Delphic AP

Single Piece Workflow

Right specimen, right
processes, right results
for your patients

Delphic AP Single Piece Workflow

Delphic AP Single Piece Workflow is the specimen tracking module of the Delphic AP solution that allows your lab to move from batch based handling of histopathology specimens to individual case processing.

Fully integrated with the Delphic AP LIS, Single Piece Workflow helps your lab to reduce lab errors, improve quality and efficiency, and provide complete traceability.

Supporting your lab's compliance with histology lab accreditation requirements, Delphic AP Single Piece Workflow provides assurance that your lab can track every step and action throughout the processing of a patient specimen.

Right specimen, right processes, right result for your patients

It is estimated that laboratory specimen handling errors occur in 1 out of every 100,000 histopathology specimens. The harm these errors can cause to patients is significant[1].

With Delphic AP Single Piece Workflow you can prevent specimen and label mix-ups, minimise the potential for accidental specimen transposition and improve patient safety.
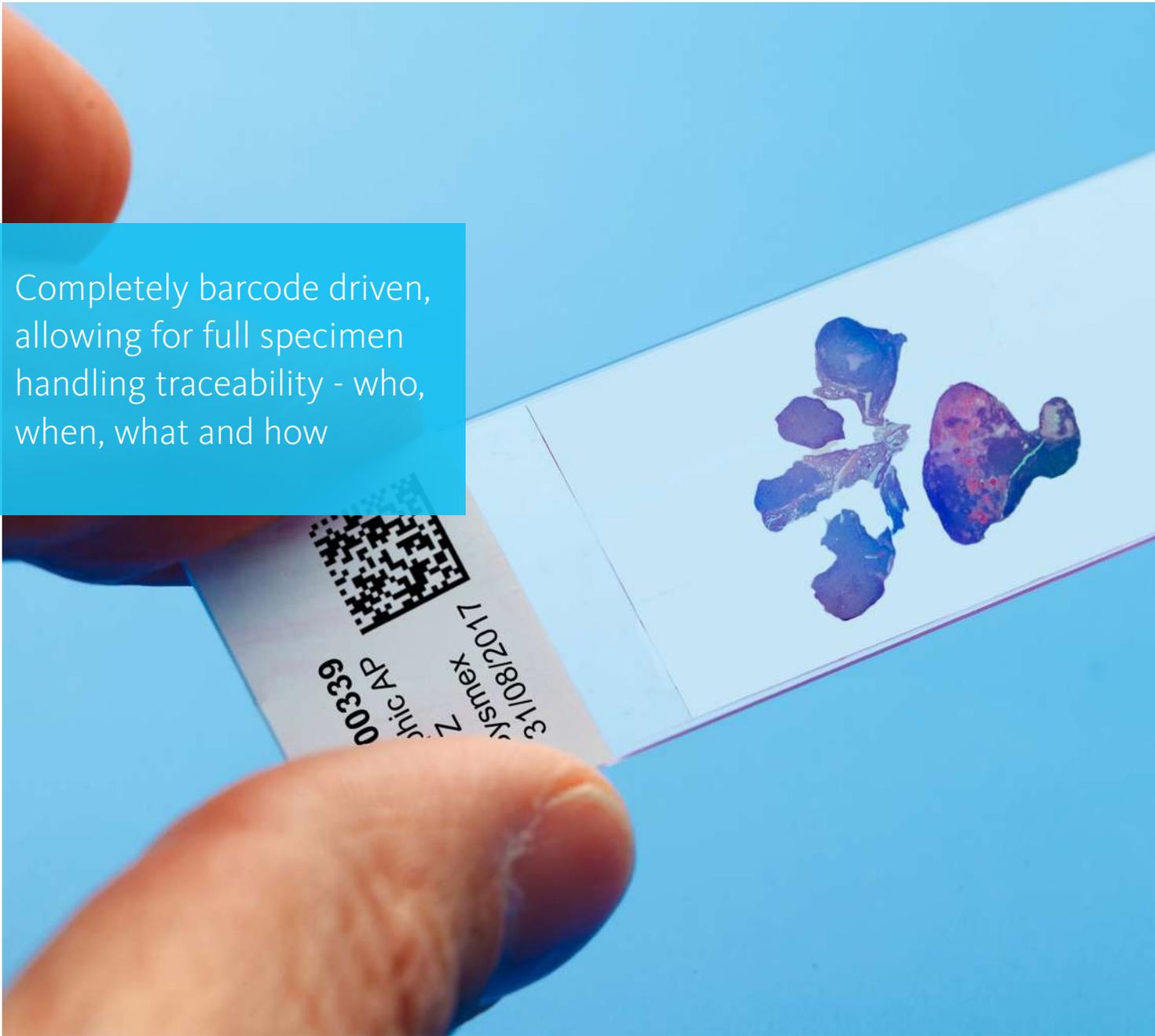

