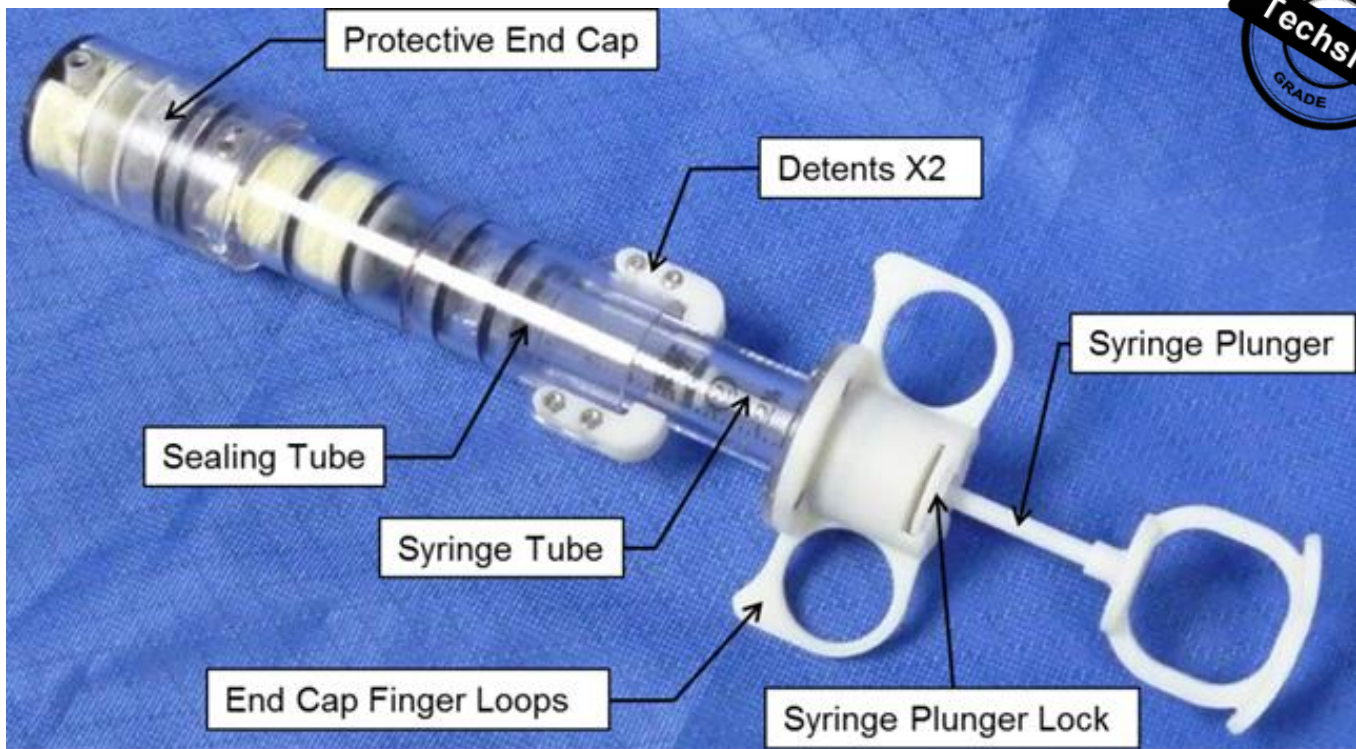


ACT² - Sample Transfer Tool

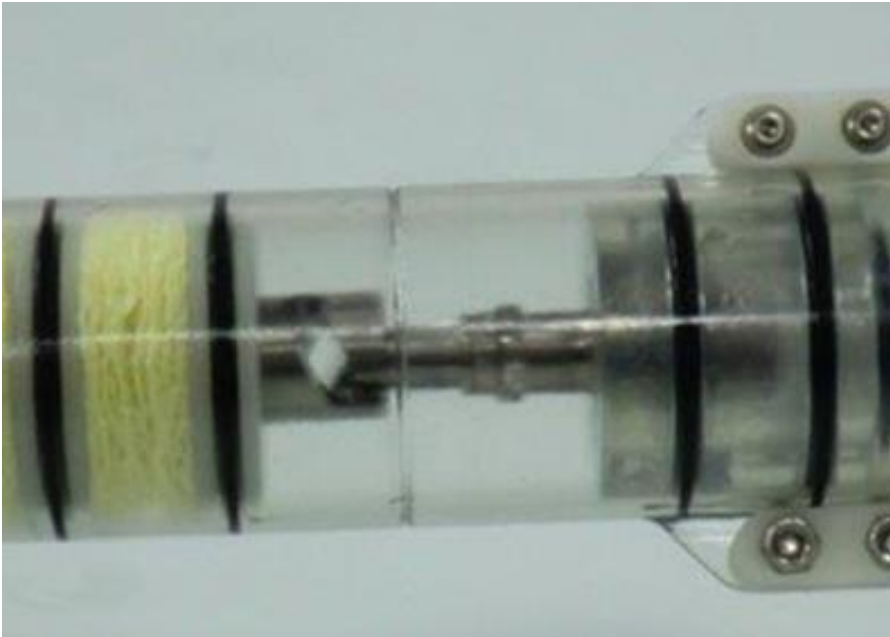


Transfer samples safely on orbit with the Techshot Analytical Containment Transfer Tool (ACT²)

The Analytical Containment Transfer Tool (ACT²) is a disposable device that doubly-contains and transfers samples in a safe manner from unique experiment-specific spaceflight hardware to on-orbit analytical tools for real-time analysis.

At the core of ACT² is a commercially available syringe (1 ml, 3 ml or 5 ml) that is seated within a doubly-contained enclosure known as the Syringe Tube. This innovative design requires the syringe to mate and demate Dual End Shut Off (DESO) fittings, contained within the ACT², Sealing Tube before allowing the transfer of fluid.

ACT² - Sample Transfer Tool



Internal Dual-End Shut Off fitting

When a fluid transfer is desired, the ACT², which contains a standard male Luer lock fitting, is mated and locked to a sample port designed to accept a male Luer lock fitting. The Syringe Tube containing the syringe is then moved forward in a telescopic motion within the Sealing Tube, to join the DESO fittings contained within the adjoining tube.

A safe transfer of fluid from the syringe through the DESO fittings may then proceed with assurance of double containment.

Once the fluid transfer is complete, the internal DESO fittings are uncoupled and the two telescoping tubes are moved apart. This action fully disengages the DESO fittings and the subsequent path to the ambient environment. The sample is now doubly contained and the tool is safe to be removed from the sample port and transported to another experiment, stored for later use or properly discarded.

Techshot offers a comprehensive suite of professional tools for conducting research in space. ACT² can work in combination with many of them as a single, complete, and effective solution for transferring, processing and analyzing high-value samples on orbit.

ACT²+ADSEP+Dynamic Microscope Stage+Mic-E