Expertise and solutions for film heritage preservation

EQUIPMENT — NEW AND REFURBISHED — SUPPORT
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1919</td>
<td>CTM — a French-based company was founded in 1919 as a film laboratory.</td>
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<td>1951</td>
<td>CTM as «Compagnie de Travaux Mécaniques» is created to manufacture film equipments as the editing MORITONE becoming a standard.</td>
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<td>1984</td>
<td>CTM opens an integration department to complete film with digital equipment.</td>
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<td>1989</td>
<td>CTM Film takes over another French company DEBRIE — a long-established film equipment manufacturer.</td>
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<td>1992</td>
<td>CTM Film introduces its first telecinema DIXI HARMONY, to transfer 16mm and 35mm to video with color grading integrated.</td>
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<td>1997</td>
<td>CTM creates the film cleaning machines ULTRACLEAN with continuous solvent recovery and distillation and ultrasonic action.</td>
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<td>2000</td>
<td>DEBRIE presents a new product PERFECTA, a digital multiformat viewing and scanning table for old films.</td>
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<td>2015</td>
<td>CTM Film introduced the brand new sprocketless real-time scanner SCANBOX dedicated to 8, 9.5 and 16mm films.</td>
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<td>2018</td>
<td>Conception of the brand new sprocketless real-time scanner SCANBOX dedicated to 8, 9.5 and 16mm films.</td>
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<td>2019</td>
<td>Introduction to the market of the last generation film cleaning machine COMPACT CLEAN especially designed for archives’ needs.</td>
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</table>
PERENITY

**HIGHLIGHTS**

- Multi format: 35/S35 - 16/S16 - 8/S8, 28 - 17.5 - 9.5
- 5K (HDR mode – option) / 4K / 2K
- Sprocketless laser detection
- Picture stabilization through the perforation analysis
- High-power cold RGB LED source

**KOLIBRI software:**

- Video noise reduction
- Automatic Scene Detection & Timeline
- Automatic White Balance
- Automatic Level Control
- Autofocus

**ADVANTAGES**

- Specially conceived for handling any type of damaged film with a large amount of missing perforations
- Capstan drive system
- Cleaning by Particle Transfer Rollers – PTR (optional)

**TECHNICAL SPECIFICATIONS**

- High resolution lenses
- Ratios: 4:3 – 16:9 – 1.85
- 2, 3, 4 perforations in 35mm
- Ultra low noise camera with Bayer pattern
- Self-adjusting motorized frame size
- Optical sound reader COMADi, all format types

PERFECTA

**HIGHLIGHTS**

- Multi format: from 8/S8, 9,5, 16/S16, 17,5, 28, 35/S35mm
- Picture stabilization through the perforation analysis
- Sprocketless capstan drive system with 2D optical pin registration
- Simplified film loading thanks to a very limited number of rollers

**ADVANTAGES**

- Horizontal positioning proper to a traditional viewing editing table
- Enhanced ergonomy for film viewing, inspection, physical restoration and editing
- Equipped with a multi-unit counter: images / meters / time

**TECHNICAL SPECIFICATIONS**

- Camera: 5.1 K with ultra low noise, progressive mode with Bayer filter, 12-bits
- Sensor format: (5.120x3.840 pixels)
- Output formats: 5K, 4K, 2K, HD, SD and others
- DPX Color 8/B/10/16 bit (ANSI / SMPTE 268M-2003)
- uncompressed AVI
- Low resolution AVI
- WAV / BMF
- Bi-phase output, Genlock input synchronization and basic protocol RS422
- Audio output (2 channels)
TYPES ET FORMATS DE FILMS :
- Négatif, interpositif, positif, color et B & W
- 16/35 mm – 9.5 mm – 8/8 mm

SCANNING :
- Vitesse de scanner à 50 images par seconde
- Faible bruit, mode progressive avec filtre Bayer
- Résolution 4K (4 096 x 3 000), 2K (2 048 x 1 536)
- Objectif haute résolution
- Réglage automatique du format et de l’ouverture

STABILISATION DE L’IMAGE :
Les perforations sont détectées par un laser. Cela permet une positionnement précise de l’image.
L’absence de sprocket pour la détection évite tout risque de dégâts au film. La détection laser peut gérer n’importe quel type de film avec jusqu’à 5% de déformation.

