

## **DMM-2000 Digital Measuring Microscope**

Measuring, testing, comparing, reporting



### **DMM-2000: The universal tool for quality assurance and process monitoring**

The Digital Measuring Microscope DMM-2000 with Micro and Macro optics is a microscope enhanced with digital or video camera technique with outstanding image quality. It impresses especially by its modular and compact design and by its very easy handling. This versatile instrument is not only suitable for laboratory work, but also for teaching in various application areas, such as textiles, metallurgy, electronics, cables, precision engineering, food, paper, packaging, plastics and chemistry.

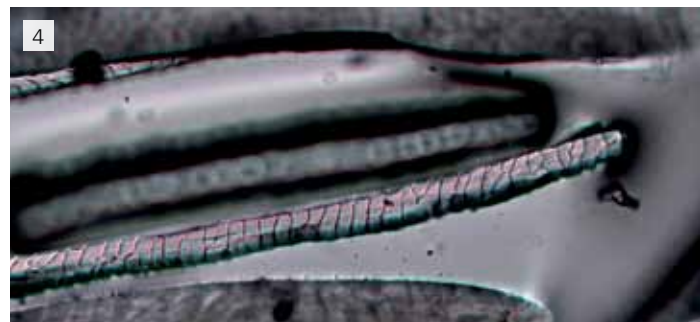
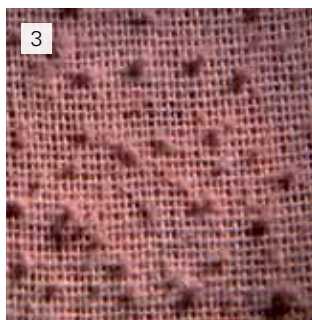
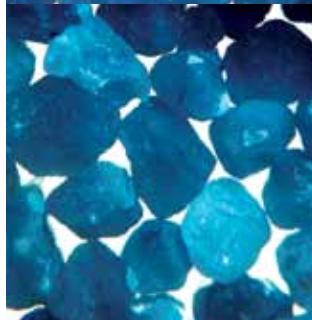
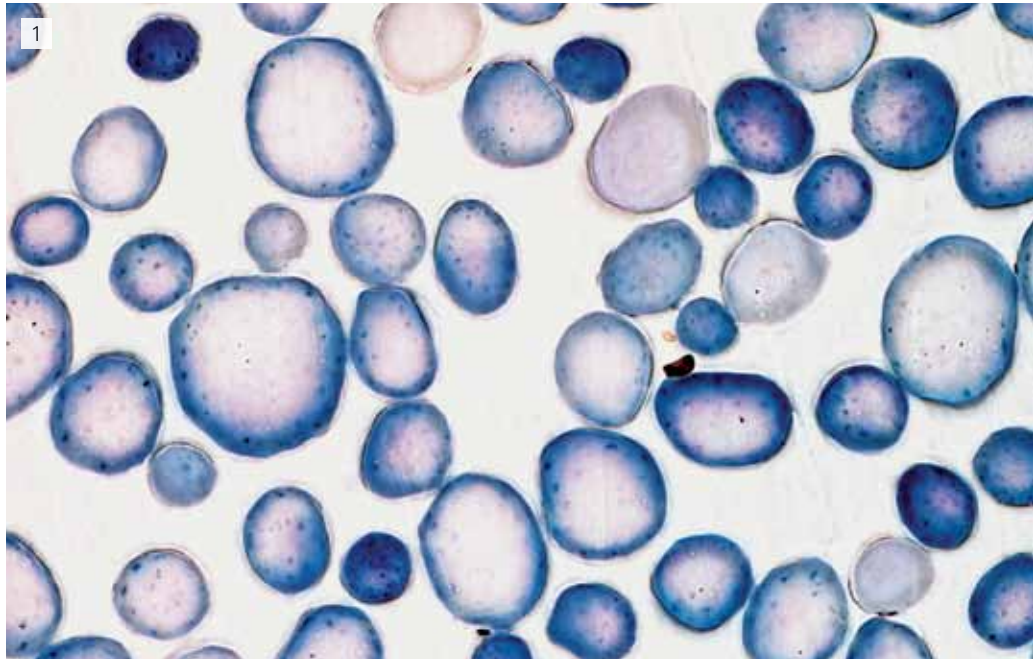
# The tailor-made solution for both Micro and Macro investigations

