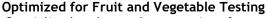
Computerized Agricultural Penetrometer and Texture Analyzer

Sophisticated materials testing in a rugged portable package

Key Features

- Constant rate, Creep, and Crispness testing
- Eliminates operator and transcription errors
- Tension and compression modes
- 5 mg (1x10-5 lb.) force sensitivity (24-bit ADC)
- ±30 kg (±65 lb.) standard load cell range
- 0.001 mm (1x10-5 in.) distance precision
- Precision external scale / automated calibrator
- 2+ GB storage, enough for thousands of tests
- USB host/client, 10/100 Ethernet
- · Lightweight with bright color touchscreen

MOHR MDT-2 Series instruments are the industry's most capable portable agricultural firmness testers, featuring unmatched precision, unique texture analysis capabilities, intuitive data visualization tools, and rugged portability.



Specialized probes and test routines for:

- Apples
- Pears
- Grapes

- Cherries
- Kiwi
- Tomatoes
- PotatoesWaterme
- Watermelon
 Many more

Unique, Meaningful Test Data

- Repeatable, accurate results every time
- Complete fruit maturity data:
 - Constant rate penetrometer testing
 - Internal and external fruit pressure
 - Crispness textural characteristics
 - Creep viscoelastic properties
 - Quality Factor (QF): Variety-specific statistical measure helps guide picking, packing, and retail handling decisions
- Real-time graphics and instant statistics as you test

Major Cost and Efficiency Savings

- Save 50% or more of the time you spend testing and managing data
- Fast testing 25+ tests/minute
- Automated reports with network integration
- Barcode scanning
- Automatic diameter and weight measurements
- Store titrable acidity, soluble solids, color data



MDT-2 Penetrometer and Texture Analyzer



Standard external precision scale



Variety of interchangeable probe types

MOHR[®]

Test and Measurement Solutions for Industry ™

Specifications

Force System Characteristics

Standard internal and external load cells:

Type: Stainless-steel S-beam with overstress guards

Range: ±30 kg (±65 lbs.)

Sensitivity: 5 mg (1x10-5 lbs.) at default gain settings Instrumentation amplifiers (internal, external channels):

Type: Differential input, zero drift, programmable gain

Default gain: 176x

Analog-to-digital conversion (internal, external channels):

Sample resolution: 24 bits Sample rate: up to 14 kHz

Distance System Characteristics

Type: Brushless DC servo with optical quadrature feedback

Range: 7.3 cm (2.9 in.) Precision: 0.001 mm Sampling resolution: 32 bits Velocity: 0 - ~100 mm/s

Velocity resolution: 32 bits Acceleration resolution: 32 bits

Test Capabilities

Multi-region testing

Thousands of samples per test

Simple and/or complex test parameters:

Constant velocity

Creep: Deformation under constant force

Crispness: Time-dependent fracture characteristics

Software Features

Real-time graphical display User-configurable fruit types Powerful easy-to-use relational database Instant comparative statistics

Data Storage

2+ GB flash memory, thousands of tests USB thumbdrive ready Remote data storage over Ethernet

Connectivity

4x USB host for keyboard, barcode, and/or external instrumentation USB client and 10/100/1000 Mb Ethernet for PC connection

Remote testing with real-time data using Winapples™ software

Display

Color LED-BL 14.5 cm (5.7 in.) VGA TFT-LCD, > 600 cd/m2

Power System

AC Power: 110/220 VAC (±10%), 50/60 Hz 1-phase,

using AC adapter

Battery Power: Internal NiMH DC battery Battery Life: >1000 tests (typical use) Battery Charging: <1 h low-battery, <4 h fully-

discharged

Environmental and Mechanical

Operating / Non-Operating Temp.: +0°C to +50°C /

-20°C to +60°C

Dimensions: $42.0(H) \times 17.8(W) \times 20.3(L)$ cm

 $(16.5 \times 7.0 \times 8.0 \text{ in.})$ Weight: ~ 4.5 kg (10 lbs.)



Regulatory

Complies with all applicable EU directives, as specified by the Declaration of

Conformity supplied with the instrument.

Ordering Information

General Options

MDT-2 Base Unit

Standard Accessories

Test probe

Winapples[™] software

Calibration kit

Quick-load Teflon® base

Precision external scale

AC power adapter and cable

USB and Ethernet cables

Operator's manual

12-month limited warranty

Optional Accessories

USB Add-Ons

Flexible Waterproof Keyboard MDT2-AC-KBD Barcode Reader Kit MDT2-AC-BCD

Test Probes

Probe 4 mm MDT2-AC-P4M

Probe 8 mm MDT2-AC-P8M

Probe 11 mm MDT2-AC-P11M

Probe Cherry MDT2-AC-PCH

Probe Compress MDT2-AC-PCM

Probe Rheology MDT2-AC-PRH

This product or use of this product covered by U.S. Patent #6643599; other patents pending.

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