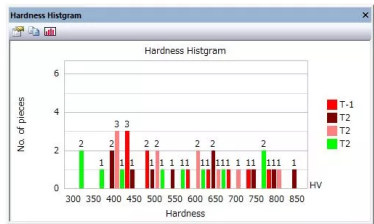
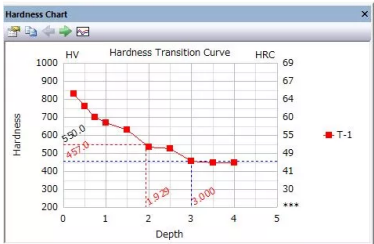
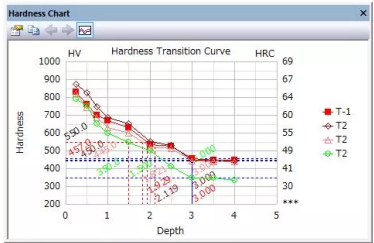
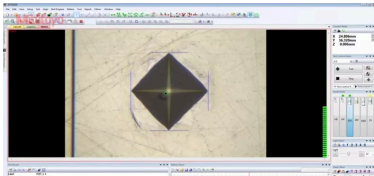
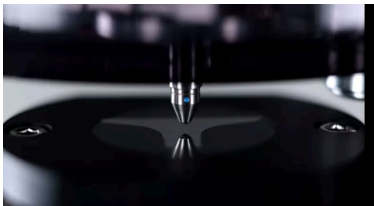


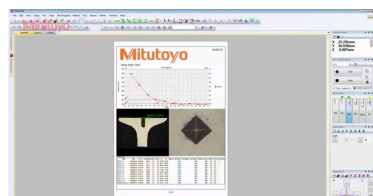
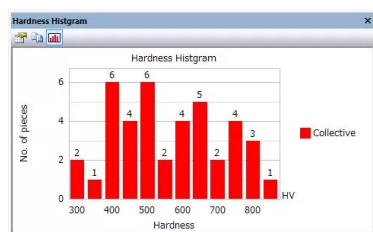


HM-220 B-type set, double indentershaft

Item number: 810-409-11-BSET2

Images





Specification

Applicable standards:

Applicable standards Vickers : ISO 6507-2, ASTM E92, ASTM E384, JIS B 7725

Applicable standards Knoop : ISO 4545-2, ASTM E92, ASTM E384, JIS B 7734

Applicable standards KC fracture toughness : based on IF method (JIS R1697)

Applicable test methods:

Applicable Vickers scales : HV0,00005*; HV0,0001*; HV0,0002*; HV0,0003*; HV0,0005*; HV0,001; HV0,002; HV0,003; HV0,005; HV0,01; HV0,02; HV0,03; HV0,05; HV0,1; HV0,2; HV0,3; HV0,5; HV1; HV2

Applicable Knoop scales : HK0,01; HK0,02; HK0,03; HK0,05; HK0,1; HK0,2; HK0,3; HK0,5; HK1; HK2

Machine Control:

Control method : AVPAK software control

Software functions AVPAK : Turret and stage control, contrast level indicator for easy focus, autofocus (D-Types), automatic illumination, auto reading function, ISO 18203 conform hardening depth evaluation presets, CHD, NHD, SHD; Jominy Test; guide Function for single test/pattern test/standard test, curved surface compensation, hardness conversion, overview image creation (C- and -D-Types), part programming, incl. edge detection, coordinate alignment, pattern creation and application, report creation, external data output, StatusMonitor compatibility

Language support : Japanese, English, German, French, Italian, Spanish, Korean, Simplified Chinese, Traditional Chinese, Turkish, Portuguese, Polish, Czech, Hungarian, Dutch, Russian, Thai

Resolution : 0,01 HV units (settable)

Data output:

MeasurLink capability : yes

Data output : PDF, Excel

Test force:

Test Force Range : 0.4903-19610mN (0,0005-2kgf)

Test force generation : Electromagnetic (Voice coil)

Test force switching : AVPAK

Duration time : 5-999s. 1 s. increments

Indenter approach speed : 60 μm , below HV0,03 selectable in 1 $\mu\text{m/s}$. increments

Optical system:

Optical system : Infinitely corrected

Standard objective lenses : MH Plan 10x, 50x and 100x

Light source illumination unit : White LED

Aperture diaphragm : variable

Measuring microscope : optional

Focus method : manual

XYZ axis:

XY stage : 810-420

Z-axis : manual elevation unit

Autofocus unit : upgradable together with motorized XY

Range XY : 25x25 mm

Turret:

Turret drive method : Motor/Manual

Turret control method : AVPAK

Number of objective lens ports : 4 (2 equipped)

Number of indenter ports : 2 (1 equipped)

Functional dimensions:

Stage/Anvil adaption : Ø19 mm

Max. specimen height : 133 mm

Throat depth :	160 mm
-----------------------	--------

Maximum specimen weight :	3 kg
----------------------------------	------

Main unit data:

External dimensions WxDxH :	341x586x683 mm
------------------------------------	----------------

Mass main unit :	40.5 kg
-------------------------	---------

Power supply :	AC100 -240V Auto-selection
-----------------------	----------------------------

Power consumption W :	43
------------------------------	----

Operation temperature °C :	5-40
-----------------------------------	------

Relative humidity RH :	80% or lower without condensation
-------------------------------	-----------------------------------

Vibration Frequency :	5Hz or lower
------------------------------	--------------

Standard accessories:

Diamond indenter :	included
---------------------------	----------

Reference material :	700 HV0,3 Ø25mm x 6mm
-----------------------------	-----------------------

Water level :	mounted on main unit
----------------------	----------------------

Inspection certificate :	included
---------------------------------	----------

Power cord :	not included
---------------------	--------------
