



HIGH QUALITY & LIFE LONG RELIABILITY

AFFRI® provides high quality indenters. Ball or cone types according to Rockwell, Vickers, Brinell, Knoop and Shore for each type of hardness tester. AFFRI® has a wide variety of test blocks for every scale certified UKAS/ACCREDIA or with AFFRI'S test blocks amenable to primary institute

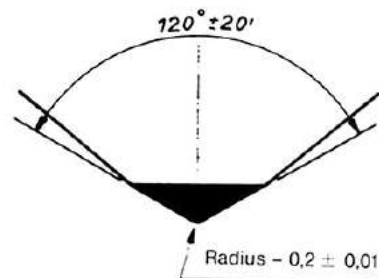


INDENTERS & BLOCKS

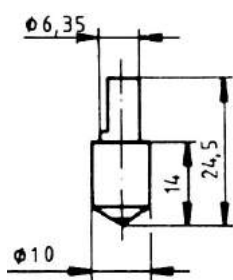
HIGH QUALITY DIAMOND INDENTERS FOR EVERY TYPE OF HARDNESS TESTERS

HARDNESS TEST DIAMONDS ACCORDING TO ROCKWELL (RC)

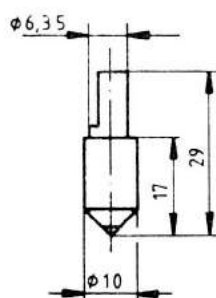
Nr.	Type	Testing appliance
11	Origin. Rockwell 120°	z.B. Frank
12	Testor 120°	Wolpert - Wilson - Time - Mitutoyo
13	Briro UVN 120°	Reicherter
14	Testor-Automat 120°	Wolpert



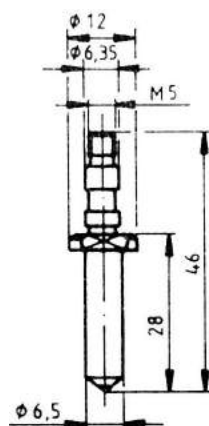
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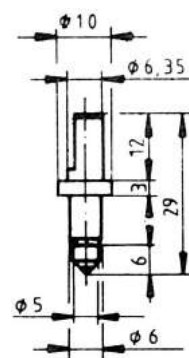
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Nr. 13

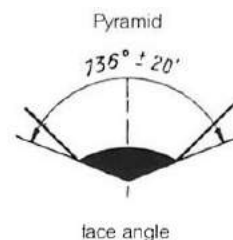


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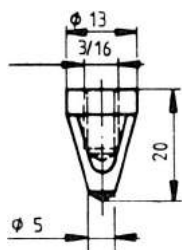


HARDNESS TEST DIAMONDS ACCORDING TO VICKERS

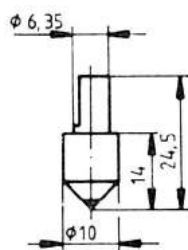
Nr.	Type	Testing appliance
15	Origin. Vickers 136°	Vickers - Tukon
16	Vickers 136°	Frank
17	Dia-Testor 136°	Wolpert - Wilson - Time - Mitutoyo
18	Brivisor 3000H 136°	Reicherter
19	VHT 5 136°	Reicherter



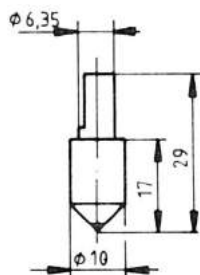
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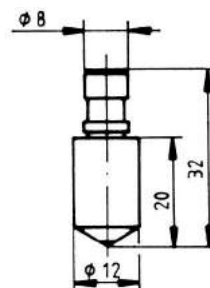
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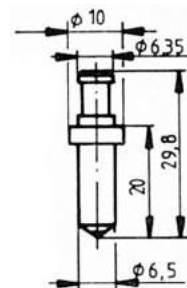
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Nr. 18

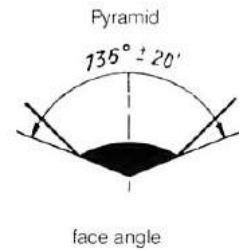


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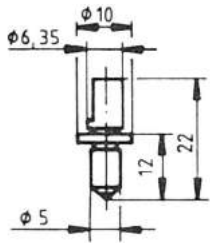


