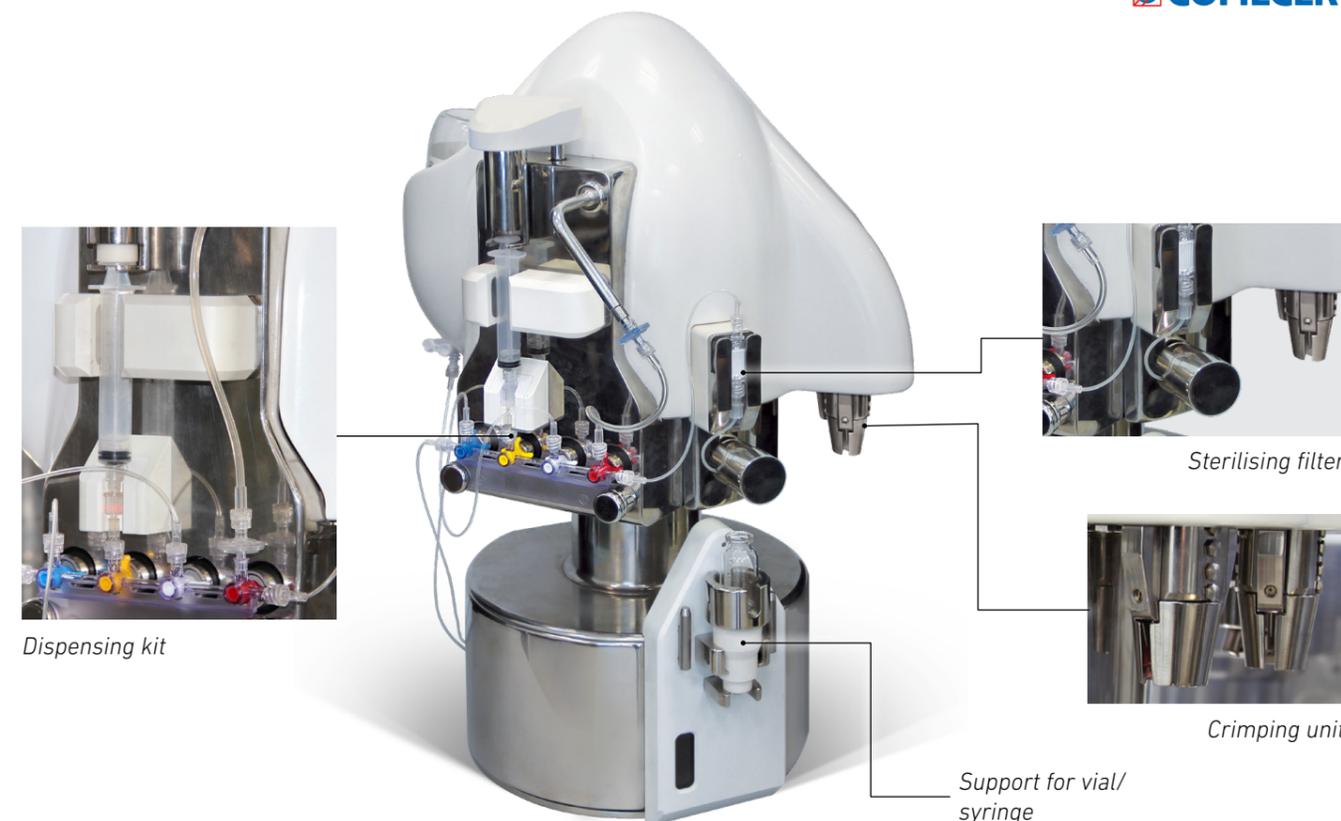
ARGO is an automatic dispensing system for vials. The equipment is designed and produced to dispense radiotracers used in PET and SPECT diagnosis and therapeutic radiopharmaceuticals.

ARGO is a system that complies with the cGMP guidelines for filling open vials. Functional and validated to dispense FDG, upon technical approval, it can be used for different isotopes and molecules. ARGO offers a reliable and complete workflow. It is usually

integrated in Class A shielded isolators equipped with manipulators, thus ensuring the utmost in ergonomics and convenience in total compliance with the cGMP guidelines.

Main technical features

- Controlled volume dispensing by means of an integrated pumping syringe in the disposable kit.
- Opening time of the vial less than 10 seconds
- Accurate volume dispensing within 5% for volumes between 1 and 10 ml
- Label printer
- Calculation of the concentration and formulation of the initial volume of radiopharmaceuticals with the formulation unit*
- Sterilising filter and bubble point test in-line*
- Barcode reader*.



CLIO - VIAL AND SYRINGE DISPENSING SYSTEM

- ✓ *Dispensing in open and closed vials, in 5 ml syringes and Letho cartridges*
- ✓ *Automatic dispensing process*
- ✓ *Innovative aerodynamic profile for the dispensing area to be effectively covered with a laminar flow*
- ✓ *cGMP compliant*
- ✓ *Disposable sterile box*

The CLIO dispenser is designed for the automatic fractionation of radiopharmaceuticals (PET, SPECT and radio-treatments) in vials and syringes.

