

# $\triangle R | \langle | \rangle \equiv BC$









TO MFFT FVOLVING NFFDS

Due to a range of factors, the volume of histology cassettes to be stored has increased dramatically over the last decade and is still rising at a rapid rate. At the same time, the growing complexity of modern medical practice has increased the frequency of requests for second and subsequent opinions, and has also widened the circumstances under which those requests may occur. This also applies to advanced testing for a variety of pathological specimens.

Patient sample management and storage has thus become a real issue for pathology labs, making archival, traceability and safety more challenging.



A non-organized sorting, archiving and retrieval process can be error-prone, leading to potential sample loss, misidentification and delays in retrieval. These things all translate to **delayed analysis**, **increased costs** and potential medical-legal liability for the laboratory.

Additionally, the whole process is extremely **time consuming**, and in some cases the original tissue or biopsy may be unsuitable for additional testing due to non-standardized storage solutions and conditions.



## TRACK AND TRACE YOUR TISSUE BLOCKS AND TAKE SAMPLE STORAGE TO THE NEXT LEVEL

Arkive BC™ is the innovative, automated histology cassette storage and management solution for pathology labs and clinics. It was developed by **A.Menarini Diagnostics** to streamline the archiving and retrieval process, optimize traceability, ensure the safety of important patient tissue and biopsy blocks, and reduce the time and effort needed to sort and store.

Patient samples will always be viable for future use, and laboratory resources can be used more effectively and for what matters most – providing the right diagnosis to the right patient in a timely manner.

#### **Key benefits of Arkive BC™**

- Built-in automation to improve safety, increase productivity and make workflows more efficient
- Reliable LIS integration and user-friendly, on-board software to minimize errors and enhance performance
- **■** Full traceability and easy retrieval of cassettes
- Safe and secure storage unit with constant monitoring
- Proper archiving to ensure long-term sample preservation, integrity and quality
- No risks associated with lost or misplaced samples
- Improved utilization of staff, time and equipment
- Modular and scalable solutions and capacities to meet evolving laboratory needs







### DESIGNED FOR TRACFABILITY



DESIGNED FOR SAFETY



The critical aspects of the histopathology workflow lie in the archiving of slides and cassettes, and in retrieving them for further testing. In most cases, the process is non-standardized and complicated, impacting safety, convenience and service costs.

**Arkive BC™**, the integrated storage solution from A.Menarini Diagnostics, **can now provide pathology professionals with total cassette traceability**. Any specimen can be very quickly archived or located and accessed for retrieval at any time; the entire workflow will be improved, minimizing errors and saving a lot of time each day.

#### Reliable identification technology

Thanks to the use of 1D/linear barcodes and QR Codes, no manual data entry operation is needed. Each component can be fully tracked, virtualized and visualized. In-depth traceability information for important patient samples will be always at hand. RFID technology has also been implemented.

#### Integration into the LIS and user-friendly on-board software

**Arkive BC™** can be easily **integrated into the Laboratory Information System (LIS)** or can be interfaced with middleware as desired so that each task is managed and traced in an appropriate and timely manner. The on-board software with its user-friendly interface allows the complete management of the operations by authorized technicians.

### Traceability is at the forefront of sample safety and security

Safe and secure storage is a non-negotiable part of the laboratory workflow, and each sample must be managed, monitored and preserved in a consistent manner. **Arkive BC** $^{\text{TM}}$  is designed to guarantee cassette integrity, safety and security during short and medium/long-term storage, while also enhancing efficiency and productivity.

- There is total traceability through LIS integration and on-board software, combined with overall barcode technology to avoid manual data entry and reduce errors.
- The cassettes are physically protected with dedicated trays and holders, and there is adequate spacing to avoid contact and cross-contamination.
- There are extended security features that prevent samples from being accessed by any unauthorized users (operator identification and authentication).
- **≡** Each unit is equipped with temperature sensors and alarm signals.
- A backup battery is on board to guarantee uninterrupted operation and data security in case of power failure.



## **ARCHIVING PROCESS**



Histology cassettes are ready to be archived



Storage unit (total capacity: 36,400 cassettes)



User is authenticated



Cassettes are loaded using the loading trays (36 cassettes) -6 trays can be inserted into each loading door in the front







Internal automation: a robot arm equipped with a barcode reader moves each cassette from the tray to a random, tracked position in the internal panels. Each panel can store 2,800 cassettes (14 hives on each panel).

