

Thwing-Albert

INSTRUMENT COMPANY

Mechanical Inkometer Model MBC

The MBC Inkometer provides reliable data on ink tack by simulating the dynamic conditions that occur in the printing process. It measures the integrated forces involved in ink film splitting and the effects of speed, film thickness, temperature and solvent evaporation on these forces.

The test results are numerical values (in gram-meters) for the torque required to “work” the ink film at known rates, with predetermined film thickness and temperature. These torque readings are actually measurements of the tack of the ink. Taking tack readings at varied roller speeds and finding the difference between the readings will provide a value for the length of the ink.

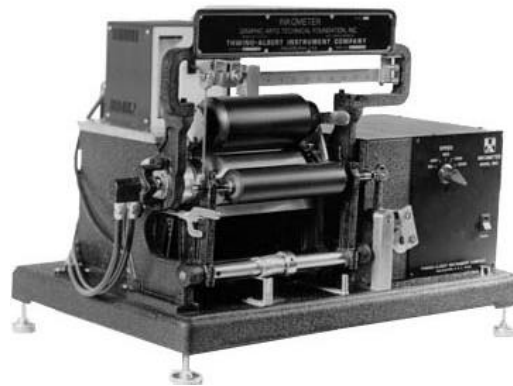
MBC includes:

Upper composition covered roller
Vibrator composition covered roller
Temperature controlled roller

The composition covered rollers are suitable for testing all printing inks having definite plastic properties and containing no volatile thinners.

The MBC Inkometer features a fixed speed motor controller that operates at speeds of 400, 800, 1200 and 2000 RPM (314, 628, 924 and 1570 feet per minute) with a distribution speed of 150 RPM.

The temperature is controlled by circulating water through the metal roller. The water bath is temperature controlled by electronic reservoir-type constant temperature circulator which features a heat adjust control knob, standard (90° F) or variable temperature switch,



▲ **MBC Inkometer measures the tack of ink**

power switch and heating cycle indicator lamp. The heat adjust control permits adjusting heater wattage from 100 to 1000 watts.

Tack readings are taken by manually balancing the scale beam at the required time intervals. A stop watch is used to obtain the proper timing.

An optional display is available that automatically provides the tack reading digitally.

Features

- Constant temperature circulator
- Fixed Speed Motor Controller
- Digi-Tack digital display accessory



A Century of
Testing Solutions

Options

Digi-Tack

Digitally displays tack readings, eliminating the need for stopwatches, release levers and balance beams.

Calibration Check Bar

Provides a quick, easy way to verify instrument calibration.

Physical Specifications

Dimensions 22 in D x 27.5 in W x 21 in H
(559 mm x 698.5 mm x 533 mm)

Gross Weight 250 lb (114 kg)

Net Weight 190 lb (86.4 kg)

Performance Data

Inkometer:

Roller Testing Speeds - Fixed

400, 800, 1200 and 2000 RPM
(314, 628, 942 and 1570 feet per minute)

Roller Distribution speed

Nominal 150 RPM

Roller Set

Total surface area of 106 square in. (2692.4 mm)

Spring Tension Pressure

Bearing force of 8 lbs between vibrator and brass rollers

Inkometer Pipette Volume

1.32 ml

Power Requirements

Standard: 115 V \pm 10%, 60 Hz
Optional: 220 V \pm 10%, 50 Hz

Inks

Applicable to inks that are essentially non-volatile at 73.5° F (23° C)

Operating Environment

Air Temperature: 75° \pm 1° F (23.9 \pm 0.5° C)
Relative Humidity: 40% to 60% (Non-Condensing)

Temperature Controller:

Water Temperature Settings

90° F or variable

Heat Adjust Control

100 to 1000 watts

Reservoir Capacity

2.5 gallons

Thermometer Reading Range

-20° to +150° F



Thwing-Albert

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