PTRS & WETGATE :
- Rololettes de nettoyage de poussière et de poussière
- Wetgate pour réduction des griffures (option)

DIMENSIONS :
- Hauteur : 80 cm
- Longueur : 65 cm
- Epaisseur : 52 cm

REJUVENATING MACHINE
CLARA

CLARA offre une excellente solution de nettoyage et de dégraissage avant le scanner.

HIGHLIGHTS :
- Gelatine restoration with reduction and removal of scratches
- Efficient polising
- Moisture treatment by soaking the film in the baths, by the action of brushes and ultrasonic
- Very accurate cleaning of the two faces of the film
- Reduce "vinegar syndrome" effect

ADVANTAGES :
- Full rejuvenation process
- Fast and efficient drying unit
- Demand-drive
- Integrated pumps
- Ultrasonic cavitation (optional)
- Very compact and simple to install

TECHNICAL SPECIFICATIONS :
- Film capacity: 600m (2000 feet)
- Film formats: 16/35 mm
- Film speed: 0 to 750 m/h
- Tanks: 1 PVC monoblock of 4 tanks
- 2 circulation pumps
- Heat exchanger + filter: 2
- Unwinder & winder buffers: 1 min 30s at full speed (750 m/h)
- Take-off & take-up: constant tension
- Power: 380V, 50Hz, 3 phases (P+N+Ground), 15 kW

CLARA provides an excellent film cleaning and softening solution before scanning.
Compact Film Cleaner

COMPACT CLEAN & ECO CLEAN

TO CLEAN YOUR FRAGILE FILMS

HIGHLIGHTS
• Last generation multi-format economical and compact model specifically designed for archives and film laboratories
• Effective dirt, grease, fingerprints and other contaminations removal by the immersion cleaning action in the hermetically protected cabinet

TECHNICAL SPECIFICATIONS
• Film capacity: 600 meters
• Film speed: Variable speed
• Multi-formats: 8, 16, 35mm
• Sprockets/capstanless - drive system
• Controlled by PLC
• Options: distillation and conservation tanks

ADVANTAGES
• Real-time solvent filtering
• Smooth drying by nozzles and solvent vapors recovery by condensation
• Ergonomic and fully digitized touch screen controller providing with the cleaning settings and detects the end of film

HIGHLIGHTS
• Dual cleaning process with buffers & ultrasonic action
• HFE or Perchloroethylene as cleaning agent
• Continuous solvent recovery & distillation
• Closed loop air drying
• Film drive by capstan
• Control of brushes speed rotation

TECHNICAL SPECIFICATIONS
• Film capacity: 4000 feet (1200 m)
• Formats: 16mm, 35mm
• Film speed: Variable speed
• HFE: 50, 100 feet (1500 meters/hour max)
• PERCH: 50, 100 feet (2000 meters/hour max)
• Power: 220V, 50 Hz, 1 phase, 3.5 Amp

PERCHLOROETHYLENE

WATER + ADDITIVE

HIGHLIGHTS
• Low solvent consumption
• Partition between a clean and a dirty reel
• High cleaning speed
• PLC management
• Better comfort for the user
• External conservation tank for HFE storage (optional)

TECHNICAL SPECIFICATIONS
• Film capacity: 4000 feet (1200 m)
• Formats: 16mm, 35mm
• Film speed: Variable speed
• HFE: 50, 100, 250 feet (4200 meters/hour max)
• PERCH: 50, 100 feet (2000 meters/hour max)
• Power: 220V, 50 Hz, 1 phase, 3.5 Amp

DIMENSIONS
• Height: 135 cm
• Length: 74 cm
• Width: 90 cm
SECOND HAND EQUIPMENT

A FULL RANGE OF TABLES

INSPECTION

REWINDING

VIEWING

The wide range of horizontal inspection tables corresponds perfectly to the requirements and needs of the operators.