Delphic AP Single Piece Workflow improves the accuracy of multi-step specimen handling and simplifies user interaction:

- Unique identification of all items belonging to a case
- Individual request processing
- Barcode driven workflow
- Just-in-time cassette and slide label printing
- Standardised pathology processing through predefined operations and procedures
- Adaptable lab bench configuration with touchscreen and instrument interfacing

Delphic AP Single Piece Workflow is designed to support the future histopathology laboratory with a lean, automated workflow:

- Completely paperless pathology lab operations
- Full specimen tracking and traceability
- Interface to any autostainer or cassette and slide printer

Completely barcode driven,
allowing for full specimen
handling traceability - who,
when, what and how

Utilising Delphic AP Single Piece Workflow across the histopathology work area

Specimen Preparation

The patient case is opened by scanning the unique barcoded specimen pot.

The specimen preparation screen displays information related to the case, including lab work, patient, specimen and block details. The number of blocks required and procedures to perform are automatically determined based on the specimen type, e.g. Appendix = 2 X H&E.

Cassettes for the specimen will automatically print with the unique case and specimen details embedded in the barcode. This removes the need for handwritten cassette labels.

The number of blocks and procedure types can be easily amended as needed and comments can be added to inform lab staff of any special details.

The request form image for the case displays on a second screen, fully synchronised with the Single Piece Workflow module, allowing the laboratory to become a completely paperless environment.

The gross tissue description can be entered into the patient report using predefined text; as a digital dictation transcription file; or using integrated voice recognition software.

The gross tissue pieces are placed in each of the prepared cassettes and scanned to mark as complete. When all required blocks for the case are complete, the specimen pot is scanned again to flag specimen preparation as finished.

Blocking

After logging in at the Blocking workstation, the histotechnologist individually scans the barcoded cassettes before embedding commences.

Cutting

To begin processing, the microtomist logs in at the Cutting workstation and scans a barcoded cassette. The scanning of the cassette triggers the slide writer to print the appropriate number of slides, uniquely labelled for the procedures / stains that are to be performed.

The cutting screen displays information related to the scanned cassette, including block, work and slide details. Comments from the Blocking station can be viewed and additional comments added as needed.

After checking the cassette and slide details, the microtomist cuts and mounts all the required sections. As each slide is completed, it is scanned to mark it as done.

Once all slides for the scanned cassette are finished, the microtomist scans the cassette once again to indicate that all tasks are now concluded.

Staining

Delphic AP Single Piece Workflow interfaces to a range of autostainers for special stains and immunohistochemistry. This gives your lab freedom to choose the instruments best suited to your lab size and environment.

The instrument reads the slide label and retrieves the information from Delphic AP which defines the type of staining to perform for that request. This eliminates the need for manual staining worklists and setup in the staining instrument; saving time and improving accuracy.

Issuing

At Issuing all slides for the case are collated. Lab staff can review comments, add and review any notes regarding the lab work or specimen, and visually check all details of the selected case.

