

MACH V-V

HIGH PERFORMANCE MICROFICHE SCANNERS

LEADING THE INDUSTRY

The Mekel MACH series **microfiche scanners** are the most advanced fiche scanning systems on the market today. Designed to handle various microfiche and jacket formats, the **MACH VI** and **MACH VII** create superior image quality at high speeds from even the most difficult film. Designed for service bureaus, institutions, agencies and other large volume end-users, the MACH series microfiche scanners have a reputation as the most automated, reliable, hardest-working and easiest-to-use equipment in the industry.



VERSATILITY AND IMAGE QUALITY

COM. Jackets. Step and Repeat. Using the latest in Mekel's CCD, lens and patented "smoothlight" fiber optic technology, these 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, the MACH series 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 superior image quality, the **MACH VII** fiche scanner is designed to operate at speeds of up to 200 images per minute. The **MACH VI** fiche scanner, a mid-range unit, achieves up to 100 images per minute. Both pieces can create both bi-tonal and grayscale images simultaneously without impacting speed.

EASY TO USE SOFTWARE CREATES ADDED VALUE

FastFiche, the MACH series microfiche scanner software, virtually eliminates the software learning curve. The simple-to-use sliders, preview screens and flexibility often reserved for more sophisticated applications ensure that even a first-time operator will be scanning within hours of installation and training. Automatic image enhancement features allow for nearly unattended scanning without sacrificing image quality.

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 rescan window that allows for real-time image enhancement
- Flexible and simple to use file naming capability

EQUIPMENT FEATURES

Camera/Optics	<ul style="list-style-type: none">■ 12-bit dynamic range with gamma correction grayscale output. Full depth of pixels processed■ 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	<ul style="list-style-type: none">■ 100-600 true optical dpi								
Film Handling	<ul style="list-style-type: none">■ Hands-free automatic loading/unloading or manual loading/unloading■ Input hopper capacity up to 75 fiche								
Speed (fully processed)	<table><thead><tr><th>MACH VI</th><th>MACH VII</th></tr></thead><tbody><tr><td>■ 24x/200 dpi – up to 75 ppm</td><td>■ 24x/200 dpi – up to 150 ppm</td></tr><tr><td>■ 42x/200 dpi – up to 75 ppm</td><td>■ 42x/200 dpi – up to 150 ppm</td></tr><tr><td>■ 48x/200 dpi – up to 100 ppm</td><td>■ 48x/200 dpi – up to 200 ppm</td></tr></tbody></table>	MACH VI	MACH VII	■ 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
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Fiche Formats	Supports all standard 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 Image Enhancement	<ul style="list-style-type: none">■ Real-time image sharpen and enhancement done in hardware; no reduction in throughput								

SOFTWARE FEATURES

Image Processing	<ul style="list-style-type: none">■ 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	<ul style="list-style-type: none">■ Single-pass intelligent prescan 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	<ul style="list-style-type: none">■ Fully- and/or user-definable title bar can be saved along with images scanned from fiche (opaque or translucent)■ Full fiche prescan image can also be saved along with images scanned from fiche
Viewing/Browsing	<ul style="list-style-type: none">■ Full or partial screen in real-time or by thumbnail, emulating fiche layout■ Real-time dual view of bi-tonal and grayscale images

TECHNICAL SPECIFICATIONS

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 XP utilizing Mekel FastFiche scanning software
Agency Approvals	FCC, UL and CE certification
File Formats	<ul style="list-style-type: none">■ Bi-tonal: TIFF, CCITT 4, G3, G4, PDF■ Grayscale: Uncompressed TIFF, PDF and JPEG (true 256 shades of gray)■ Simultaneous output of grayscale and bi-tonal formats