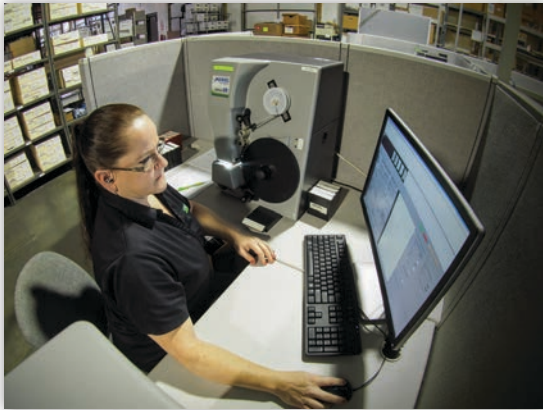


In 1987, Mekel Technology brought the world its first production microfilm scanner.

Today, it brings the most advanced microform processing software on the market.



# Quantum

## Roll film. Ribbon scan. Strip scan. Complete capture.

No matter what the technology is called, when it comes to full-fiche, aperture card or full-roll ribbon scanning, Mekel Technology's **Quantum** software scanning and processing technologies offer superior image capture, quality, processing and savings benefits.

### Increase operator production

- Scan at full-rated speeds without operator intervention
- Share quality assurance tasks with multiple operators
- Drive multiple **MACH-series** microfilm scanners with a single operator

### Reduce microform scanning costs

- Never search for lost images
- Eliminate the need to rescan

### 100% image capture guaranteed

### Optimum image quality

# ADVANTAGE

## Quantum Scan

### Easy To Use Microform Workflow



### Automatic Frame Detection

Regardless of size or skew, **QuantumScan** will find any frame automatically on microform without the need for complicated set-up wizards – 100% image capture guaranteed

### Speed

Using varying resolution and reduction scenarios, the **Mekel MACH-series** microfilm scanners can operate at speeds up to 1600 images per minute and offer the highest optical resolution on the market

### Template Options

Create job templates for like projects to ensure the continuation of quick and easy scanning

### Image Quality Settings

Features such as automatic sharpening, exposure and more save set-up time and decrease the need for post-scan editing

### Advanced Focus Option

Fine-tune focus within seconds for various film thicknesses to ensure optimum image quality

### Pre-Scan Testing

Provides quick confirmation that images are correctly framed and that desired image quality has been achieved before starting production scanning

### Advanced Frame Detection

**QuantumScan** detects simplex, duplex, comic and cine mode film formats on the fly

### Easy Transfer

**QuantumScan** turns raw roll footage into a manageable size, allowing for easy transfer to centralized storage and quality assurance

### Easy Workflow Integration

**QuantumScan** enables scripting integration to launch customized functionality within the software or for third-party applications

### Easy Integration into IMAGEhost

Images scanned with **QuantumScan** can be easily integrated into Crowley's microform hosting platform, IMAGEhost. IMAGEhost offers digital access to microform collections in their original format via any internet-enabled device.

## Quantum Process

### Revolutionary Microform Processing Workflow

### NEW! Optical Character Recognition (OCR)

**QuantumProcess** can now output OCR-enabled .pdf, .txt and HOOCR files for easy text searchability

### Batch Processing

Single or multiple **QuantumProcess** license availability enables microform to be processed across a network by multiple quality assurance technicians

### Strip Zoom Capability

Use the image zoom function to allow for a range from "quick glimpse" to "detailed review" for quality and frame accuracy

### Editing Toolkit

A sophisticated toolkit ensures that multiple editing functions are only a mouse click away: frame creation; resize; delete; insert; overlap; undo; mirror; invert; etc.

### Fixed Grid Frame Replication

Allows for the setting of a fixed image size and spacing to be applied to all frames or selected frames in a group

### Blip Removal

Provides the option to remove blips from frame detection

### Irregular Frame Flag

Save time and labor by selecting a median average of all frame sizes, flagging only those images that fall outside of the average for review

### Custom Processing

The "all" or "selected" options give the operator the ability to process/export all images in a roll or only those pre-selected

### Multiple Image Output Options

Various file output options include uncompressed TIFF, JPEG, JPEG 2000 and others as well as PDF/A, TIFF LZW in single/multi-page formats. Additional output options include: grayscale files only; bitonal files only; simultaneous grayscale and bitonal files

### Multiple Ribbon Output Options

In addition to individual image output, full ribbons can be output in various formats including: uncompressed TIFF, JPEG, bitonal TIFF and more

# GES



Easy and intuitive software interface enables operators to be up and running in minutes

## Easy Workflow Integration

**QuantumProcess** enables scripting integration to launch customized functionality either within **QuantumScan** or any other third-party applications

## Image Enhancement

Multiple enhancement features are available for image quality corrections on individual images, a selected group of images or an entire digital film roll or fiche

**Dual view.** Allows for quick and easy tab-style view of both the grayscale and bitonal version of the image under review

**Real-time.** With a quick slide of the image enhancement toolbar, the operator receives immediate visual feedback of the selected settings within the image

**Editing tools.** Take advantage of a full complement of image processing features to include: crop; deskew; invert; rotate; and others

## File Naming Features

**Flexibility.** **QuantumProcess** allows for user-defined directories. Dual file outputs can be saved to the same or different/multiple file locations

