

Superior Safety and Ease of Use

Introducing the 2nd generation of EQUASHIELD® Closed System Drug Transfer Device

Safe

Covers more routes of exposure than alternative systems

- The only system that prevents syringe plunger contamination (repeatedly identified as a major route of exposure to hazardous drugs).
- Closed pressure equalization prevents the escape of drug or drug vapors.
- Dry connectors that remain free of drug residues upon disconnects.
- Cleared by the FDA under the ONB code and substantiated to prevent microbial ingress for up to 7 days.
- Clinically proven to be safe and efficacious.

Simple

Faster and Easier to use

- System was deemed fastest to use requiring fewest steps and least time in recent studies, compared to its peer.
- Fully preassembled syringe with connector, requiring no further setups or off the shelf syringes.
- Easy to use single motion sliding connectors.
- Audible click to signal secure connection during drug administration.
- Intuitive accessories such as catheter connector and syringe to syringe connector to ensure simplification of workflow.

Closed

The most closed system on the market

- The only system with encapsulated syringe barrel and plunger rod.
- Closed internal pressure equalization built into the syringe.
- Connector permanently welded to syringe to ensure compliance across the hazardous drug handling process.
- Encapsulated plunger rod that cannot be pulled out of the barrel.
- Pre-bonded y-site and available locking female connector maintain a closed system to reduce exposure.



EQUASHIELD®

Bound by peer reviewed and independent clinical data on **Safety** and **Efficacy**

1 Surface Contamination Elimination Study

2 Vapor Containment Studies

4 Plunger Rod Contamination Elimination Studies

2 Leak Proof Studies

2 Efficiency Studies

Simple & Intuitive: 3 easy steps save valuable time during preparation



#1

Snap Vial Adaptor
onto vial



#2

Attach Syringe Unit
and draw dose



#3

Transfer to IV bag
via Spike Adaptor

Safe & Simple Administration: 1 Click to administer



Administering through a primary line, secondary line, cassette, ambulatory pump or push is simplified with EQUASHIELD's portfolio of administration accessories and sets.

All EQUASHIELD® components may be connected and disconnected by a single motion slide.

Innovatively Designed: To Simplify Use

Double Jacket Enclosure Prevents Syringe-Plunger Rod Contamination

EQUASHIELD® equalizes pressure differentials via:

- Dual needle design enables an efficient air to liquid exchange
- Factory sealed sterile air chamber provides pressure equalization without additional steps

To offset the pressure differential during withdrawal, the short needle draws medication out of the vial while the long air needle replaces the liquid with an equal amount of air to maintain equilibrium. The sterile air is drawn from the sealed air chamber in the back of the syringe. During reconstitution of lyophilized powder, the process is reversed; the short needle injects liquid into the vial, while the long air needle offsets overpressure by drawing toxic vapors into the air chamber behind the syringe. EQUASHIELD® ensures constant equilibrium.



Dry Connectors Prevent Drug Residues, Spills, Leaks and Needle Sticks

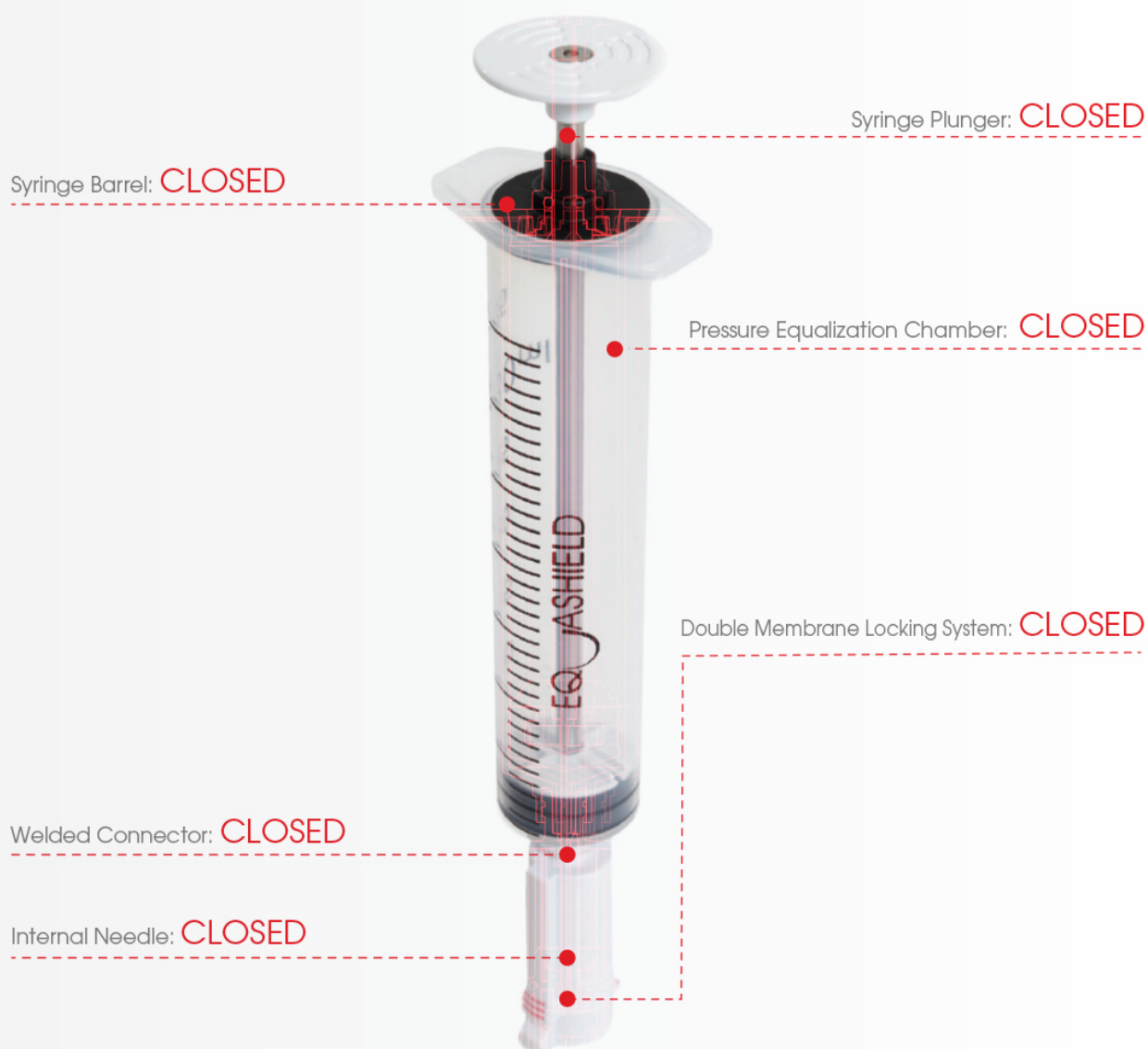
EQUASHIELD® ensures leak free and dry medication transfer via:

