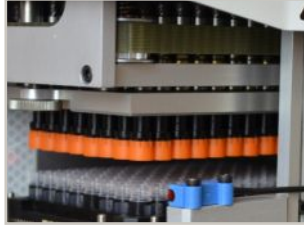


Tube Capping / Decapping Product Range



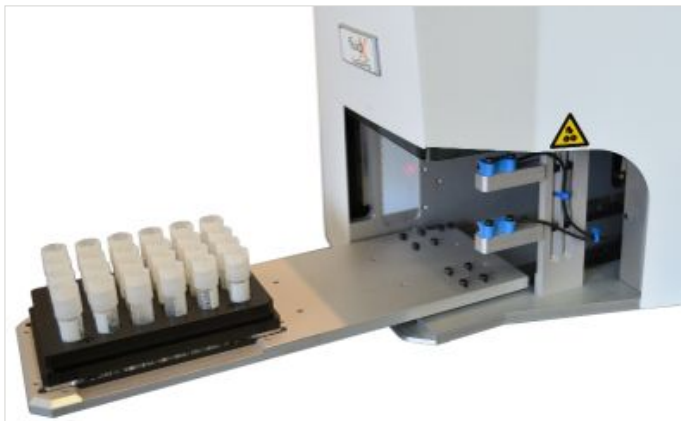
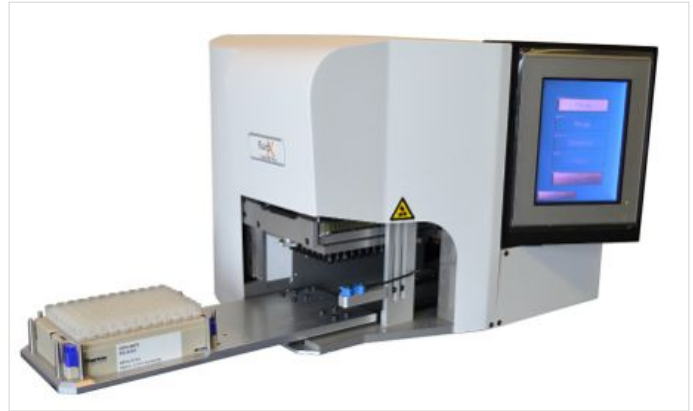
Version 3.2



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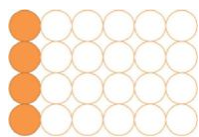
FluidX offers the widest range of capping/decapping systems for sample storage tubes - which can be sealed using screw caps, TPE septum caps or our proprietary AirFilm thermal sealing technology.

Although we believe that we also provide the largest (and the best) range of sample storage tubes in the world, we understand that there are occasions when you need to use tubes from alternative suppliers, so we have designed, and supplied, capping/decapping systems for use with other tubes from different manufacturers including Thermo, Micronic, Greiner, Eppendorf, Sarstedt and many others.

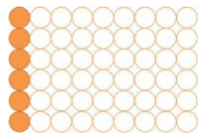


Key to symbols used in catalog

Single column capping/decapping ability



E.g. XSD-4

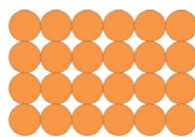


E.g. XSD-6

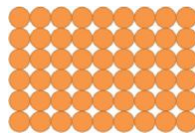


E.g. XSD-8

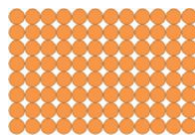
Whole rackcapping/decapping ability



E.g. XSD-24



E.g. XSD-48



E.g. XSD-96, XAC-96, XDC-96

Note: Single column screw cap capping/decapping systems are also able to cap/decap whole racks one column after another.

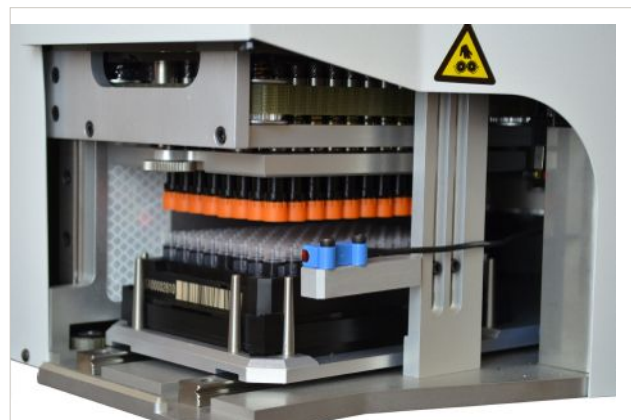
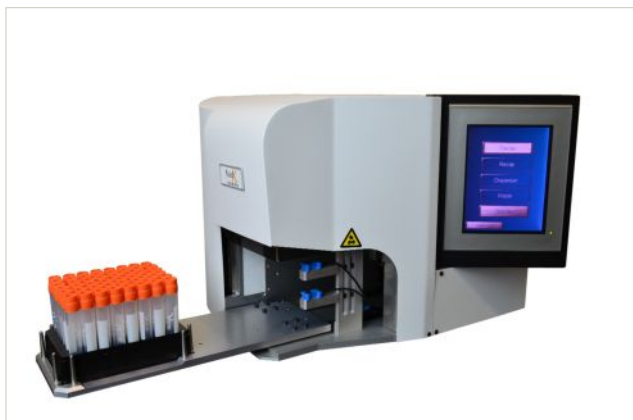
SCREW CAP CAPPING/DECAPPING SYSTEMS

Capping system	Type	Operation	Height calibration	Cap waste function	Cap error detection	Cycle time (decapping)*	Cycle time (recapping)*	Integration	Biofill use
XSD-96	Whole rack capper /decapper for 96 format tubes	Fully automatic	Adapter plate	Yes	Yes	34 sec	44 sec	Serial RS232 communication for integration	Yes
XSD-48	Whole rack capper /decapper for 48 format tubes		Sensor driven detection			22 sec	31 sec		
XSD-24	Whole rack capper /decapper for 24 format tubes		22 sec			31 sec			
XSD-8	Single row capper/decapper for 96 format tubes	Fully automatic	Sensor driven detection	Optional	Yes	15 sec/row	18 sec/row	Serial RS232 communication for integration	Yes
XSD-6	Single row capper/decapper for 48 format tubes								
XSD-4	Single row capper/decapper for 24 format tubes								
XSD-1	Single tube capper/decapper	Semi-automatic	No	No	No	10 sec/tube	10 sec/tube	No	No

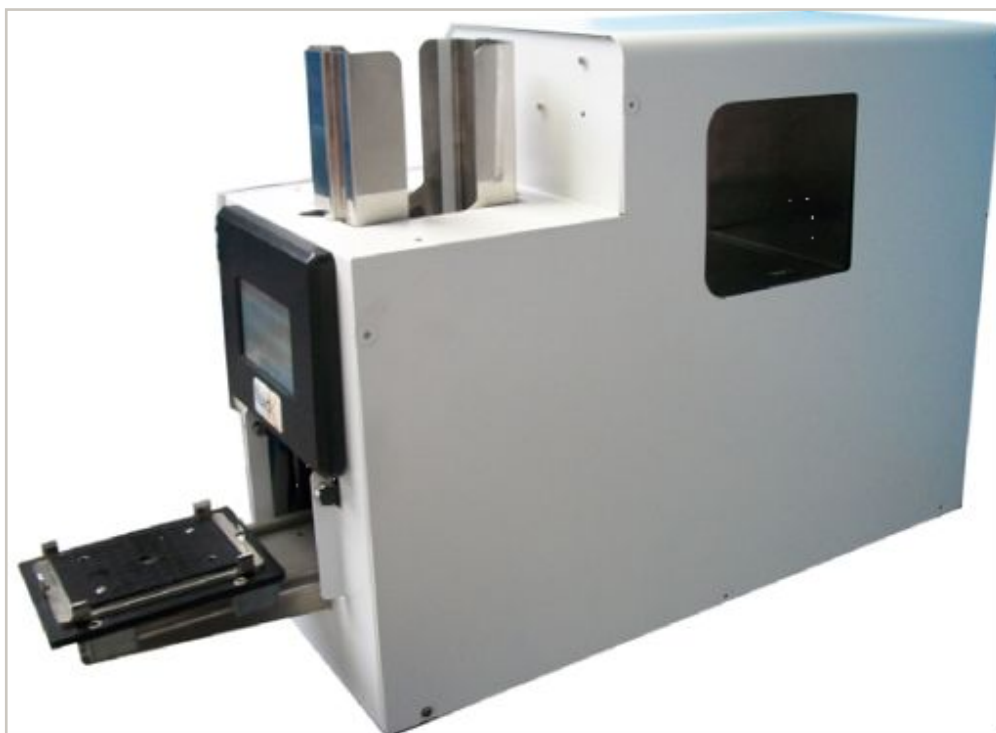
TPE SEPTUM CAP CAPPING/DECAPPING SYSTEMS

Capping system	Type	Operation	Height calibration	Cap waste function	Cap error detection	Cycle time (decapping)*	Cycle time (recapping)*	Integration
XAC-96	Whole rack capper for 96 format tubes	Fully automatic	Adapter plate	NA	NA	Capping time 60 sec	NA	Serial RS232 communication for integration
XDC-96	Whole rack capper/decappers for 96 format tubes	Fully automatic	Adapter plate	Yes	Yes	15-30 sec	15-30 sec	No
XDC-96 PRO			Adapter plate	Yes	Yes	15-30 sec	15-30 sec	Serial RS232 communication for integration
X-CAP	Whole rack capper for 96 format tubes	Semi-automatic	Adapter plate	NA	NA	Capping time 20-30 sec	NA	No
E-CAPIT	Whole rack cap mat sealer for 96 format tubes	Semi-automatic	Adapter plate	No	No	Capping time 10 sec	NA	No

*Please note that the cycle times can vary depending on the tube type used.