## Efficient material testing

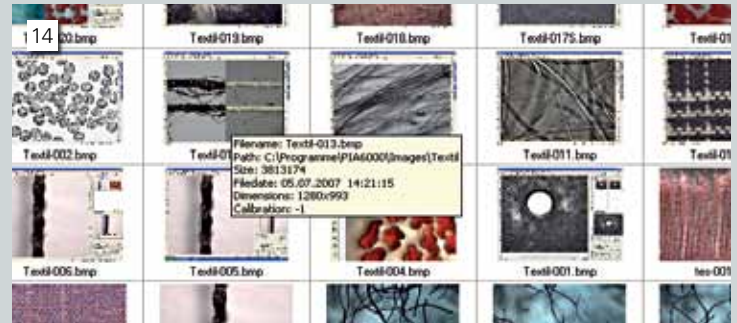
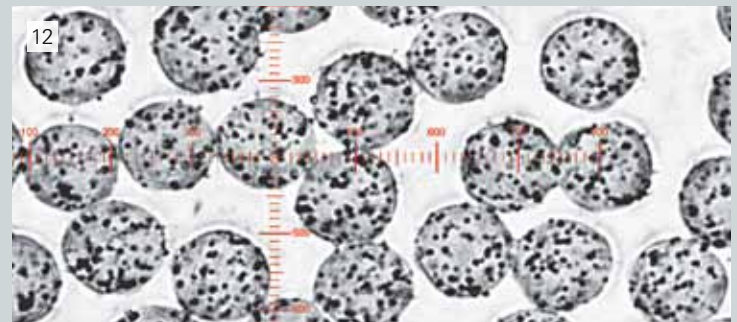
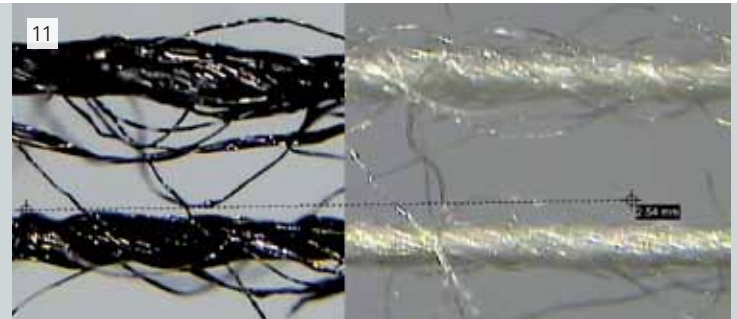
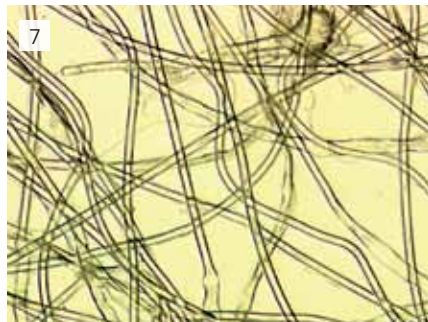
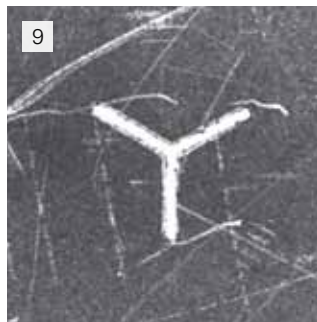
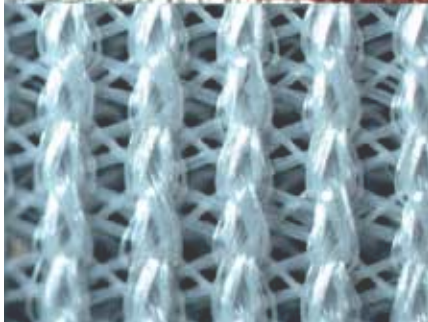
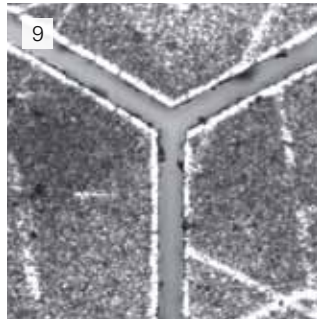
The new Projectina Digital Measuring Microscope DMM-2000 has been developed to meet the specific testing requirements of the textile industry. This new device also fits the requirements of other industrial branches for material testing, quality control and documentation.

