

MACH III-IV

TRADITIONAL ROLL FILM SCANNERS

HIGH PERFORMANCE SCANNING

The Mekel MACH series **roll film scanners** are the most advanced systems on the market today. Designed to handle **16mm and 35mm** film formats, these easy-to-use machines and software create **superior image quality** at high speeds from even the most difficult film.



SETTING THE INDUSTRY STANDARD FOR QUALITY

The first to introduce a microfilm scanner to the world in 1989, Mekel technology has remained at the forefront of the industry as evidenced by the efficiency and quality offered in the **MACH III** and **MACH IV** roll film scanners. Designed for service bureaus, institutions, agencies and other large volume end-users, this MACH series uses the latest in camera, lens and light source technology and demonstrates the ability to seamlessly convert both **16mm** and **35mm** roll microfilm into various electronic image formats. **Providing the highest optical dpi in the industry**, the MACH series scanners deliver clear and consistent image quality automatically while regulating density variations common to all microfilm.

FILLING THE NEED FOR SPEED

In addition to superior image quality, the **MACH III** is designed to operate at speeds of up to 180 images/360 files per minute. The **MACH IV** can process up to 325 images/650 files per minute. Both film roll scanners can create both bi-tonal and grayscale images simultaneously with no impact on speed.

Various image-processing features include:

- Automatic crop
- Automatic rotation
- Automatic mirror
- Automatic invert
- Automatic deskew
- Software focus

HIT THE GROUND RUNNING

FastFilm, the custom-designed MACH series roll film software, has unparalleled ease-of-use. Simple to use sliders, preview screens and the flexibility often reserved for more sophisticated applications ensure that even a first-time operator will be running full speed within hours of installation and training. Automatic image enhancement features allow for nearly unattended scanning without sacrificing image quality.

EQUIPMENT FEATURES

Camera/Optics	<ul style="list-style-type: none">■ 12-bit dynamic range with gamma correction grayscale output. Full depth of pixels processed■ Real-time image processing provides 5x the typical processing speed■ Direct path imaging: camera, film and light source are in-line to ensure optimum image quality■ 80 megapixel/second camera; 160 megapixel/second output■ Full 8,192 pixel CCD array for highest true optical dpi in the industry■ Automatic Gain Control (AGC) to optimize image quality while scanning■ Mekel "smoothlight" fiber optic bundle offers balanced lighting across the entire scan area with no hot spots or shadowing
Speed (fully processed)	<ul style="list-style-type: none">■ MACH III – 180 images/360 files per minute at 200 dpi■ MACH IV – 325 images/650 files per minute at 200 dpi■ No adaptive speed control necessary
Resolution	<ul style="list-style-type: none">■ 100-600 true optical dpi
Film Types	<ul style="list-style-type: none">■ Accepts ANSI, M-types and open spools■ 16mm/35mm; simplex/duplex; positive/negative■ Silver, Diazo or Vesicular formats■ 1,000 foot roll standard
Hardware Image Enhancement	<ul style="list-style-type: none">■ Real-time image sharpen and enhancement done in hardware; no reduction in throughput
Film Control	<ul style="list-style-type: none">■ Electronically-controlled film format selection for precise positioning of the CCD camera and lens■ High speed rewind
Cleaning	<ul style="list-style-type: none">■ Film cleaning rollers; custom technology cleans film as it scans

SOFTWARE FEATURES

Image Processing	<ul style="list-style-type: none">■ True fast scan with all processing; speed is never compromised■ Task set-up by job saved in set-up file
Frame Detection	<ul style="list-style-type: none">■ Single, double or triple level blip code detection as well as single- or dual-level leading and trail edge detection

TECHNICAL SPECIFICATIONS

Dell high-end multi-processor, multi-core workstation ensures maximum uptime and performance. Please request current specs

Operating System	<ul style="list-style-type: none">■ Windows XP or Vista utilizing Mekel FastFilm scanning software
Power Requirements	<ul style="list-style-type: none">■ 50Hz or 60Hz; 100v - 240v; 500w, single phase switch for domestic or international use
Agency Approvals	<ul style="list-style-type: none">■ FCC, UL and CE certification
File Formats	<ul style="list-style-type: none">■ All Standard TIFF, CCITT 4, G3, G4 (bi-tonal) and JPEG for grayscale (true 256 shades of gray)■ Simultaneous output of grayscale and bi-tonal formats

FastFilm HIGHLIGHTS

- Easy-access tabs to allow for quick project 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

NOTE TO CURRENT MACH III and IV OWNERS: Ask about our new **Quantu** software and the hardware upgrades that can give your **Mekel microfilm scanner** the power of **full roll strip scanning** at a fraction of the cost of a new machine. For more information, contact info@thecrowleycompany.com

FOR EVEN MORE ROBUST SCANNING, ASK ABOUT THE NEW MACH V

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