XAC-96 PRO Automated Capper for 96-format Tubes



The XAC-96 (fondly referred to as "the Rhino" for obvious reasons) can be used with any 96-format racked tubes.

Simple to use. Load up to 50 sealing cap mats into the stacker at the front of the system and place rack onto tray.

The rack automatically moves inside the capper, under the stacker, and a cap mat is released onto the tubes.

The rack then moves onwards and the caps are pressed onto the tubes.

The cap mat backing foil is then removed and discarded, the rack is returned to the original position ready for removal.

Cycle time is just 60 seconds.

Tubes can be purged with argon or nitrogen prior to capping.



Specifications

Dimensions	Width 225mm x Height 430mm x Depth 740mm (with shuttle), 590mm (without)
Weight	45 Kg
Power requirements	Voltage: AC 115V / 230V +/- 10% Power: less than 95W
Compressed air	Used for TPE backing plate removal, 4mm push fit tubing and 15 – 30 PSI pressure.
Nitrogen supply	Used for inert atmosphere / Nitrogen purge prior to capping, 4mm push fit tubing and 1 to 5 PSI pressure.
User interface	Colour touch panel for manual use, RS232 for integration
Compatibility	FluidX 96-format tubes and FluidX TPE septum caps

Ordering Information

Catalog No	Description
46-5501	XAC-96. Automatic 96 tube rack capper, with gas purge option for flushing with Nitrogen or Argon providing an inert atmosphere during storage or while tube is open. Compatible with FluidX, Matrix / Micronic tubes and Individual caps including 1.4ml, 1.1ml, 0.75ml, 0.65ml**, 0.5ml tube variants. For integration and benchtop use only, with full RS232 control. Please specify tube range when ordering i.e. FluidX, Abgene, Matrix or Micronic.

XDC-96 High Speed Whole Rack Tube Capper/Decapper



The XDC-96 is a stand alone, high-speed whole rack tube capper/decapper that can automatically remove, then recap or dispose of, septum caps from a full rack of 96 tubes.

Eliminating the need to manually remove the caps dramatically improves productivity and, as septum piercing is no longer required, the user is able to make use of a wider range of liquid handling systems.

The XDC-96 will also dispose of the caps or recap the same caps back into the same tubes. Manually recapping tubes after sampling is no longer required.

Cycle time (decapping and recapping) is 15-30 seconds, depending on tube type.

Compatible with most 96 format TPE septum sealed caps (0.5ml, 0.75ml, 1.0ml and 1.4ml).

Please note:

Type of tube to be used with the XDC-96 capper/decapper must be specified at the time of ordering.

The XDC-96 can only be used with natural coloured TPE caps.

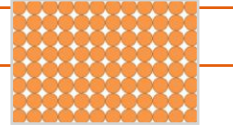
Specifications

Dimensions	Width 215mm x Height 350mm x Depth 680mm (with shuttle), 480mm (without)
Weight	30 Kg
Power requirements	AC 115 V /230V +/- 10%. Power less than 55 W.
User interface	Membrane panel for manual operation. Windows compatible maintenance and calibration software package provided.
Compatibility	FluidX 96-format tubes with septum caps (1.4ml, 0.5ml). Micronic microtubes with capcluster (1.4ml, 0.65ml). Matrix TrakMates with SeptraSeal caps (1.4ml, 0.75ml, 0.5ml). Abgene Cypher with caps (1.2ml, 0.65ml). Please contact FluidX for information on additional tube types.

Ordering Information

Catalog No	Description
46-5001	XDC-96. Automatic 96 tube rack capper/decapper. Compatible with FluidX, Matrix / Micronic tubes and individual caps including 1.4ml, 1.1ml, 0.75ml, 0.65ml**, 0.5ml tube variants. For benchtop use only, use XDC-96Pro for integration or RS232 control. Please specify tube range when ordering e.g. FluidX or Abgene or Matrix or Micronic. (**Some restrictions apply to smaller volume tubes)

XDC-96 PRO High Speed Whole Rack Tube Capper/ Decapper - ideal for integration



A compact, high-speed whole rack tube capper/decapper that can automatically remove, then recap or dispose of, TPE septum caps from a full 96 tube rack.

Eliminating the need to manually remove the caps dramatically improves productivity and, as septum piercing is no longer required, the user is able to make use of a wider range of liquid handling systems.

The XDC-96 will also dispose of the caps or recap the same caps back into the same tubes. Manually recapping tubes after sampling is no longer required.

Cycle time (decapping and recapping) is 15-30 seconds, depending on tube type.

Compatible with most 96 format TPE septum sealed caps (0.5ml, 0.75ml, 1.0ml and 1.4ml).

Can be used either manually or in automated mode.

When using as a stand-alone system, the simple to operate LCD touch screen allows set up, calibration and settings to be changed without a PC.

Integration into automated systems is made simple using the RS232 interface.



PURGE MODULE

The XDC-96PRO is fitted with a purge module that enables an inert gas of choice to be "layered" over the sample straight after decapping, and immediately prior to recapping. This layering technique protects sensitive samples from the action of humidity and oxygen while uncapped and purging immediately prior to recapping ensures that the sample is stored long term in a dry inert atmosphere

The purge sequence and duration is set up using the touch screen or simple PC-based software downloaded to the unit's firmware.

AIR BLADE

The air blade prevents the waste chute becoming clogged when caps are disposed. Particularly useful when caps become sticky with DMSO use. An air cushion is created as the caps are removed from the harpoons which propels them through the chute at speed.

Can be set up for multiple tube types, settings can be saved and recalled using the touch panel.

Note:

Adapters are required to alter the height of the rack tray.

The type of tube to be used with the decapper must be specified at the time of ordering.

Can only be used with natural coloured TPE caps.

XDC-96 PRO cont

Decapping action

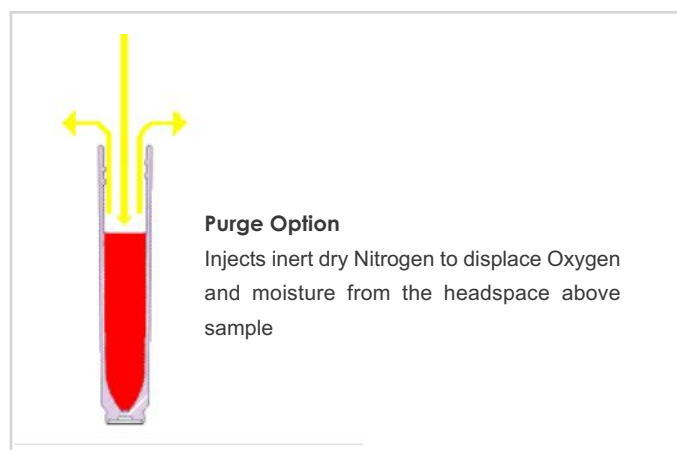


Specifications

Dimensions	Width 215mm x Height 350mm x Depth 680mm (with shuttle), 480mm (without).
Weight	30 Kg
Power requirements	AC 115 V /230V +/- 10%. Power less than 55 W.
User interface	LCD touch screen for manual operation, system maintenance and calibration. Windows compatible maintenance and calibration software package included.
Cable interface	Serial RS 232
Operating system	Windows XP, 7
Compatibility	FluidX 96-format tubes with TPE septum caps (1.4ml, 0.5ml). Micronic microtubes with capcluster (1.4ml, 0.65ml). Matrix TrakMates with SeptraSeal caps (1.4ml, 0.75ml, 0.5ml). Abgene Cypher with caps (1.2ml, 0.65ml). Please contact FluidX for information on additional tube types.

Ordering Information

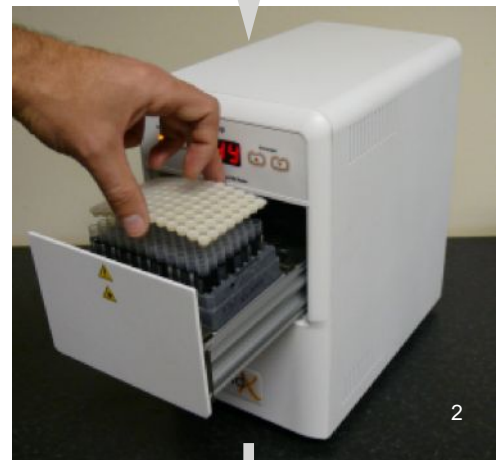
Catalog No	Description
46-5003	XDC-96PRO Automatic 96 tube rack capper/decapper. With gas purge option for flushing with Nitrogen or Argon providing an inert atmosphere during storage or while tube is open. Air blade option for discarding solvent "sticky" caps to waste, prevents caps clumping together and blocking waste chute. Compatible with FluidX, Matrix / Micronic tubes and individual caps including 1.4ml, 0.75ml, 0.65ml**, 0.5ml tube variants. For integration and benchtop use. Please specify tube range when ordering e.g. FluidX or Abgene or Matrix or Micronic. (**Some restrictions apply to smaller volume tubes).