- Horizontal guide: 1 to 20 m/
- Vertical guide: 0.1 to 20 m/
- Manual or electrical return system with 0.1 to 2 m/
- Manual or electrical return system with 0.1 to 2 m/
- Foot push button

Comfort for the operator. Well arranged controls, large choice of options. Simple, concise and robust.

This range of tables is ideal for handling negative, positive or very delicate archival materials. Mono or bidirectional, manual or electric — these are some of available options to choose from:

- Horizontal or vertical table
- Automatic or manual control
- Foot push button
- Capacity of 600 m
- Automatic tension setting
- Reversible core (ET)

Bidirectional tables, equipped with a clutch and an electromagnetic brake that can be moved by hand.

On the 16/35 tables, changing from 16mm to 35mm film does not require any changes in the 16mm and 35mm picture holes are side by side as well as separate magnetic soundtracks are 10mm, 15mm, and 35mm.

Tables in the DUAL series are equipped with a double screen.

SECOND HAND EQUIPMENT TOTALLY REFURBISHED WITH MANUFACTURER'S WARRANTY

RT27
MANUAL REWINDING TABLE
- Capacity: 600 m
- Format: 16/35 mm
- Power: 110/220 V - 50/60 Hz - 10 Amp

AVAILABLE OPTIONS:
- OP222 - 2 PTR D=76 mm with mountings for film cleaning

RT28
ELECTRIC REWINDING TABLE
- Capacity: 600 m
- Format: 16/35 mm
- Power: 110/220 V - 50/60 Hz - 10 Amp

AVAILABLE OPTIONS:
- OP222 - 2 PTR D=76 mm with mountings

M10/11
MANUAL UNI AND BIDIRECTIONAL INSPECTION TABLE
- Capacity: 600 m
- Format: 16/35 mm
- Speed is controlled by manual handle

AVAILABLE OPTIONS:
- OP010 – Working table lamp
- OP080 – Multi unit counter
- OP201/202 – Simple/Double shelf etc.

HDC6/35
VIEWING AND COMPARISON TABLE
- Capacity: 600 m
- Format: 16/35 mm
- Power: 110/220 V - 50/60 Hz - 10 Amp

AVAILABLE OPTIONS:
- OP010 – Working table lamp etc.
BECOME OUR LOCAL PARTNER IN YOUR COUNTRY!

OUR CLIENTS: MORE THAN 50 WORLDWIDE ARCHIVES

EUROPE
- Danish archives (Denmark)
- National Audiovisual Archive Helsinki (Finland)
- TVP Telewizja Polska S.A. (Poland)
- Turkish Radio and Television Corporation (Turkey)
- Cineteca Nacional (Mexico)
- Cineteca Brasileira (Brazil)
- Fundación Centro Cultural Palacio La Moneda (Chile)

NORTH AMERICA
- USA - CHRISTY'S

AFRICA / MIDDLE EAST
- Iran - TEKALA

ASIA / PACIFIC
- Korea - SAEYUCKDOOLE CO., LTD
- Malaysia-Singapore-Thailand-Philippines
- Taiwan-China - CINEQUIPMENT
- Australia - LEMAC FILM AND DIGITAL

AFRICA / MIDDLE EAST
- Egyptian Media Production City (Egypt)
- Centce Cinematographique Marocain (Morocco)
- So.C.Nationale de Radio & Television (Morocco)
- Algerian Ministry of Defense (Algeria)
- The Islamic Republic of Iran Broadcastin (Iran)
- MediaGuru (Qatar)
- National Center for Documentation & Research (Abu Dhabi)
- Gulf Film (Dubai)