The same device can be used to make both micro and macro enlargements while the unique combination of high-resolution digital/video camera and binocular viewing eliminates the problem of operator's fatigue. Projectina systems permit individuals as well as teams to exercise optimum judgement in identifying, processing and clearing up damage of fibres, fabrics, textile structures and spinnerets.

- 1 Fibre cross-section wool/nylon, micro view, transmitted light
- 2 Comparison of grains of sand, macro view
- 3 Pilling on fabric, incident light, macro view
- 4 Fabric imprint, transmitted light, macro view
- 5 Cross-section of acrylic fibres, transmitted light, micro view
- 6 Vertical split of a fabric, surface light, macro view
- 7 Fibres focused electronically
- 8 Embroidery, incident light, macro view
- 9 Spinneret in transmitted and surface light
- 10 Damaged nozzle, micro view
- 11 Thread comparison, incident light, macro view
- 12 Cross-section of round nylon fibres, transmitted light, micro view
- 13 Monofil fabric, transmitted light, micro view
- 14 Image manager



## Digital Image Processing and Archiving with PIA-7000 Software



The sophisticated and simple-to-operate PIA-7000 software fulfils all requirements: Systematic comparison, measurements, image interpretation, image processing functions, establishment of data base with image search functions, etc. as well as simple documentation and reproduction of examination processes with possibility to link external data bases.

For video cameras the PIA-6 software is the perfect alternative. The PIA-6 offers as well a variety of comparative investigation possibilities with image processing and measuring functions.

# DMM-2000

Sophisticated, modular, flexible

## Basic system DMM-2000

- newly developed basic equipment with integrated transmitted light illumination 12V/20W, variable light intensity
- inclined / vertical illumination, 12V/10W
- connection for X/Y object stages
- height adjustment 68 mm
- dust cover

## Available Accessories

### Macro objectives

Single objectives for magnifications 5x, 10x, 20x and 50x for transmitted and inclined incident light

### Transmitted light turret

for max. 5 objectives, on request with built-in polarisation filters

### Micro objectives

Wide choice of Achromat objectives for transmitted and incident light, for magnifications up to 2400x

### Epi turret

Objective turret for max. 5 Micro objectives for coaxial illumination

### Condensers

Suiting the Macro and Micro objectives

### Working stages

Micrometer stages, spinneret stages, etc.