Purge Option

Injects inert dry Nitrogen to displace Oxygen and moisture from the headspace above sample

X-CAP Semi-automatic Sealer for 96 Format Tubes



The X-CAP provides electronic semi-automatic sealing of microtubes and microplates in a 96 format rack.

Suitable for use with all 96-format FluidX tubes with TPE caps, Micronic TPE capmats, Matrix Technologies sepraseals and Abgene sealing mats.

When used with FluidX racks featuring TubeLock, the X-CAP is also able to automatically lock and unlock tubes within the rack. (See next page).

Cycle time is 20-30 seconds depending on tube type.

The depth of capping action is adjustable with the use of spacer plates, which ensures efficient capping of all tube types.

The X-CAP can seal either full and partial racks.

Easy to use.

Simply place a rack in the drawer with a capmat fitted loosely on top.

Push in the drawer and the capper will start automatically.

Once the caps have been inserted, the drawer will open and the rack can be removed.

Specifications

Compatibility	All FluidX 96-format racked tubes and TPE caps.
Power requirements	230/115V

Ordering Information

Catalog No	Description
46-2004	X-Cap semi-automatic electrical motor capmat sealer for 96-format FluidX tubes with TPE caps. Adapter set included.

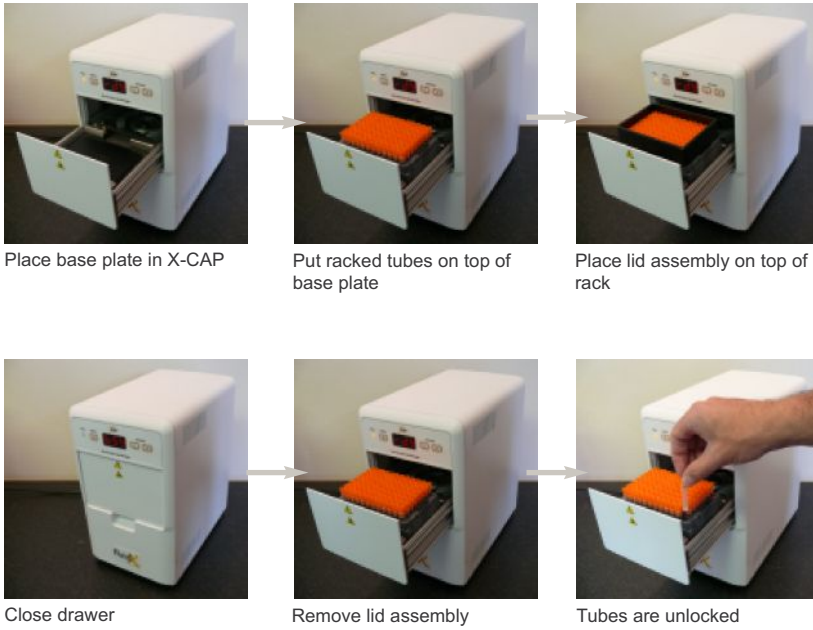
X-CAP cont Tube Locking/ Unlocking Function

By using an adapter set, the X-CAP can be used to automatically unlock or lock tubes into racks as needed.

Many FluidX racks are dual position allowing tubes to be locked into place for added security during use. Individual tubes can be simply pulled upwards to unlock and enable removal. For a faster approach the X-CAP is able to unlock (or lock) all tubes within an 96-format rack simultaneously.



UNLOCKING PROCESS



Place base plate in X-CAP

Put racked tubes on top of base plate

Place lid assembly on top of rack

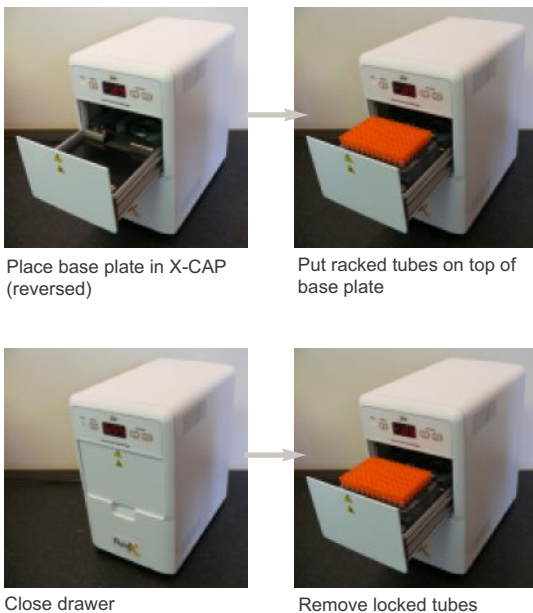
Close drawer

Remove lid assembly

Tubes are unlocked



LOCKING PROCESS



Place base plate in X-CAP (reversed)

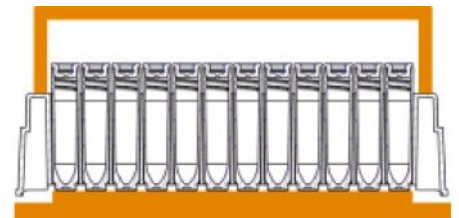
Put racked tubes on top of base plate

Close drawer

Remove locked tubes

To unlock racked tubes using X-CAP

Use base plate and lid assembly. The base plate pushes tubes upwards while lid pushes rack back downwards.



To lock racked tubes using X-CAP

Use base plate. Reverse base plate so tubes are pushed into lock mode.



E-capit Semi-automatic Cap Mat Sealer for 96 Format Tubes



The Xcm-eCapIt provides electronic semi-automatic sealing of microtubes and microplates in a 96 format rack.

Suitable for use with FluidX EasyTrack caps, Micronic TPE capmats, Matrix Technologies sepraseals and Abgene sealing mats. (Adapters may be required).

Cycle time is approx. 10 seconds.

The depth of the capping action is adjustable, with the use of spacer plates, ensuring efficient capping of all tube types. The Xcm-eCapIt will seal both full and partial racks.

Easy to use. Simply place a rack in the drawer with a capmat fitted loosely on top. Push the drawer in and press the start button. When the sequence is completed the drawer is opened and the rack removed.

Specifications

Compatibility	EasyTrack EasyCap, TPE Capmat™, TPE Capcluster™ and SepraSeal caps. EasyTrack Racks, Lobarack™, Comorack™, Roborack™, Staborack™, TrakMate™ racks. Please specify racks and capping systems to be used at time of ordering. (Default is compatible with FluidX 1.4ml racked tubes).
Power requirements	230/115V

Ordering Information

Catalog No	Description
46-1004	Xcm-CapIt Semi-Automatic Electrical Motor Cap-mat Sealer (FluidX, Micronic and Matrix tubes with TPE, SepraSeal and EVA Capmats) Please select adapter kit required, Matrix 1.4ml tubes do not require a separate adapter.
42-1006	FluidX 0.5ml Adapter for Xcm-CapIt
42-1007	FluidX 0.65ml Adapter for Xcm-CapIt
42-1008	FluidX 1.1ml Adapter for Xcm-CapIt
42-1009	FluidX 1.4ml Adapter for Xcm-CapIt
42-1010	Matrix 0.5ml Adapter for Xcm-CapIt
42-1011	Matrix 0.75ml Adapter for Xcm-CapIt



The FluidX range of automated capping/decapping systems for screw cap tubes improve productivity while reducing the risk of cross contamination and repetitive strain injury.

Able to automatically remove, apply or dispose of screw caps from 24, 48 or 96 format racked tubes. The caps can be retained within the system as the user fills or accesses the tubes, the same caps can then reinserted into the same tubes they were taken from.

Compatible with any standard screw cap tube in 24, 48 or 96 format.

Each cap receives the same torque to ensure optimal seal quality and consistency. Thread is tracked precisely to avoid any cap cross threading. By adjusting to the tube pitch required for each manufacturer, FluidX capping/decapping systems ensure that caps are not cross threaded during the recapping process.

The active cap driver ejection mechanism eliminates the risk of splashing or aerosol.

Easily integrated or use alone, can be used in either manual or automated mode.

Simple to operate (touch screen) with easy to read visual cues for operational status, tube type selection and operation.

Integrate using RS232 command set. Motorised stage aids and decapping cap failure detection aid robust integration further.

Easy stage access. Sensors ensure that a rack is always loaded in correct orientation.

Rack set-down position is clear of the main housing to allow easy robot gripper access and mounting points provide a solid fixture for robotic integration. Fits inside an environmental control cabinet.