HARDNESS TEST DIAMONDS ACCORDING TO VICKERS

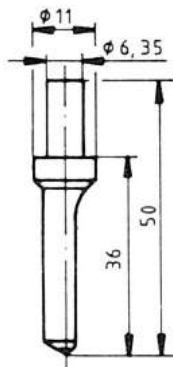
Nr.	Type	Testing appliance
20	Zwick 1 136°	Zwick
21	Zwick 2 136°	Zwick
22	Briviskop 187.5 136°	Reicherter
23	Spare indenter for item 22	Reicherter
24	Testor-Automat 136°	Wolpert



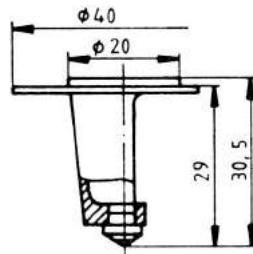
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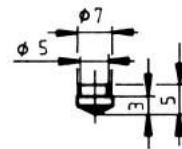
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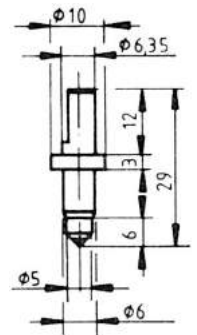
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Nr. 23



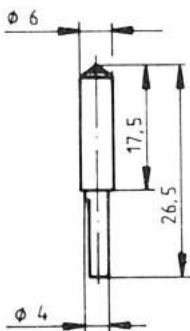
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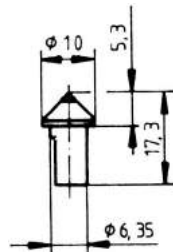
DIAMONDS FOR MICRO HARDNESS TEST

Nr.	Type	Testing appliance
25	Mikro 136°	Leitz
26	Mikro-Testor 136°	Wolpert
27	Vickers 136°	Frank
28	Knoop	*

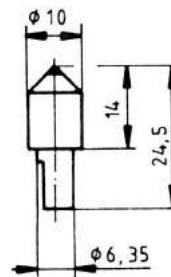
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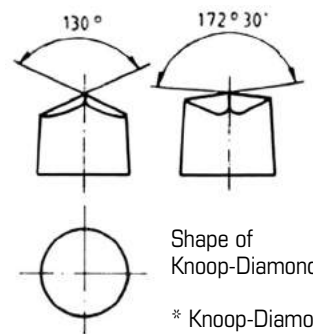
Nr. 26



