

# MACH6 - MACH7

### HIGH PERFORMANCE MICROFICHE SCANNERS

#### FROM THE FIRST NAME IN MICROFILM SCANNING

#### **LEADING THE INDUSTRY**

In 1989, **Mekel Technology** introduced the first microfilm scanner to the world, followed closely by its first microfiche scanner. Today, the Mekel **MACH-series microfiche scanners** are the most advanced fiche scanning systems on the market.

- Handles various microfiche and jacket formats NEW! Now handles aperture cards.
- Offers advanced image quality capture at high speeds from even the most difficult film
- Widely-recognized as the most automated, reliable and easiest-to-use fiche scanners in the industry

#### VERSATILITY AND SUPERIOR IMAGE QUALITY

**COM.** Jackets. Step and Repeat. Using the latest in Mekel's CCD, lens and "smoothlight" fiber optic technology, the **MACH** fiche scanners demonstrate an ability to seamlessly convert any format of microfiche to various electronic image formats. Providing the highest optical dpi in the industry, Crowley microfiche scanners deliver clear and consistent image quality while automatically regulating density variations common to many microfiche. Image processing features include:

- Automatic crop
- Automatic rotation
- Automatic invert

- Automatic mirror
- Automatic deskew
- Software focus

#### **HIGH SPEED**

In addition to providing high-quality images, the MACH 7 fiche scanner is designed to operate at speeds of up to 200 images per minute. The MACH 6 fiche scanner, a mid-range unit, achieves up to 100 images per minute. Both pieces can create bi-tonal and grayscale images simultaneously without impacting speed.

#### **EASY TO USE SOFTWARE CREATES ADDED VALUE**

**FastFiche**, the **Mekel Technology** microfiche workflow system, eliminates the software learning curve. The simple-to-use sliders, preview screens and flexibility often reserved for more sophisticated applications ensure full-bore scanning within hours of installation and training.

#### FastFiche HIGHLIGHTS

- Easy-access tabs allow for quick job set-up without the need for elaborate and confusing wizards
- Advanced menus for detailed image enhancement features
- Dual-view capability to view bi-tonal and grayscale images simultaneously without impacting speed
- Image quality control and re-scan window that allows for real-time image enhancement
- Flexible and simple to use file-naming capability

## NEW

# **Quantum Process**

A break-through in fiche scanning, Mekel Technology's *QuantumProcess\** workflow software triples scanning productivity and guarantees 100% image capture. Postcapture features include:

- Batch Processing
- Strip Zoom Capability
- **Editing Toolkit**
- Fixed-grid Frame Replication
- Blip Removal
- Irregular Frame Flag
- Custom Processing
- Multiple Output Options
- Easy Workflow Integration
- Image Enhancement
- File-naming Features
- Auto-split and Book Modes
- "Go To" Command
- Re-detect Frames

<sup>\*</sup> Field upgrades available for existing units



#### **EQUIPMENT FEATURES** Up to 12-bit dynamic range with gamma correction grayscale output. Full depth of pixels processed Camera/Optics Advanced adaptive Automatic Gain Control (AGC). Handles varying film density in real-time across the film 80 megapixel/second camera; 160 megapixel/second output Full 8,192 pixel CCD array for highest optical dpi in the industry Mekel "smoothlight" fiber optic bundle offers balanced lighting across the entire scan area with no hotspots or shadowing Resolution 100-600 true optical dpi; 4x-96x reduction ratio range Hands-free automatic loading/unloading or manual loading/unloading Film Handling Input hopper capacity up to 75 fiche Optional automatic aperture card loader Speed (fully processed) MACH 6 MACH 7 24x/200 dpi – up to 75 ppm 24x/200 dpi - up to 150 ppm 42x/200 dpi – up to 75 ppm 42x/200 dpi - up to 150 ppm 48x/200 dpi – up to 100 ppm 48x/200 dpi - up to 200 ppm **Formats** Supports all standard aperature card and fiche types including standard or long jackets; COM; AB Dick; Ultra Fiche and Microx. Images can be 16mm or 35mm; combo 16mm/35mm; simplex or duplex; positive or negative; Diazo; Silver; Vesicular; duplicates; cine/comic mode Hardware Enhancements Real-time image sharpen and enhancement done in hardware; no reduction in throughput Optional microcard module SOFTWARE FEATURES Image Processing Continuous automatic scanning Interactive selection of individual images or automatic capture of entire fiche row as an individual image Real-time automatic and manual control of rotation, cropping, deskew and automatic compression of film background density variations Real-time image processing provides 5x the typical processing speed Task set-up by job or saved in set-up file Frame Detection Single-pass intelligent pre-scan automatically detects all images regardless of size or location "Presence Prescan" feature allows for faster throughput on COM by automatically detecting and scanning only those frames that contain data Title Bar/Full-Fiche Imaging Fully- and/or user-definable title bar can be saved along with images scanned from fiche (opaque or translucent)

#### TECHNICAL SPECIFICATIONS

Viewing/Browsing

File Formats

Dell high-end multi-processor, multi-core workstation ensure maximum uptime and performance. Please request current specs	
Power Requirements	50Hz or 60Hz/100v to 240v AC/800 watt single-phase, switchable for domestic and international use
Operating System	Windows 7 and Windows 10 (64-bit only) utilizing <i>FastFiche</i> and/or <i>Quantum</i> Software by <b>Mekel Technology</b>
Agency Approvals	FCC, UL and CE certification
Dimensions/Weight	33"l x 18"w x 19"h/130 lbs.

Full-fiche pre-scan image can also be saved along with images scanned from fiche

Output to TIFF uncompressed, PDF compressed (single/multi), JPEG2000, PDF/A and others

Full or partial screen in real-time or by thumbnail, emulating fiche layout

Real-time dual view of bi-tonal and grayscale images

Simultaneous output of grayscale and bi-tonal formats Output to single/multi-page, bi-tonal TIFF (G3, G4) and JPEG