All slides are scanned to acknowledge they are complete and the case is ready to be issued to the pathologist for reporting.
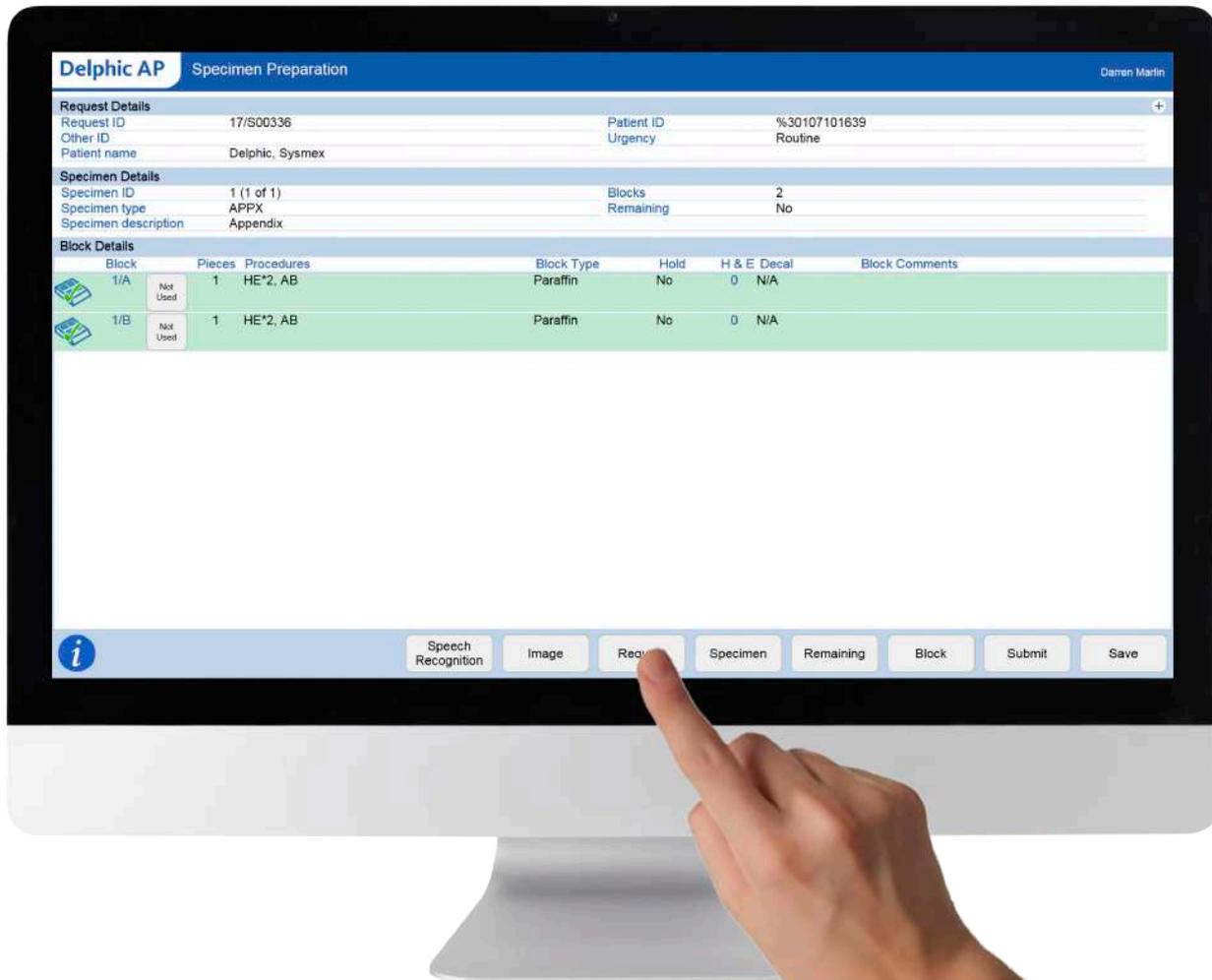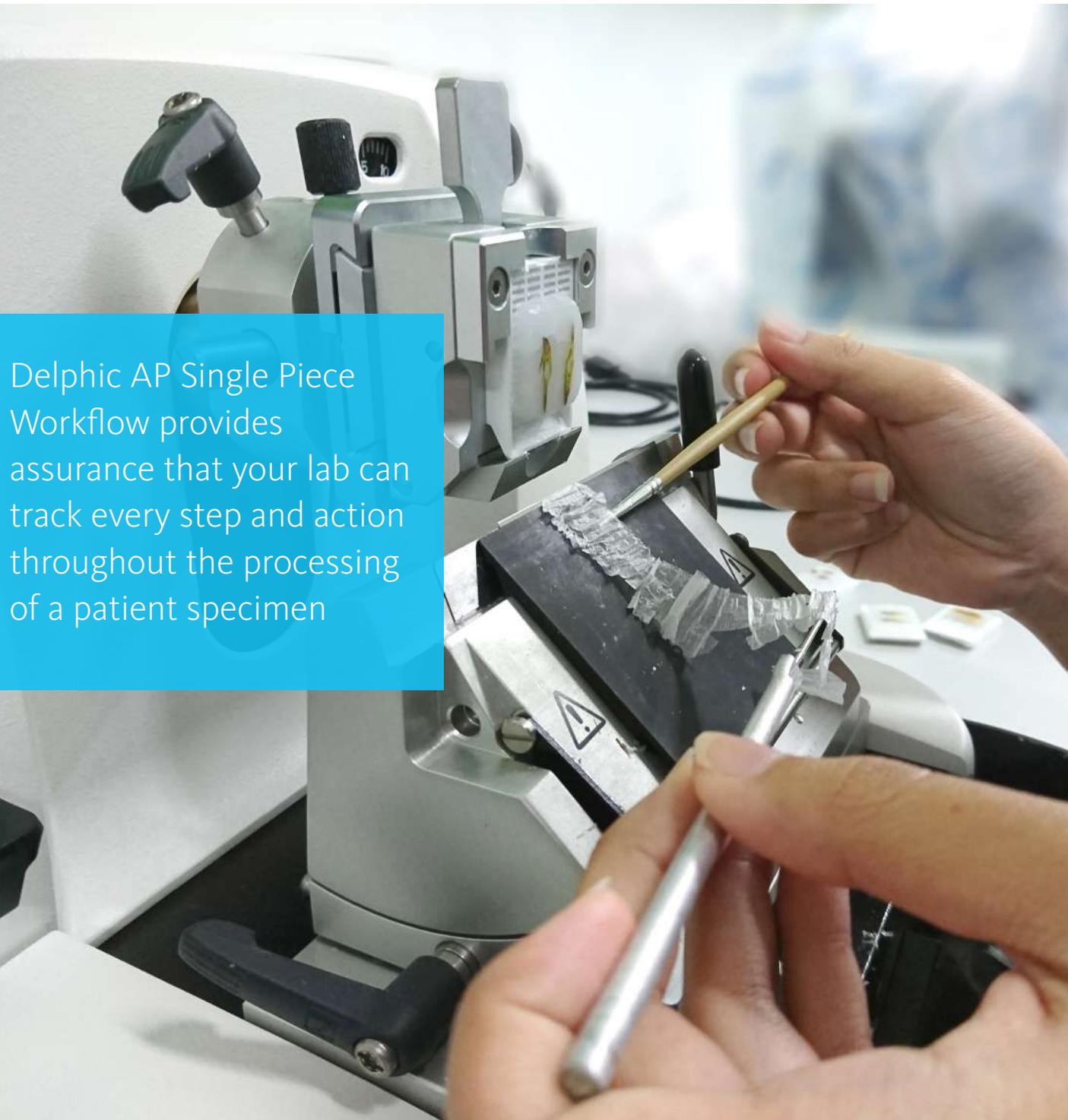
Extra Lab Work