Combine with FluidX BioFill to incorporate automated dispensing.

Optional automated tube height detector. Platform height is automatically adapted according to tube height detected. No adaptors needed.

Single column capping/decapping systems	Whole rack capping/decapping systems
<p>XSD-4 High speed single column capper/decapper for screw caps. Automatically removes and replaces (or disposes of) caps from single column of a 24 format rack of tubes. Takes 15 seconds to decap a column, 18 seconds to recap a column. Able to remove all caps from a complete rack of 24 tubes in 100 secs. (Column by column).</p>	<p>XSD-24 High speed whole rack capper/decapper for screw caps. Automatically removes and replaces (or disposes of) caps from a complete rack of 24 tubes. Takes 22 seconds to decap a whole rack, 31 seconds to recap a whole rack.</p>
<p>XSD-6 High speed single column capper/decapper for screw caps. Automatically removes and replaces (or disposes of) caps from single column of a 48 format rack of tubes. Takes 15 seconds to decap a column, 18 seconds to recap a column. Able to remove all caps from a complete rack of 48 tubes in 120 secs. (Column by column).</p>	<p>XSD-48 High speed whole rack capper/decapper for screw caps. Automatically removes and replaces (or disposes of) caps from a complete rack of 48 tubes. Takes 22 seconds to decap a whole rack, 31 seconds to recap a whole rack.</p>
<p>XSD-8 High speed single column capper/decapper for screw caps. Automatically removes and replaces (or disposes of) caps from single column of a 96 format rack of tubes. Takes 15 seconds to decap a column, 18 seconds to recap a column. Able to remove all caps from a complete rack of 96 tubes in 240 secs. (Column by column).</p>	<p>XSD-96 High speed whole rack capper/decapper for screw caps. Automatically removes and replaces (or disposes of) caps from a complete rack of 96 tubes. Takes 34 seconds to decap a whole rack, 44 seconds to recap a whole rack.</p>

XSD-1 Semi-automatic single tube capper/decapper

FluidX also offer a semi-automatic single tube capper/decapper for single tubes which can be used with all standard tubes sealed with either screw caps or TPE septum caps. Cycle time is less than 1 second!



APERIO 8 Channel Semi-Automated Screw Cap Tube Decapper



The Aperio offers the consistency of an automated decapping system but at much lower cost.

With a set down position for caps using cap carrier.

Small footprint, and easy to use on the bench or within a laminar flow cabinet.

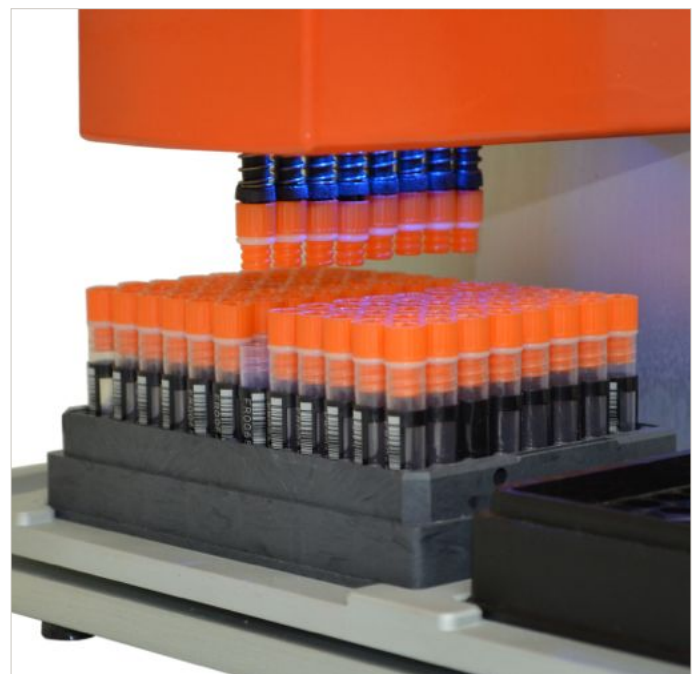
Can be used with all FluidX screw cap tubes in 96 format, with internal or external thread.

Compatible with FluidX Cap Carrier for internal and external thread screw cap tubes.

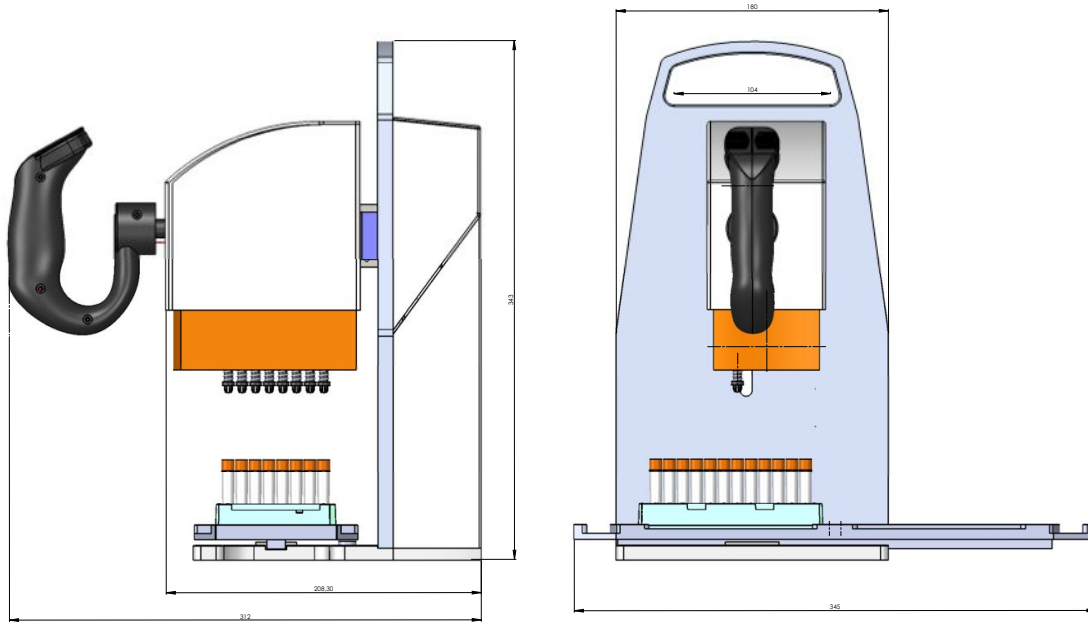
The Aperio can cap a single column of tubes from a cap carrier in under 10 seconds and will cap, or decap, a complete rack of 96 tubes from a cap carrier in under 2 minutes.

Individually sprung loaded cap drivers for easy capping.

Always ready for use, no need for battery recharging.

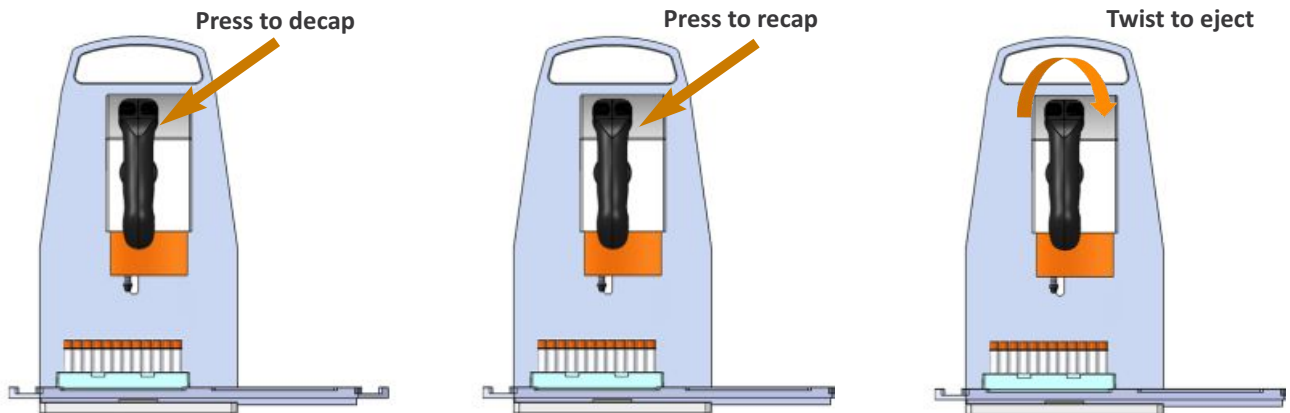


Small footprint



Measurements in mm

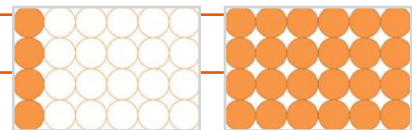
Simple controls



Ordering Information

Catalog No	Description
46-6501	Aperiio 8 Channel semi-automatic screw cap capping/decapping system for 96 format racked tubes with internal thread.
46-6502	Aperiio 8 Channel semi-automatic screw cap capping/decapping system for 96 format racked tubes with external thread.

XSD-4 High Speed Single Column Tube Capper/Decapper for Screw Caps in 24 Format



A benchtop, high-speed whole rack tube capper/decapper that can automatically remove and dispose of screw caps from a single column of a 24 format tube rack.