CLIO is a dispensing system compliant with cGMP guidelines for filling open and closed vials or single-dose syringes. Functional and validated to dispense FDG, upon technical approval, it can be used for different isotopes and molecules.

CLIO can receive radiopharmaceuticals from a multidose vial or a synthesis module.

Its particular aerodynamic shape allows the interaction with the laminar flow to be optimised.

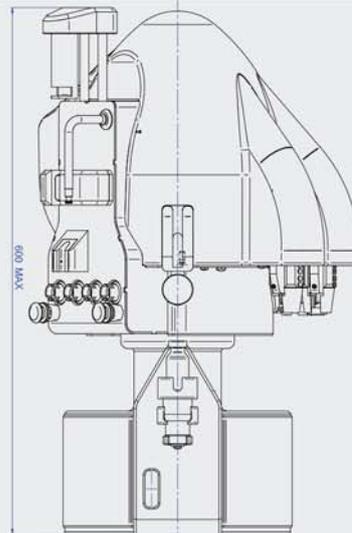
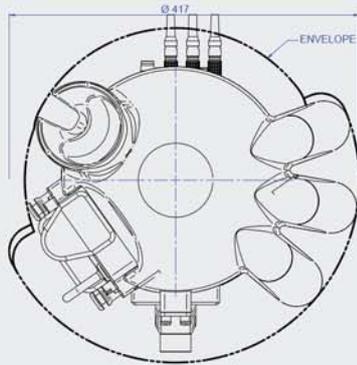
Main technical features

- Pre-assembled single-use sterile disposable
- Can be installed in isolator and shielded cells equipped with a dose calibrator and laminar flow
- Compact dimensions and lightweight
- Highly ergonomic to facilitate loading and unloading vials or syringes
- The radiopharmaceutical can be loaded from a synthesis module or a multi-dose vial
- Ventilated sterilising 0.22µm filter
- Automatic processes in the formulation stage: predilution in bulk, concentration calculation, dilution in bulk with flushing for bubbling the solution and making it homogeneous
- Automatic procedures for cleaning the consumable kit at the end of production
- Dilution in pumping syringe or final vial
- Automatic processes in the dispensing phase: remove / add lock-nut, remove / add rubber cap, volume filling or calculated activity, automatic crimping
- Complete management of the workflow by means of operator interface developed in accordance with the GAMP regulation and CFR21 Part 11 requirements.

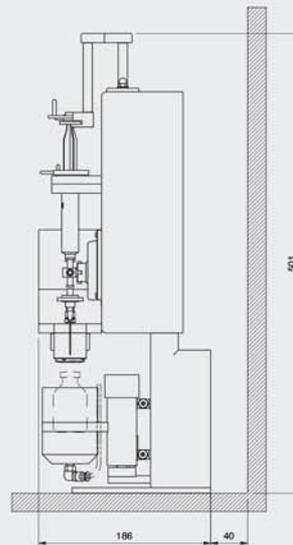
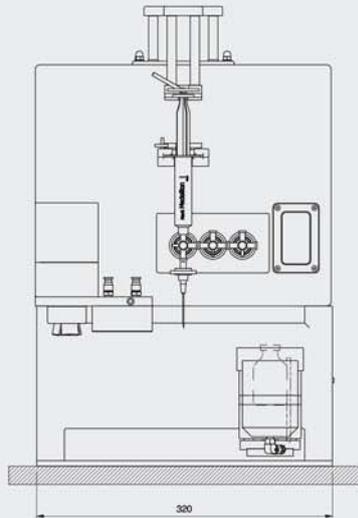
GENERAL FEATURES

Technical data

| | | ARGO | CLIO |
|---------------------------------|-----|------------------------------------|--|
| Frame support material | | AISI 316L - Mirror-Bright | AISI 316L - Mirror-Bright |
| External structure material | | AISI 316L | Polyurethane - AISI 316L* |
| External dimensions | mm | 320 x 186 x 501 (l x d x h) | 417 x 600 (Ø x h) |
| Weight | kg | 30 | 30 |
| Volumetric dispensing accuracy | ml | 0.5 + 1 ± 0.05 1 + 10 ± 5% | 0.3+2 ± 0.08 2+10 ± 5% |
| Technical gas supply (He / N) | bar | 5 | 2 - 5 |
| Type of containers to be filled | | Open vials | Open vials Closed vials Syringes |
| Dispensing method | | Open vials with automatic crimping | Sealed vials with rubber stop piercing Syringes with septum perforator Open vials with automatic closing |
| Minimum volume dispensed | ml | 0.5 | 0.3 |



CLIO: Dimensions chart



ARGO: Dimensions chart

Kontakt / Contact: _____



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