

Vida

Vickers innovative automatic tester



Via Feature

Wide range Vickers hardness testing (980.7mN to 490.3N / 100 gf ~ 50 Kgf)

Closed-loop test force control (with load cell)

Test methods

**The turret which mounted
four objective lenses**

Auto focus and auto reading function

LED indicator

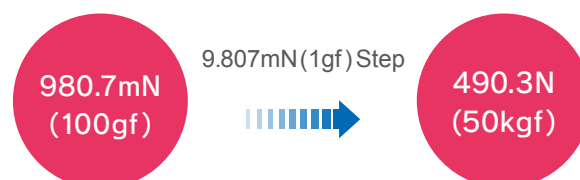
Light weight & Compact

Windows 7 PC

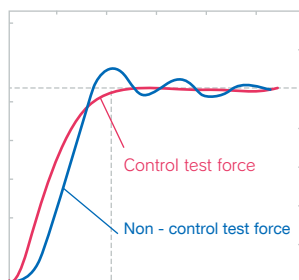
Wide range Vickers hardness testing (980.7mN to 490.3N)

All the test force control is performed by electric control. The high quality load sensing system can do a wide-range Vickers hardness test by one load cell.

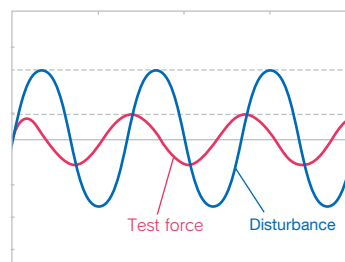
Test force



Closed-loop test force control (with load cell)



Test force is controllable with high precision from the output of a load cell.



Feedback control controls the vibration from the outside.

Test methods (Standard setting)

Vickers

HV0.1	HV0.2	HV0.3	HV0.5	HV1	HV2
HV3	HV5	HV10	HV20	HV30	HV50

Brinell

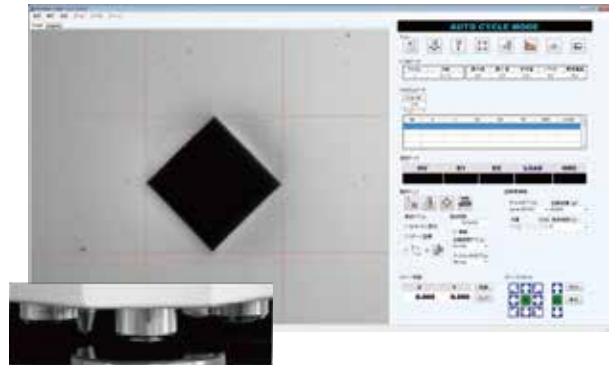
1/1	1/2.5	1/5	1/10	1/30
2.5/6.25	2.5/15.625	2.5/31.25	5/25	

Knoop

HK0.1	HK0.2	HK0.3	HK0.5	HK1	HK2
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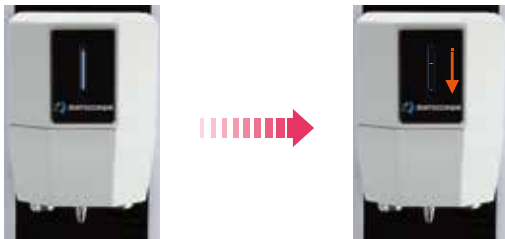
Auto focus and auto read function (standard equipment)

Autofocus and automatic reading are equipped standardly. Infinity-corrected objective lens and 1.3M high-speed USB camera offers a clear image.



This automatic-system can dissolve a personal error in reading of indentation by the latest image processing software and reduce hardness measurement cost time.

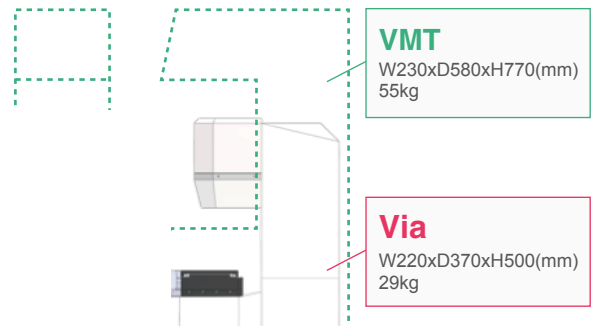
LED indicator



LED indicator is displayed so that LED may flow during operation. Operation of a testing machine can check easily.

Light weight & Compact

The optimal design realized the light weight and the compact. Operation of the testing machine which was difficult until now can also be performed easily.



The turret which mounted four objective lenses



The objective lens is up to four can be mounted.

Windows7 PC



In addition to operation of a testing machine, Windows7 PC realizes many functions, such as data processing, printing, and connection with a network.

Flexible Auto-focus and Auto-reading function.

This function sets four kinds of detailed set values of an automatic focus and reading beforehand those calls those set values easily on software.

An automatic focus and reading can be done more smoothly and accurately. In the measurement of the sample with rough surfaces like etching, a very high effect is demonstrated. Even if some of the samples with a rough surface are mixed, they can be measured smoothly and accurately by only selecting set values.

Please prepare several kinds of samples with a significantly different state on the surface.