Alternatively, the screw caps can be held within the XSD-4 while the user fills, or accesses, the tubes.

Caps can then be automatically re-inserted into the same tubes.

Compatible with all standard tubes with screw cap in 24 format.

Takes 15 seconds to decap a row, 18 seconds to recap a row.

Can be used to decap/recap a whole rack, column by column.

Optional automatic height control. Tube height detected and platform height automatically adjusted accordingly.



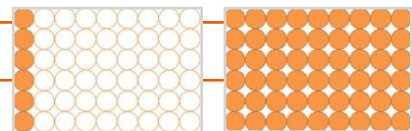
Specifications

Dimensions	Width 341mm x Height 280mm x Depth 366mm
Weight	25Kg
Power requirements	AC 110 -230V, 6A Max
Cycle time	15 seconds to decap a row, 18 seconds to recap a row.
Cable Interface	Serial RS 232
Compatibility	Suitable for use with all 24-format tubes with screw caps. Generally suitable for: Internal thread tubes with external diameter > 13.1mm. External thread tubes with external diameter >12.6mm.

Ordering Information

Catalog No	Description
46-7003	Xsd-4 (24 as 4x6 mechanism) 24 channel automatic screw top tube rack decapper / re-capper, selectable 6x8 mechanism, compatible with Fluidx and Nunc 2ml screw top cryo tubes. (Other tube types on request).
46-7901	Optional automatic tube height detection and platform position control. Allows use of multiple height tubes in FluidX screw cap decappers.
46-7902	Optional extra height unit for taller tubes. Required for 4ml and 5ml cryo tubes and other large format tubes.

XSD-6 High Speed Single Column Tube Capper/Decapper for Screw Caps in 48 Format



A benchtop, high-speed whole rack tube capper/decapper that can automatically remove and dispose of screw caps from a single column of a 48 format tube rack.

Alternatively, the screwtop caps can be held within the XSD-6 while the user fills, or accesses, the tubes.

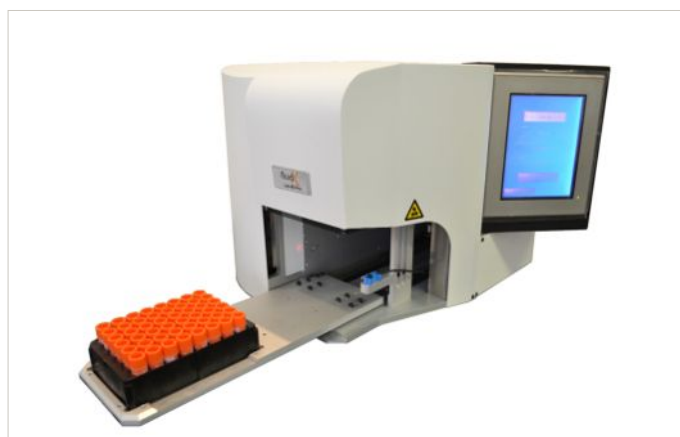
Caps can then be automatically re-inserted into the same tubes.

Compatible with all standard tubes with screw cap in 48 format.

Takes 15 seconds to decap a row, 18 seconds to recap a row.

Can be used to decap/recap a whole rack, column by column.

Optional automatic height control. Tube height detected and platform height automatically adjusted accordingly.



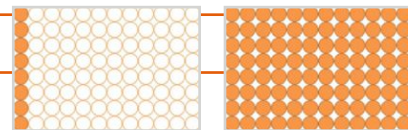
Specifications

Dimensions	Width 341mm x Height 280mm x Depth 366mm
Weight	25Kg
Power requirements	AC 110 -230V, 6A Max
Cycle time	15 seconds to decap a row, 18 seconds to recap a row.
Cable Interface	Serial RS 232
Compatibility	Suitable for use with all 48-format tubes with screw caps. Generally suitable for internal thread tubes with external diameter up to 13.1mm, or external thread tubes with external diameter up to 12.6mm.

Ordering Information

Catalog No	Description
46-7002	Xsd-6 (48 as 6x8 mechanism) 48 channel automatic screw top tube rack decapper / re-capper, selectable 6x8 mechanism, compatible with Fluidx and Nunc 2ml screw top cryo tubes. (Other tube types on request).
46-7901	Optional automatic tube height detection and platform position control. Allows use of multiple height tubes in FluidX screw cap decappers.
46-7902	Optional extra height unit for taller tubes. Required for 4ml and 5ml cryo tubes and other large format tubes.

XSD-8 High Speed Single Column Tube Capper/Decapper for Screw Caps in 96 Format



A benchtop, high-speed whole rack tube capper/decapper that can automatically remove and dispose of screw caps from a single column of a 96 format tube rack.

Alternatively, the screw top caps can be held within the XSD-8 while the user fills, or accesses, the tubes.

Caps can then be automatically re-inserted into the same tubes.

Compatible with all 96-format screw capped tubes from major suppliers (either internal or external thread).

Takes 15 seconds to decap a row, 18 seconds to recap a row.

Can be used to decap/recap a whole rack, column by column.

Optional automatic height control. Tube height detected and platform height automatically adjusted accordingly.



Specifications

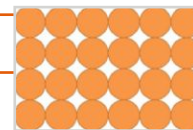
Dimensions	Width 341mm x Height 280mm x Depth 366mm
Weight	25Kg
Power requirements	AC 110 -230V, 6A Max
Cycle time	15 seconds to decap a row, 18 seconds to recap a row.
Cable Interface	Serial RS 232
Compatibility	Suitable for use with all 96-format tubes with screw caps.

Ordering Information

Catalog No	Description
46-7001	Xsd-8 (96 as 8x12 mechanism) 96 channel automatic screw top tube rack decapper / re-capper, selectable 8x12 mechanism, compatible with Fluidx, Matrix, Micronic and Nunc 1.4ml, 1.1ml and 0.5ml screw top tubes. (Other tube types on request)
46-7901	Optional automatic tube height detection and platform position control. Allows use of multiple height tubes in FluidX screw cap decappers.



XSD-24 High Speed Whole Rack Tube Capper/Decapper for Screw Caps in 24 Format



A benchtop, high-speed whole rack tube capper/decapper that can automatically remove and dispose of screw caps from a whole rack of tubes in 24 format.

Alternatively, the screwtop caps can be held within the XSD-24 while the user fills, or accesses, the tubes.

These caps can then be automatically re-inserted into the same tubes.

Compatible with all standard tubes with screw cap in 24 format. Takes 22 seconds to decap a whole rack, 31 seconds to recap a whole rack.

Optional automatic height control. Tube height detected and platform height automatically adjusted accordingly

Specifications

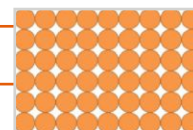
Dimensions	Width 341mm x Height 280mm x Depth 366mm
Weight	25Kg
Power requirements	AC 110 -230V, 6A Max
Cycle time	22 seconds to decap, 31 seconds to recap a whole rack.
Cable Interface	Serial RS 232
Compatibility	Suitable for use with all 24-format tubes with screw caps. Generally suitable for: Internal thread tubes with external diameter > 13.1mm. External thread tubes with external diameter >12.6mm.



Ordering Information

Catalog No	Description
46-7503	Xsd-24 Automatic 24 format screw top tube rack decapper / re-capper. With automated glide rail for integration, compatible with Sarstedt type screw cap tubes (external thread), 2ml cryo screw top tubes.
46-7901	Optional automatic tube height detection and platform position control. Allows use of multiple height tubes in FluidX screw cap decappers.

XSD-48 High Speed Whole Rack Tube Capper/Decapper for Screw Caps in 48 Format



A benchtop, high-speed whole rack tube capper/decapper that can automatically remove and dispose of screw caps from a whole rack of tubes in 48 format.

Alternatively, the screwtop caps can be held within the XSD-48 while the user fills, or accesses, the tubes.

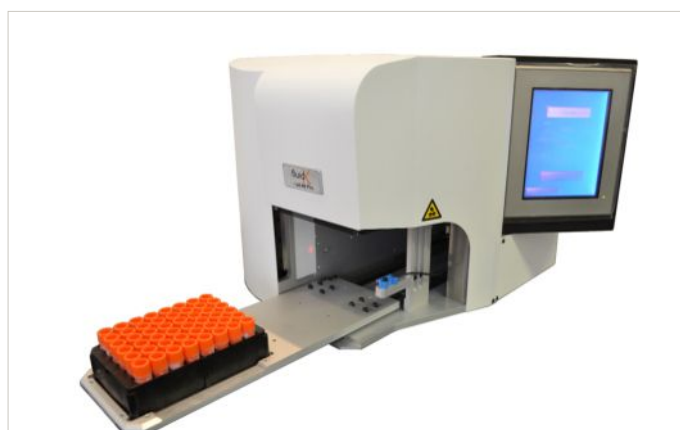
These caps can then be automatically re-inserted into the same tubes.

Compatible with all standard tubes with screw cap in 48 format. Takes 22 seconds to decap a whole rack, 31 seconds to recap a whole rack.