**Duplex naming.** Various options are available regarding desired duplex file-naming output

**Blip naming.** Output various file names and/or group files by blip/image marks within the blip channel of the film

## Auto-Split and Book Mode

Auto-detect and split oversized frames. Gutter overlap settings are also available to ensure that no data is missed within the gutter portion of the open book image

## “Go To” Command

Quickly and easily go to any frame selected within a roll or fiche for additional time savings

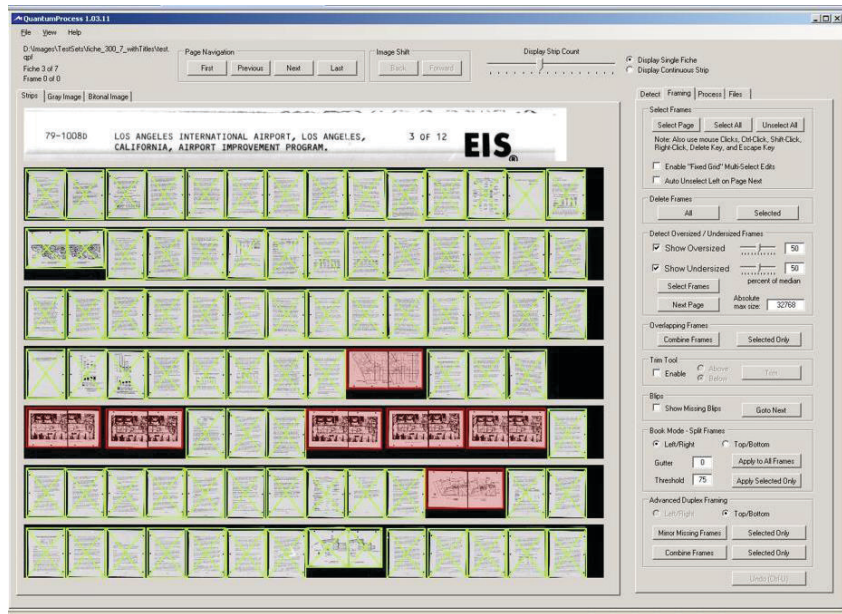
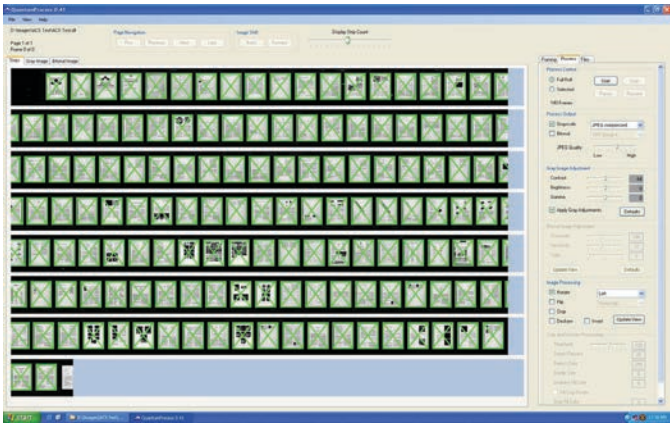
## Re-Detect Frames

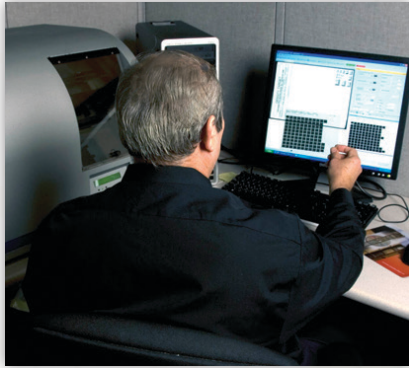
A useful option when different quality film is spliced together on a single microfilm roll, typically making it difficult for auto-frame detection to find a group of images

## Quality assurance at your fingertips

View your entire roll of film or fiche jacket within **QuantumProcess** for image quality and frame accuracy inspection.

In this highly technical but simple-to-use quality control function, make changes after the images are saved and know that they'll hold...without compromising the original scan.





## Don't Reload

Using **QuantumScan**, the need to reload has been completely eliminated. The **MACH-series** microfilm and microfiche scanners scan an entire roll or sheet of film in minutes, detecting all images and flagging those that need review. Whether reviewing an entire roll, sheet or just suspect frames, the operator has an array of manual and automatic features to ensure 100% accurate image detection.

## Don't Rescan

**QuantumProcess** provides the opportunity to edit the image detection and make changes to both grayscale and bitonal image quality without ever having to reload the microform. Strips can be stored for the life of a project, allowing the user to make as many changes as necessary to deliver the highest quality images in the market.

## Turn "Ugly" Into Useful

**Quantum** software has opened the world to "ugly" or poor quality film, which can now be scanned without missing images. Using **QuantumProcess**, these images can be scanned, processed and rendered as useable images. As a result of this capability, the new digital images can be used to create silver master films for long-term preservation of poor quality or degraded film.

**MEKEL**  
Technology  
A CROWLEY Company

Incorporated in 1972, Mekel Technology has been a part of The Crowley Company since 2003 and continues to engineer cutting-edge capture products and software for the future of data preservation.

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