Auto-focus



Auto-reading option

Product Line-up

Full-automatic model

Via-F



Semi-automatic model

Via-S



SPECIFICATION

Item / Model		Via-F	Via-S
Test force	Vickers	0.981, 1.961, 2.942, 4.903, 9.807, 19.61, 29.42, 49.03, 98.07, 196.1, 294.2, 490.3 (N)	
		0.1, 0.2, 0.3, 0.5, 1, 2, 3, 5, 10, 20, 30, 50(kgf)	
	Knoop	0.981, 1.961, 2.942, 4.903, 9.807, 19.614 (N)	
		0.1, 0.2, 0.3, 0.5, 1, 2(kgf)	
	Brinell	1/9.807, 1/24.52, 1/49.03, 1/98.07, 1/294.2, 2.5/61.29, 2.5/153.2, 2.5/306.5, 5/245.2 (N)	
		1/1, 1/2.5, 1/5, 1/10, 1/30, 2.5/6.25, 2.5/15.625, 2.5/31.25, 5/25(kgf)	
Load apply speed 負荷速度		0.981 ~ 4.903N : 50um/sec, 9.807 ~ 490.3N : 100um/sec	
Indenter 圧子種類		Standard : Vickers(HV), Option : Knoop(HK), Option : Brinell (HBW 1, 2.5, 5mm) 標準:ピッカース(HV),オプション:ヌープ (HK),オプション:ブリネル(HBW 1,2.5,5mm)	
Objective lens 対物レンズ		Infinity-corrected objective lens Standard:10x, 20x, Option : 5x, 50x, 100x 無限遠補正対物レンズ 標準: 10x, 20x, オプション: 5x, 50x ,100x	
Indent measurement 測定方法		Automatic / manual , Auto focus 全自動 / 手動 , 自動読取	
Min measuring unit 最小計測単位		0.1μm	
Auto focus speed オートフォーカス速度		2sec/1point(Depending on the sample surface) 2秒 / 1点 (試料表面により異なる)	
Camera カメラ		1/2" 1.3M BW USB2.0 Camera 1/2" モノクロ 1.3M USB2.0 カメラ	
Stage / anvil 測定台		50×50mm stroke XY auto stage 50×50mm ストローク XY 自動ステージ Movement Speed 1μm 最小移動単位 1μm	D60mm flat anvil φ60 mm フラットアンビル
Controller コントローラ	3-axis controller 3軸コントローラ		1-axis controller 1軸コントローラ
	With Safeguard against malfunction (Full operation is stopped by the emergency stop button) 誤動作安全装置付 (非常停止ボタンにより全動作停止)		
Operation panel 操作画面		21.5" monitor PC (Windows7) 21.5" モニター PC (Windows7)	11.6" tablet PC (Windows8.1) 11.6" タブレット PC (Windows 8.1)
Max. specimen height 試料最大高さ		140mm	
Max. specimen depth 試料最大奥行		100mm	
Dimensions 機体寸法		W220×D370×H500mm	
Weight 重量		34kg	29kg
Accuracy 規格		ISO 6507-2,JIS B7725 JISB7734, ASTM E-92, ASTM-E384	
Power supply 電源		AC 100 to 240V 50/60Hz available for export models. AC 100 ~ 240V 50/60Hz	

STANDARD ACCESSORIES 標準付属品

Code No. コード No.	Item 項目	Contents 内容
V061	Hardness standard block 硬さ基準片	800HV
V001	Diamond indenter ダイヤモンド圧子	Built in 本体装備
M073~M074	Object lens 対物レンズ	10x(M074), 20x(M073)
R101,R105	Anvil アンビル	60mm ϕ flat, V-shape 60 ϕ 平、V型(大)
-	Spare fuse 予備ヒューズ	2A (Built in 内蔵)
C031	Power cord 電源コード	3P-2.5m
-	Auxiliary tools 補助工具一式	-
V161	Machine cover 機体カバー	-

SPECIAL ACCESSORIES 特別付属品

Code No. コード No.	Item 項目	Contents 内容
V002	Knoop indenter ヌーブ圧子	
V003 Other V003 他	Brinell indenter ブリネル圧子	ϕ 1mm (V003)、 ϕ 2.5mm※ ¹ 、 ϕ 5mm※ ¹
M071,M075 M080	Objective lens 対物レンズ	5x (M075), 50x (M080), 100x (M071)
M011	Precision vice (Max. opening 50mm) 精密バイス (開口量 50mm)	
M012	Precision vice (Max. opening 100mm) 精密バイス (開口量 100mm)	
M013	Rotary table 回転テーブル	
M014	Thin specimen measuring device 薄物測定台	
M015	Fine specimen measuring device (vertical type) 細物測定台(タテ型)	
M016	Fine specimen measuring device (horizontal type) 細物測定台(ヨコ型)	
M017	Specimen inclining device 試料傾斜台	
M018	Rotary inclining device 回転傾斜台	
M019	Universal inclining device 万能傾斜台	
R104	V-shape anvil (small) V型アンビル(小)	
R103	V-shape anvil (large) V型アンビル(スポット)	
V032~V034	Manual X-Y stage 手動XY ステージ	Max. movement : X and Y axis 25mm (withstand load 20kg : V032 , withstand load 50kg : V034) or 50mm , (eithstand load 50kg : V033) 移動量 X,Y 各 25mm (耐荷重 20kg:V032、耐荷重 50kg:V034) 及び各 50mm (耐荷重 50kg:V033)
R111	Round table 丸テーブル	ϕ 200mm
M171~M175	Vibration isolation table 防振台各種	Tabletop type (Rubber cushion type : 171, Manual air type : M172, Auto air type : 173, Compound mount type : 175), Desk top type(M174) 卓上型(防振ゴムタイプ : M171、エアー手動タイプ : M172、エアー自動タイプ : M173、複合マウントタイプ : M175) デスク型 (M174)
※ ¹	Optional size of stage 大型ステージ	(X)100 × (Y)50 mm

※¹ Please consult ご相談ください

※カタログ記載の内容は 2015 年 3 月現在のもので、仕様・外観は予告無しに変更する場合があります。



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