Optional automatic height control. Tube height detected and platform height automatically adjusted accordingly

Specifications

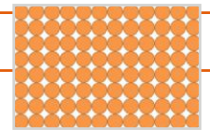
Dimensions	Width 341mm x Height 280mm x Depth 366mm
Weight	25Kg
Power requirements	AC 110 -230V, 6A Max
Cycle time	22 seconds to decap, 31 seconds to recap a whole rack.
Cable Interface	Serial RS 232
Compatibility	Suitable for use with all 48-format tubes with screw caps. Generally suitable for internal thread tubes with external diameter up to 13.1mm, or external thread tubes with external diameter up to 12.6mm.



Ordering Information

Catalog No	Description
46-7502	Xsd-48 Automatic 48 format screw top tube whole rack decapper / re-capper. With automated glide rail for integration, compatible with FluidX 2ml cryo screw top tubes.
46-7901	Optional automatic tube height detection and platform position control. Allows use of multiple height tubes in FluidX screw cap decappers.

XSD-96 High Speed Whole Rack Tube Capper/Decapper for Screw Caps in 96 Format



A benchtop, high-speed whole rack tube capper/decapper that can automatically remove and dispose of screw caps from a whole rack of tubes in 96 format.

Alternatively, the screwtop caps can be held within the XSD-96 while the user fills, or accesses, the tubes.

These caps can then be automatically re-inserted into the same tubes, alternatively new caps can be inserted using the FluidX cap carrier system.

Compatible with all 96-format screw capped tubes from major suppliers (either internal or external thread).

Takes 34 seconds to decap a whole rack, 44 seconds to recap a whole rack.

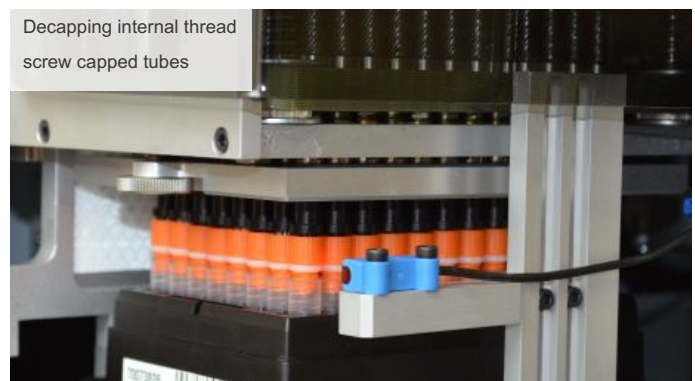
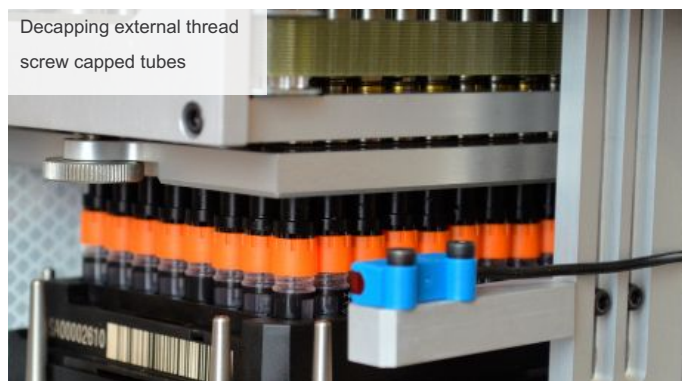
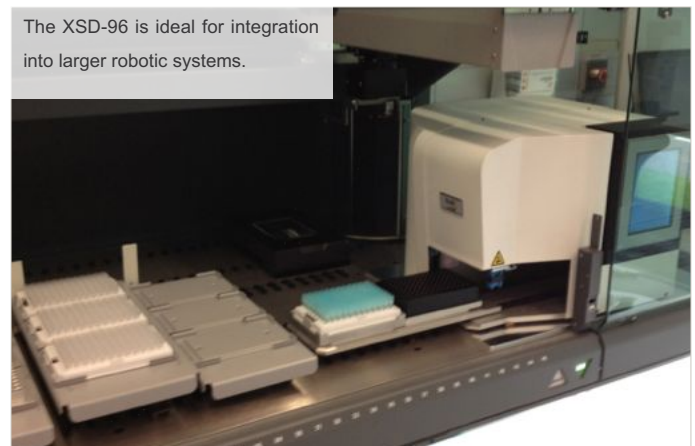


Specifications

Dimensions	Width 341mm x Height 280mm x Depth 366mm
Weight	25Kg
Power requirements	AC 110 -230V, 6A Max
Cycle time	34 seconds to decap, 44 seconds to recap a whole rack.
Cable Interface	Serial RS 232
Compatibility	Suitable for use with all 96-format tubes with screw caps.

Ordering Information

Catalog No	Description
46-7501	Xsd-96 Automatic 96 screw top tube whole rack capper / decapper. With automated glide rail for integration, compatible with FluidX and other 96 format tubes, please specify when ordering. Designed for integration with decap failure detection and error recovery.



XSD-BIOFILL Automated Dispenser for XSD Tube Decappers



Combine a FluidX screw cap capper/decapper with a BioFill dispenser unit to create a complete and compact filling system.

Automatically decap, dispense liquids and recap screw capped microtubes positioned in a 24, 48 or 96 format SBS footprint rack.

Accurate dispensing. BioFill uses a microprocessor controlled precision peristaltic pump.

Column dispensing. BioFill dispenses into four, six or eight tubes at one time reducing contamination risk. Simply select the desired column from touch screen or command set.

Space saving. BioFill fits closely next to the decapper/recapper so both fit inside a culture cabinet and integrate easily with additional systems. Easy to operate with a finger-touch control panel.

Only one column of tubes is open at one time, minimising sample contamination. BioFill uses disposable tubing cartridges to reduce the risk further.

Simple to set up. BioFill uses the same controller as decapping system.

Two programs:

System decaps, dispenses and recaps one column (either four, six or eight tubes) at a time using the same caps as before.

System decaps, discarding the caps, and recaps the assay tubes with new fresh caps from cap magazine.

Specifications

Dimensions	Width 342mm x Height 275mm x Depth 725mm
Weight	30Kg (including decapper)
Power requirements	AC115V / 230AC, 50/60Hz
User interface	Communication with XSD 96 decapper/recapper
Materials	All components in contact with the dispensed solution are made of stainless steel, or Polypropylene Resin. The cabinet is molded from soft steel with gray powder coating Cabinet protection grade: IP 54
Accuracy	Dispensing cartridges are factory calibrated, however adjustments can be made.
Volume	5-2000uL/min
Tubing	Cartridges contain sterile and calibrated tubing. Tubing can be changed quickly and easily.

Ordering Information

Catalog No	Description
46-7701	Automatic dispenser unit for Xsd-96 (8x12), Xsd-48 (6x8), Xsd-24 (4x6) screw cap capping/decapping systems.
46-7711	Baseplate for use with XSD and BioFill systems for surfaces requiring support such as laminar air flow cabinets



XSD-1 Semi-automatic Single Tube Decapper for Screw Caps or TPE Septum Caps

Compact semi-automatic single tube capper/decapper designed to reduce the risk of injury resulting from repetitive movements. Compatible with all standard size tubes sealed with either screw caps or septum caps.

To use simply place the tube into gripping system. The XSD-1 will start automatically while the operator gently holds the tube in place. Cycle time is less than 1 second.

Easy to use. Select option "0" to alternate automatically between screwing and unscrewing caps. Option "I" will enable the user to unscrew caps repeatedly. Option "II" is selected to screw caps onto multiple tubes.

Suitable for use inside a laminar flow cabinet.

Specifications

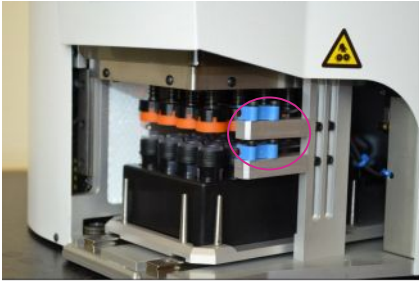
Dimensions	Width 110mm x Height 295mm x Depth 338mm
Weight	5.5Kg
Power requirements	AC 100 -240V, 50/60 Hz, 26W
Cycle time	< 1 second
Materials	All components that may come into contact with samples are manufactured from stainless steel, anodized aluminum or resistant plastic. Cabinet is soft steel mold with grey powder coating. Cabinet protection grade IP54.
Compatibility	Suitable for use with all standard sized tubes with either screw cap or septum cap.

Ordering Information

Catalog No	Description
46-6001	Single channel automatic screw top tube decapper/recapper. Please specify tube type when ordering.



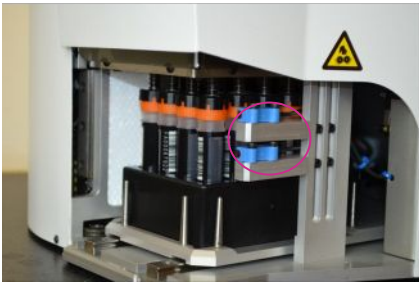
Auto height detection module



The XSD range of automated screw cap tube cappers/decappers are available with an optional auto height detection module.

