



The dyeability is one of the fundamental characteristics of staple fiber, filament yarn and fabric. Insufficient dyeing properties indicate deviations in the production process. Therefore, a reproducible testing procedure for examining the dyeability properties is of vital importance.

With the **Dyeing Machine FM 02**, the dyeability characteristics of viscose staple fiber are determined in an automated and reproducible way.

In combination with Lenzing Instruments colorimeter Vibrochrom 400, the test is completed with colour comparison tests for determination of deviations from reference samples.

**FM 02** offers efficient quality control with the possibility of testing of up to 8 samples simultaneously. Further, various time- and temperature settings may be selected for flexible testing.

## Scope:

Robust industrial laboratory dyeing machine for the pressureless dyeing of viscose fiber samples to check and classify the dyeability in combination with the colorimeter Vibrochrom 400.

The dyeing program provides two cycles at two different temperatures (0 - 99 °C). The time for each cycle can be set between 0 - 99 minutes. At the end of the dyeing process an acoustic alarm is given.

## Method:

During the dyeing process, 8 small cages filled with samples, are continuously perfused with colour through the rotating movement of the cylinder, in which they are positioned. The temperature-time-program of the dyeing process, is controlled by a programmable control system. The end of the dyeing process is signaled by an acoustic signal. After washing and skidding the samples, they have to be dried at 105 °C in a drying furnace.

## Results:

The dyeing results are evaluated by putting the samples in a fibercuvette and measuring them in the Vibrochrom 400. In order to receive a dyeability index, a reference-sample is measured, which was dyed together with the other samples.

The evaluation is carried out according to the CIELAB-formula according to DIN 6174.

## Dyeing cylinder:

Stainless steel  
volume: 5 l

## Dyeing rotor:

With 8 pcs. removable cages

## Sample cage:

For 4 g of sample material

## Discharge of color residues:

By means of a valve into the gully or into a collect vessel

## Time setting:

Individual via user terminal;  
2 cycles 0 - 99 minutes

## Temperature setting:

Individual via user terminal;  
2 cycles 0 - 99 °C

## AC motor:

With gear box and mechanical clutch electrical control unit

## Power supply:

230 / 115 VAC ± 10 %,  
50 / 60 Hz

## Heating:

220 V / 2000 W / 6.5 A

## Control unit:

Free programmable control unit

## Dimensions:

Height: 800 mm  
Depth: 410 mm  
Width: 600 mm  
Weight: approx. 50 kg

Technical data and pictures are subject to change!

## THE TEXT TECHNO GROUP

Your reliable partners for  
quality improvement