# NEVER TRACK YOUR



LIS integration



User badge identification and authentication

For more information, please

# LOSE OF CASSETTES



Touch-screen user interface



Barcode and RFID technology for maximum traceability

### **RETRIEVAL PROCESS**

Storage unit



User is authenticated



Single cassettes are made available through a front retrieval compartment (with Led lighting); cassette batches are retrieved from the front loading doors. Each operation/task begins with a notification from the head pathologist, and requires relevant user authentication.







Mass retrieval: up to 800 cassettes/run can be made available in hives placed on a side panel after automated retrieval by the robot arm



Histology cassettes are ready for further investigations



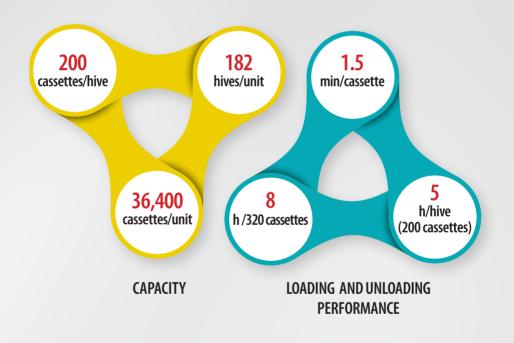
refer to the User Manual





### Increase speed, improve efficiency, reduce errors, lower costs and deliver better quality

As cancer diagnostics and treatment methods improve and the average age of the population increases, the quantity of tissue blocks being archived each year also increases. At the same time, the number of samples recalled for second opinions or further testing is also growing, and there is a desperate need to manage storage and access in a safe, efficient and cost-effective way.



A.Menarini Diagnostics Arkive BC™ archiving solution represents a breakthrough in histology cassettes management that maximizes productivity and efficiency by substantially reducing the user input and time needed to complete the required tasks.

There is no more need for time-consuming manual sorting of cassettes. A particular specimen or batch of specimens can be easily and quickly archived or located for retrieval at any time, which in turn increases the user's peace of mind.



## DESIGNED **FOR** MODUL ARITY



### Flexible and scalable solutions to fit your needs

Arkive BC™ is built with user-friendly design features, and is a modular system that can be easily configured to meet your specific storage needs and requirements. It enables efficient use of available lab space while also allowing for gradual investments over time.

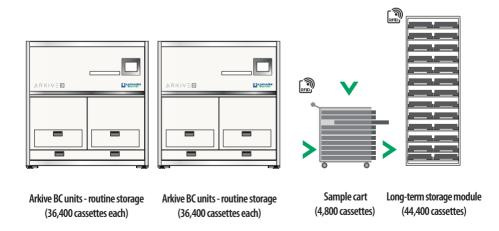
### An Arkive BC<sup>™</sup> system can grow and evolve as the lab's needs expand. This can be done within the timeframe you want and in the way you prefer

**Arkive BC™** is a modular system that can be expanded at any time with the installation of additional units for short, medium and long-term storage purposes. This can be done as needed in different areas of your lab to keep pace with changing needs and requirements. Automated sample storage systems such as **Arkive BC™** further enable sample management in the lab, while also eliminating the risk of sample degradation that is typical of traditional manual storage practices.

Moreover, **Arkive BC™** seamlessly interfaces with your IT infrastructure and LIS.

Configure the system to your current needs and expand it to accommodate future storage requirements.

Example of standard configuration for short and medium/long-term storage – 100% future ready





AUSTRIA - A.Menarini GmbH www.menarinidiagnostics.at

BENELUX - Menarini Benelux N.V./S.A -Division Diagnostics www.menarinidiagnostics.be

FRANCE - A.Menarini Diagnostics France SASU www.menarinidiagnostics.fr

GERMANY - A.Menarini Diagnostics Deutschland Eine Division der Berlin Chemie AG www.menarinidiagnostics.de

GREECE - A.Menarini Diagnostics s.a. www.menarinidiagnostics.gr

ITALY - A.Menarini Diagnostics Srl www.menarinidiagnostics.it

PORTUGAL - Menarini Diagnósticos, LDA www.menarinidiag.pt

SPAIN - A.Menarini Diagnosticos S.A. www.menarinidiag.es

UNITED KINGDOM - A.Menarini Diagnostics Ltd www.menarinidiag.co.uk