This allows tubes of 2 differing heights to be used within the system, using the same caps.

Sensors on the side of the unit determine the height of the tubes placed within the system and adjust accordingly.



This is particularly beneficial when integrating into a system that uses 2 different tube sizes such as 2ml and 4ml cryo tubes, or 6ml and 10ml large format tubes, in a liquid handling platform as no additional command changes are required to the integration software.

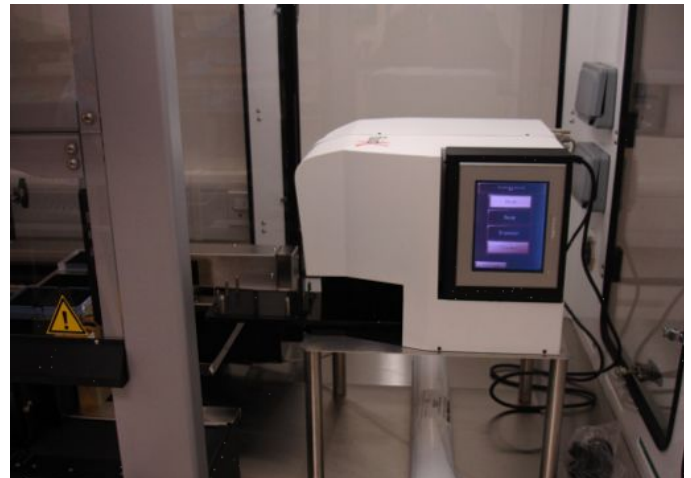
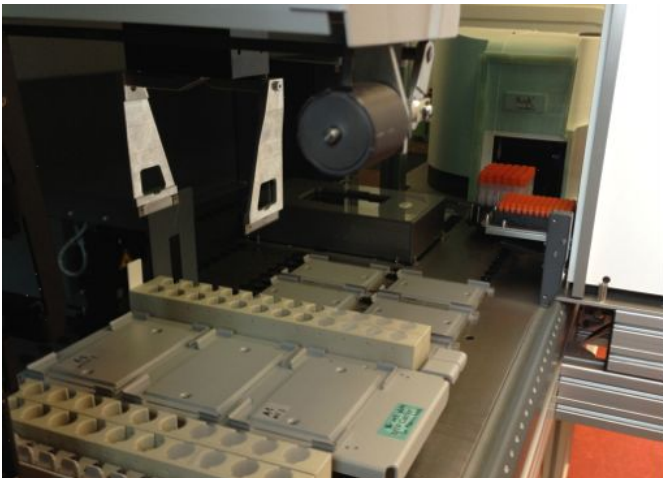
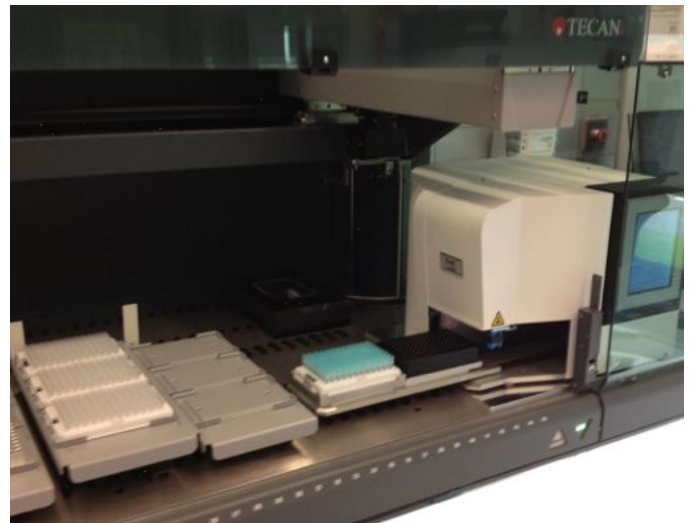
Integration

The XSD range of automated screw cap tube capper/decapper are designed to be used as a stand alone system (using the integrated touch panel) or integrated via the inbuilt RS232 port and PCL controlled serial command set.

Compact XSD systems fit easily on the deck of automated sample processors and racks can be easily placed onto the extended reach of the rack shuttle by the gripper arms.

Error reporting and recovery via the RS232 connection allow for reliable integration. Sensors indicate if a cap has not been removed during a decapping cycle.

Easy to replace cap drivers, along with a design that has been optimised for field service, ensures minimal down time for integrated systems.



Manufactured to Order Rack Service

Need to decap a non-fluidx tube?

Do you have an existing tube that you need to automate?

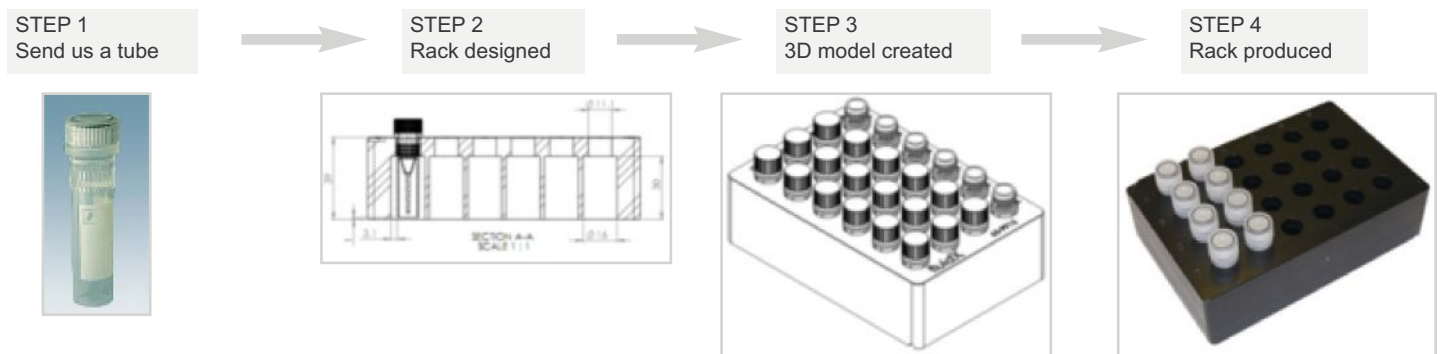
Do you have an existing tube that you need to use with an automated decapper / recapper?

Do you need an SBS rack for a legacy tube?

We provide a custom design and build service for SBS standard racks to be used with our range of decappers or any other automated process.

Send us samples of the tube along with the process and the number of racks that may be required. To create between 1 and 100 racks, the rack will be machined. For more than 100 racks it may be beneficial to use injection molding techniques.

For a machined rack the whole process will take approx 4 weeks.



EXAMPLES



48 Rack for Nunc cryo tubes, for use in XSD-48 capper/decapper. Machined rack.



24 Rack for Sarstedt micro tube with screw cap, for use with XSD-24 capper/decapper. Injection molded rack.



24 Rack for Greiner and Nunc cryo tubes, for use with XSD-24 capper/decapper and automated sample storage systems. Injection molded rack.



24 Rack for Greiner vacutainers, for use with automated sample storage systems. Injection molded rack.



24 Rack for Eppendorf MC flip top tubes, for use with manual and automated liquid handling systems. Machined rack.

AIRFILM THERMAL SEAL

The single-use AirFilm aluminium film is designed for economical, individual sealing of polypropylene microtubes in 96 or 384 format racks.

Impenetrable barrier

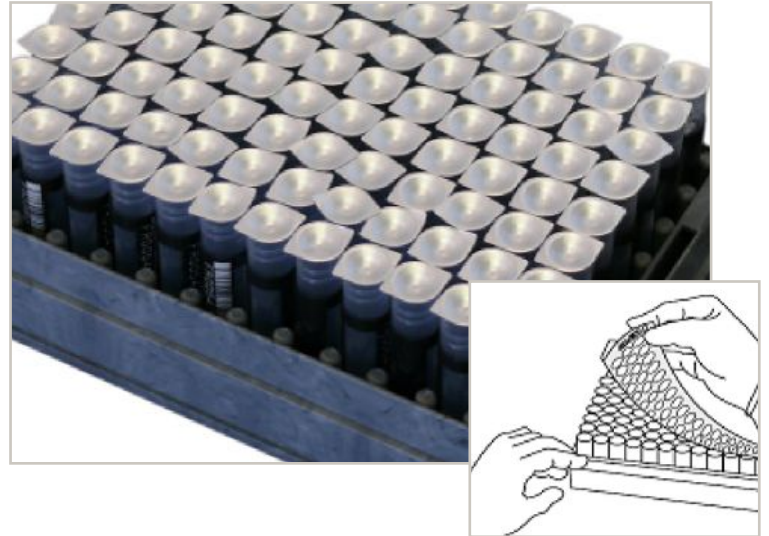
Creates an air-tight seal that can be easily removed by peeling. Suitable for low temperature sample storage (-196°C). Not for use in liquid phase Nitrogen.