Often the pathologist may request extra lab work to help determine a diagnosis for a patient case.

Lab staff can review the extra lab worklist and any comments or special instructions added by the pathologist.

The material is retrieved, scanned and flagged as collected by selecting the collected button. It is then delivered and scanned in at the workstation performing the extra lab work.

Delphic AP Single Piece Workflow has an intuitive touch screen interface for guided navigation of the workflow

Delphic AP Single Piece Workflow provides assurance that your lab can track every step and action throughout the processing of a patient specimen

Advantages of Delphic AP Single Piece Workflow

• No LIS interfacing costs to 3rd party specimen tracking software
• Fully integrated, end-to-end AP workflow, capturing all information assets
• Freedom to choose printers and instrumentation suitable for your lab size and environment
• Single source for specimen and user activity traceability
• Improve lab bench ergonomics with touch screen capability (including ability to wall mount screens)
• Developed and engineered to comply with histology lab accreditation requirements

Hardware Specifications for Delphic AP Single Piece Workflow

Lab Reception
PC, barcode reader, label printer for pot labels

Specimen Preparation
PC, touchscreen, barcode reader, cassette printer(s)

Embedding (Blocking)
PC, touchscreen, barcode reader

Cutting (Microtomy)
PC, touchscreen, barcode reader, slide printer or label printer

Staining
No hardware requirements

Issuing
PC, touchscreen, barcode reader

All-in-one PC with touchscreen also supported

For optimal use of Delphic AP Single Piece Workflow, Sysmex recommends wall mounting touchscreens and barcode readers to maximise bench space.

Minimum requirement, Delphic AP V9

[1] https://www.health.govt.nz/system/files/documents/publications/breast-biopsy-errors-report-v3.pdf

Delphic AP is not a medical device as it does not have a therapeutic purpose.