- A unique locking mechanism with dual membranes for multiple access
- Connections that engage in a simple sliding motion

All EQUASHIELD® Connections are made with a single sliding motion. When two connectors are engaged, the locking mechanism presses elastic membranes on mating surfaces into a tight-locked position. Needles pierce through the compressed membranes only after the membranes are tightly locked. During the needle retraction, needles are wiped against the resealing membranes. Any contact between the drug and outer surface of the membranes is prevented, leaving the surface area dry and clean of any drug residues. Additionally, EQUASHIELD® is a needle safe system, where needles remain shielded inside component housing and beyond reach.



Innovatively Designed: To Protect User



Double Jacket Enclosure Prevents Syringe-Plunger Rod Contamination

Several peer reviewed studies have shown syringe plunger contamination by hazardous drugs during routine drug preparation and pushes as a major route of exposure. A recent peer reviewed study performed at a major cancer center, confirmed high levels of cyclophosphamide residues on a traditional syringe plunger which in turn contaminates the work environment. Unlike other devices that use a traditional syringe with exposed cylinders and plungers, EQUASHIELD® uses a double jacket enclosure that encapsulates the syringe barrel. This isolation of syringe plunger contributes to elimination of plunger rod contamination with EQUASHIELD®.

A Fully Self-Contained Syringe Unit with Welded Connector Prevents Disconnects

Fully preassembled syringe with welded connector, eliminates a need for additional setup and a traditional syringe:

- Prevents accidental luer disconnects to avoid spills and exposure
- Plunger rod can never be detached from syringe thereby preventing spills
- Saves valuable set up time by eliminating a need to opening additional packages, drawing up air or assembling components
- Utilizes a factory-sealed, sterile air chamber for pressure equalization

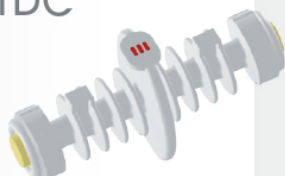
Constantly Innovating to offer Products to Meet user needs. Product Pipeline:

LL-1C



EQUASHIELD's **Catheter Adaptor (LL-1C)** is ideal for administering drug using a catheter for bladder instillation procedures. The LL-1C adaptor comes with a pre-bonded Equashield male luer lock adaptor to a conical catheter adaptor, saving valuable setup time and preventing opportunities for accidental luer disconnections and spills.

LL-1DC



EQUASHIELD's **Syringe to Syringe Adaptor (LL-1DC)** is ideal for connecting and safely transferring medication between syringes, QS procedure.

The use of this adaptor makes the transfer between syringes easy with fewer components to retrieve, open and assemble. This adaptor has two access ports for Syringe Units at nominal priming volume.

FC-1S



EQUASHIELD's new **Female Luer Lock Connector (FC-1S)** is designed to convert any standard luer lock port into a closed system connection for leak free and dry connection. The new Female Luer Lock Connector provides a connection at the end of an IV line that cannot be disconnected, ensuring compliance during administration and reducing risk of accidental disconnections.

EQUASHIELD Pro



EQUASHIELD Pro is industry's first CSTD Robot. Equashield® Pro relies on the Equashield's proprietary CSTD to redefine the automation workflow to optimize throughput. The system enables compounding a large variety of patient specific chemotherapy doses quickly, using a unique and safe method of compounding that shortens the process flow while performing multiple tasks simultaneously. Equashield® Pro's dose verification software allows for a highly reliable system, reducing the occurrences of medication dosage and identification errors in hospitals.

SUPERIOR SAFETY and EASE OF USE

EQ  ASHIELD[®]