Nr. 27



Nr. 28



* Knoop-Diamond
for all Testing
Appliances

STANDARD BLOCKS WITH OFFICIAL CERTIFICATE CONFORM TO ASTM-ISO STANDARDS FOR PRIMARY CERTIFICATION OF THE HARDNESS TESTER



TYPE	SCALE	NOMINAL VALUE	DIMENSION mm	SURFACE
Rockwell	HRC	20 25 30 35 40 45 50 55 60 63 65 67	Ø 64 x 15	Mirror
	HRB	30 40 50 60 70 80 85 90 95 100	Ø 64 x 15	Mirror
	HRA	26 31 35 40 45 50 53 55 59 62	Ø 64 x 15	Mirror
	HRA	60 63 65 68 70 73 76 78 81 83 84 85	Ø 64 x 15	Mirror
Available Rockwell HRD HRE HRF HRG HRH HRK HRL HRM HRP HRR HRS HRV scale				
Rockwell superf	HR15N	69 72 75 78 81 83 85 88 90 91 92 93	Ø 64 x 15	Mirror
	HR30N	41 46 50 55 59 64 68 73 77 80 82 83	Ø 64 x 15	Mirror
	HR45N	19 25 31 37 43 49 55 61 66 70 72 74	Ø 64 x 15	Mirror
	HR15T	70 73 77 80 83 86 88 90 91 93	Ø 64 x 15	Mirror
	HR30T	36 43 49 56 63 69 73 76 80 83	Ø 64 x 15	Mirror
	HR45T	2 12 22 32 43 53 58 63 68 73	Ø 64 x 15	Mirror
Available Rockwell HR15W HR30W HR45W HR15X HT30X HR45X HR15Y HR30Y HR45Y scale				
Vickers	HV10	50 100 200 300 350 400 450 500	Ø 64 x 15	Mirror
		550 600 650 700 750 800 850 900		
	HV30	50 100 200 300 350 400 450 500	Ø 64 x 15	Mirror
		550 600 650 700 750 800 850 900		
At demand: HV1 HV2 HV3 HV5 HV20 HV50 HV100				
Micro Vickers	HMV 0,1	50 100 200 300 350 400 450 500	Ø 30 x 10	Mirror
		550 600 650 700 750 800 850 900		
	HMV 1	50 100 200 300 350 400 450 500	Ø 30 x 10	Mirror
		550 600 650 700 750 800 850 900		
At demand: HMV 0,010 HMV 0,025 HMV 0,050 HMV 0,2 HMV 0,3 HMV 0,5				
Micro Knoop	HMK 0,1	50 100 200 300 350 400 450 500	Ø 30 x 10	Mirror
		550 600 650 700 750 800 850 900		
	HMK 1	50 100 200 300 350 400 450 500	Ø 30 x 10	Mirror
		550 600 650 700 750 800 850 900		
At demand: HMK 0,010 HMK 0,025 HMK 0,050 HMK 0,2 HMK 0,3 HMK 0,5				
Brinell	HB _{2,5-62,5}	100 125 (Aluminium soft alloy)	Ø 64 x 15	Polished
	HB _{2,5-187,5}	200 300 400 500 600 (Steel)	Ø 64 x 15	Polished
	HB ₁₀₋₃₀₀₀	100 150 (Aluminium soft alloy)	150 x 120 x 15	Polished
	HB ₁₀₋₃₀₀₀	200 300 400 500 600 (Steel)	150 x 120 x 15	Polished
At demand special loads				

A certificate is included.



STANDARD BLOCKS WITH CERTIFICATE TRACEABLE AND CONFORM TO ASTM-ISO STANDARDS FOR JOURNAL CALIBRATION

TYPE	SCALE	NOMINAL VALUE	DIMENSION mm	SURFACE
Rockwell	HRC	40 60	Ø 64 x 15	Mirror
	HRB	90	Ø 64 x 15	Mirror
	HRA	70 83	Ø 64 x 15	Mirror
Rockwell superf	HR15N	91	Ø 64 x 15	Mirror
	HR30N	80	Ø 64 x 15	Mirror
	HR45N	70	Ø 64 x 15	Mirror
	HR15T	90	Ø 64 x 15	Mirror
	HR30T	73	Ø 64 x 15	Mirror
	HR45T	63	Ø 64 x 15	Mirror
Vickers	HV10	200 700	Ø 64 x 15	Mirror
	HV30	200 700	Ø 64 x 15	Mirror
Brinell	HB _{2,5-62,5}	100 125	Ø 64 x 15	Polished
	HB _{2,5-187,5}	200	Ø 64 x 15	Polished





ACCESSORIES AND AUTOMATIC SYSTEMS

AFFRI® provides X-Y tables (motorized or manual), tightening vices, prisms, multi sample box and several accessories to fix the piece on the hardness tester. AFFRI® is also able to meet the needs of the customers, building special tools for specific hardness tests on bulky, irregular and uncommon samples.