### Binocular tube

with diopter adjustment and deflection optics

### Selection of video/digital equipment

- video camera with FireWire IEEE1394a connection or USB Video converter, in combination with PIA-6 Software
- digital cameras with 3,3 and 5 Megapixel resolution, FireWire IEEE1394a connection, in combination with PIA-7000 Software

## Software

- PIA-7000 Image Processing, Comparison and Measuring Software in combination with digital cameras
- PIA-6 Imaging software in combination with video cameras

## PC Configuration

QuadCore or HP Workstation, FireWire IEEE1394a, Windows7 Pro 32bit, 21", 24" or 30" TFT monitor

## Various Accessories

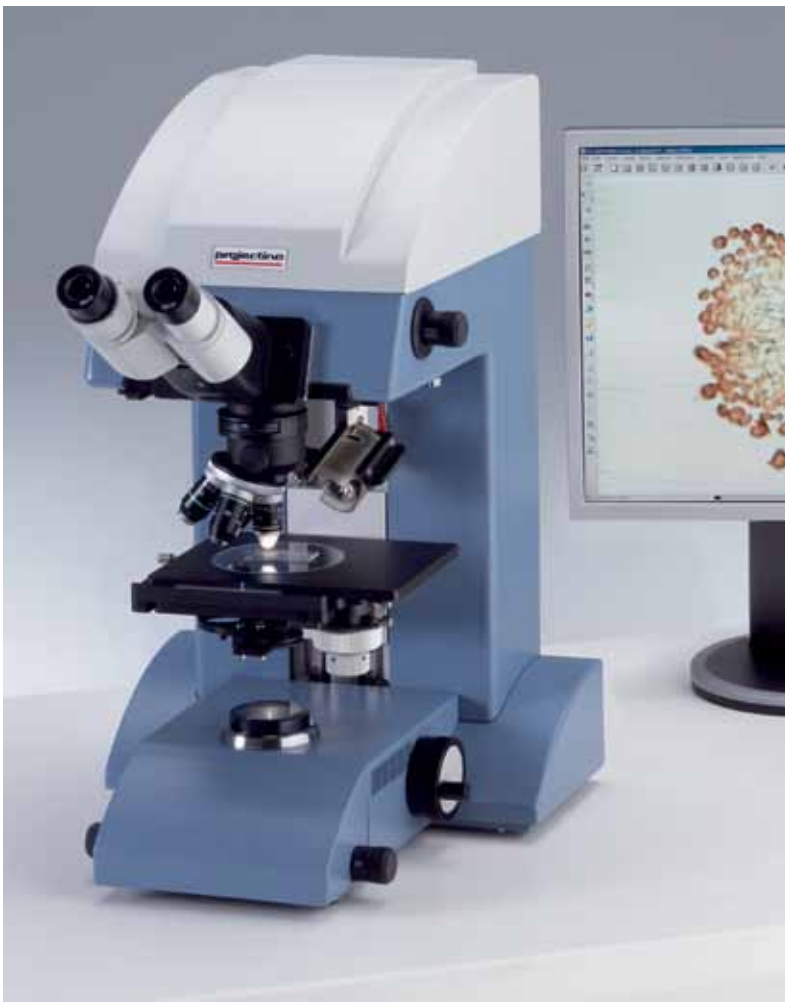
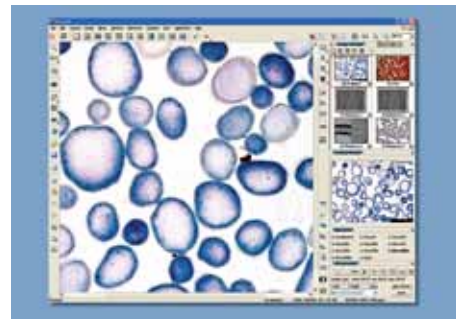
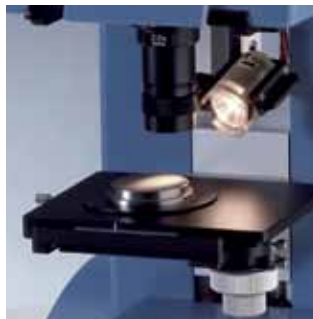
- Yarn comparator for textiles
- Preparation kit (cross-sections)
- Object micrometer
- further accessories on request

## Dimensions

57x35x50 cm (hxxwxd)  
Weight: 25 kg

## Mains connection

230V/50Hz or 110V/60Hz



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