Reduce risk of sample damage

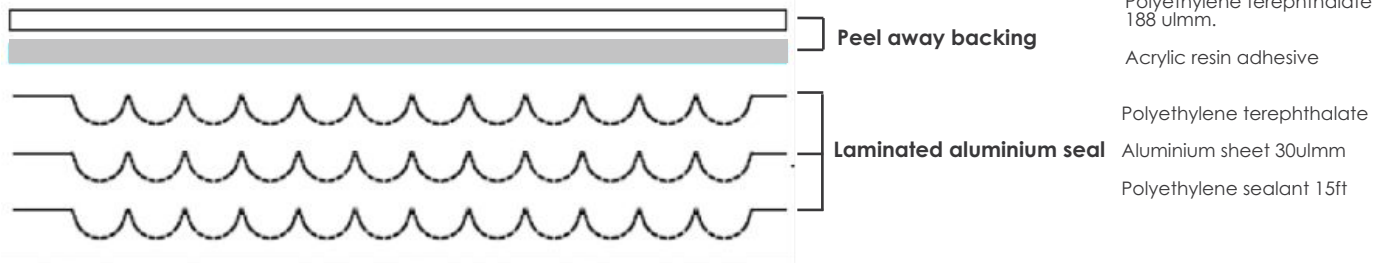
Heat transfer during sealing process is lessened by the "embossed" seal construction which creates an air pocket between the seal and tube.

Automated use

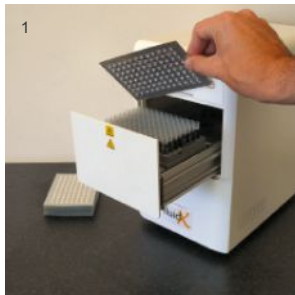
AirFilm seals can be pierced with suitable liquid handling tips.



AirFilm composition



Easy to seal



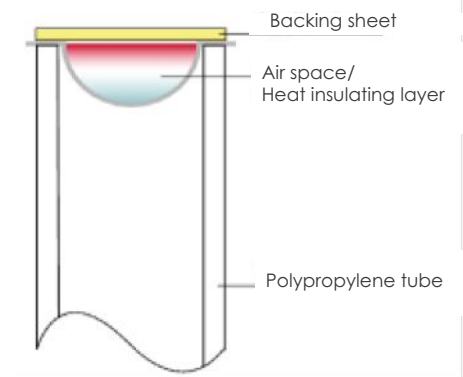
1 Place racked tubes in the thermal sealer and position a sheet of AirFilm over them.



2 Start the sealing process. Recommended sealing temperature and time for use with FluidX Manual Thermal Sealer are 200°C/5 seconds.



3 Remove rack from the sealer and gently remove PET backing sheet from the sealed tubes.



Easy to remove



Ordering Information

Catalog No	Description
66-1001	AirFilm Individual Thermal Seal, 96 tube seals per sheet. 50 Sheets/case
66-1002	AirFilm Individual Thermal Seal, 384 tube seals per sheet. 50 Sheets/case

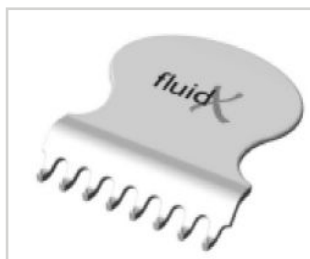
MANUAL DECAPPERS

The range of manual decappers from FluidX offers a cost effective and easy to use method of decapping tubes sealed with single screw caps or TPE caps allowing individual manual sample access.

The manual 8-way TPE cap decapper provides a fast option for the removal of 8 caps from a single column. This decapper can be used sequentially to decap a complete rack in under 60 seconds, even when wearing gloves

Ordering Information

Catalog No	Description
65-54000	Manual Decapper-1, 1 piece
65-54001	Manual Decapper-8, 1 piece
65-54004	Screw Cap Remover, 10 piece



TPE SEPTUM CAPS

Piercable cap, for use with any 96-format FluidX tube. White, disposable caps manufactured from thermoplastic elastomer. Suitable for use at temperatures between -80 and 110°C



SCREW CAPS

Reduce sample loss

A significant amount of liquid can become trapped within a standard screw cap resulting in the loss of valuable sample material. The “hollow” area on the cap catches the sample and surface tension then makes removal difficult.

Studies demonstrate that our new screw-cap design significantly reduces this effect by offering a much lower liquid retention than many existing caps while maintaining seal quality.

Polypropylene cap with a silicon “O” ring for optimal seal quality. Compatible with all FluidX 96-format tubes with screw top. High chemical resistance. Now available in a choice of ten colours to aid identification. Autoclavable.

Temperature range -196°C to +120°C. Do not use in liquid phase Nitrogen.

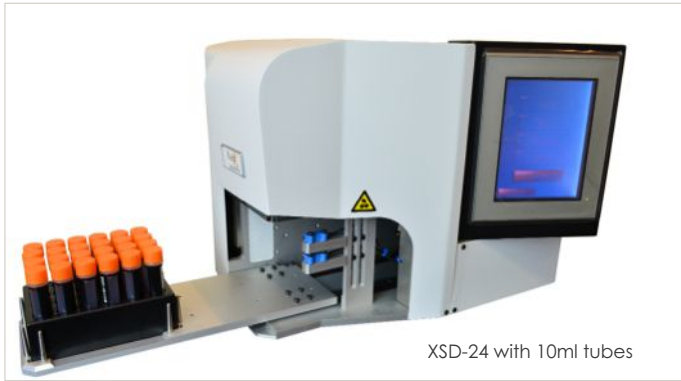
Automation friendly, available in Cap Carrier for use with automated capping/decapping systems.



9 colours to chose from



SOME SYSTEMS IN ACTION...



XSD-24 with 10ml tubes



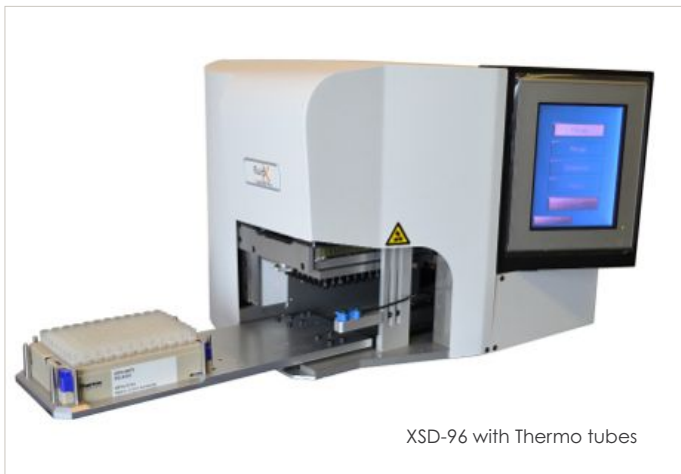
XSD-48 with Greiner internal screw top cryo tubes



XSD-96 with FluidX 1ml tubes



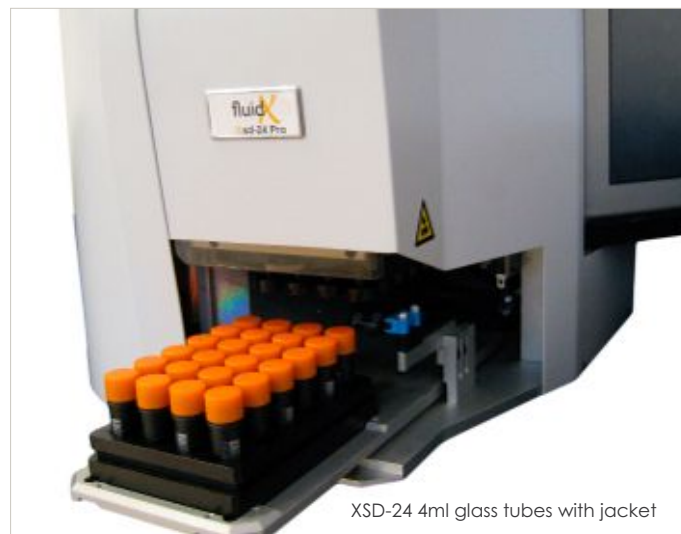
XSD-24 with 2ml Nalgene cryo tubes



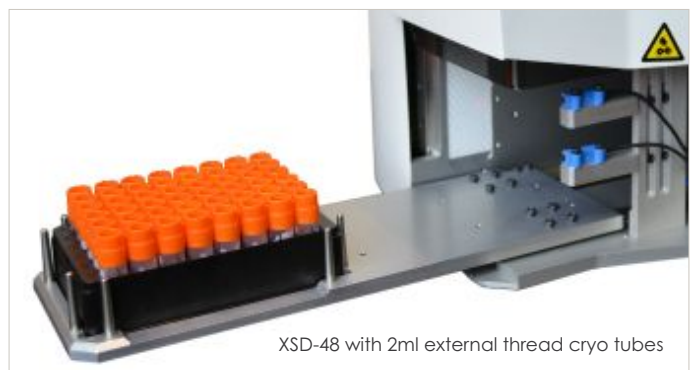
XSD-96 with Thermo tubes



XSD-8



XSD-24 4ml glass tubes with jacket



XSD-48 with 2ml external thread cryo tubes

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