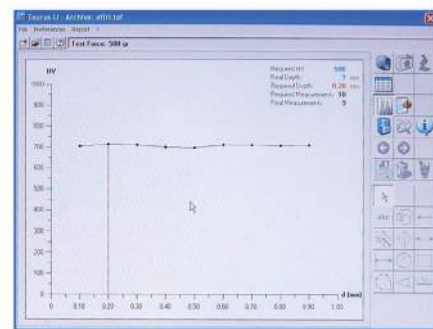
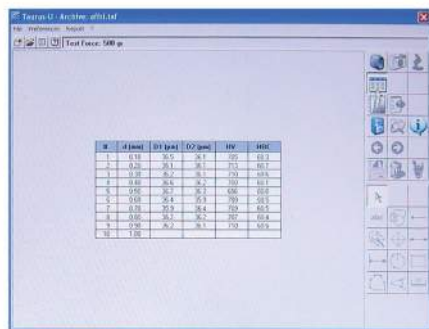
ACCESSORIES

ACCESSORIES FOR AUTOMATIC VICKERS SYSTEM

082.0.0.004 FULLY AUTOMATIC SYSTEM to move automatic stage X Y table, Z auto focus, automatic Vickers measure, Automatic case depth, automatic multi-sample mosaic scanning and test process no limit on scanning area assuring 5 μ accuracy step, print report. Including: ST-2000 Stage Controller, for X-Y-Z and CMT software Vickers-Knoop auto measure. 1.3 MP Camera, Auto focus Z axis. (CMT X-Y stage table is a separate item). Adaptable to DM2A, DM2D, DM8A, DM8B, DM5, WIKI, INTEGRAL



A112.0.003 AUTOMEASURE TAURUS 8 system with USB connection and dedicated software which provides immediate analysis of indentations and automatic Vickers Knoop or Brinell units, case depth diagrams. Self installing on Windows XP English. Supplied on CD. Adaptable to DM2A, DM2D, DM8A, DM8B, DM5, VRS series, and every brand of micro Vickers

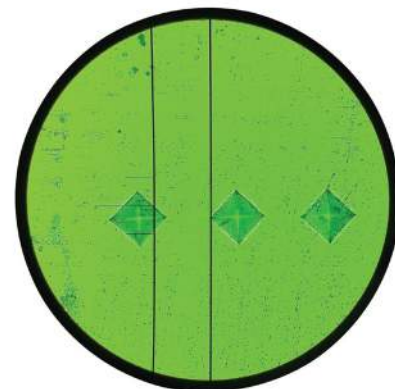
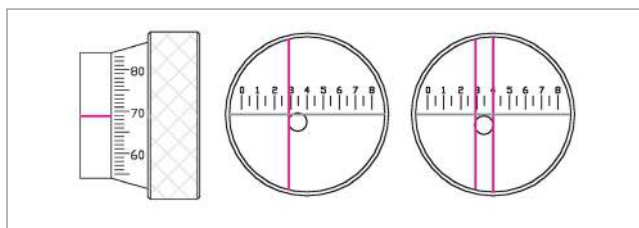


ACCESSORIES FOR BRINELL, ROCKWELL AND VICKERS MEASURES

431216 MICROSCOPE



- Portable handly microscope equipped with foot base $\varnothing 16$ mm and light source
- 0.01 mm division - 20x magnification (As option: division 0.001mm)
- External scale for easy measure
- Not stressing on the eyes
- Scale 6 mm
- Available with magnetic base (option)



A4014.0.001 ANVILS



A series of different anvils is available to test every size of test piece:

- | | |
|------------|---|
| A014.0.001 | Flat anvil $\varnothing 60$ mm with flat surface |
| A014.0.003 | V face anvil $\varnothing 60$ mm for diameters from 8 to 220 mm |
| A014.0.004 | Double Spot anvil $\varnothing 60$ flat + V $\varnothing 25$ mm for diameters from 5 to 30 mm |
| A014.0.002 | Flat anvil $\varnothing 150$ mm |

STANDARD ACCESSORIES INCLUDED ON THE PRICE LIST

For RT RTD EX MX DRM RS RSD series:

- 1 HRC indenter
- 1 HRB Indenter
- 1 HRC test block w. traceable certificate
- 1 HRB test block w. traceable certificate
- 1 Flat anvil
- 1 V face anvil
- 1 spot v+ Flat face anvil
- Manual instruction
- Conversion table
- Warrantee certificate
- Power cable

For all other bench-top models:

- 1 HRC indenter
- 1 HRC test block w. traceable certificate
- 1 Flat anvil
- 1 (objective for optical machines)
- Manual instruction
- Conversion table
- Warrantee certificate
- Power cable