

# HARDNESS REFERENCE BLOCKS & INDENTERS

ISO/IEC 17025 CERTIFIED REFERENCE TOOLS FOR HARDNESS TESTERS



**CATALOGUE 2024**

# INTRODUCTION

UPI Laboratories Europe BV, ISO/IEC 17025 RvA accredited laboratory providing DIN EN ISO / ASTM dual certified test blocks and indenters.

The RvA, like UKAS, Dakks, COFRAC, NVLAP, A2LA are ILAC (International Laboratory Accreditation Cooperation) members. Certificates issued by INNOVATEST Europe for test blocks and indenters meet or exceed the relevant ISO/ASTM requirements for hardness testing and comply with the requirements for NADCAP accredited/certified organizations.

Hardness test blocks or hardness reference plates are comparison plates most commonly made of Steel or Aluminum but could also be made of Brass or custom materials. They are used for the day to day Indirect Verification and Calibration of hardness testing machines and instruments. There are hardness test blocks for almost all hardness testing methods and scales.

Calibrating the display reading of a hardness tester against ISO/ASTM certified hardness test block values part of a normal quality assurance process. Adjusting your hardness tester according to the value engraved in a hardness test block, as long as the adjustments are minor, can be done after assurance that a correct and undamaged indenter/penetrator is installed and the tester operates normally. Indenters are available for almost all scales with viability of micro and macro diamond indenters and carbide or available in the different sizes by the different methods.

## ISO & ASTM HARDNESS TEST BLOCKS and INDENTERS (RvA)

Hardness test blocks INNOVATEST Europe BV branded are manufactured according to standards ISO (International) and ASTM (American).

Such standards apply to the physical requirements as well to the method & the way the final value is found and confirmed." INNOVATEST Europe BV hardness test blocks and indenters are of excellent finish and have very low variation, excellent repeatability.

## RAW MATERIALS USED

In order to manufacture good hardness test blocks, strict control over the quality of raw materials (Steel, Brass, Aluminum) is required. The entire block material needs to be homogenous, to assure low spread of readings and excellent repeatability. INNOVATEST Europe BV performs supplier audits to assure this.

## HEAT TREATMENT

Distribution of the blocks in the hardening furnaces is of utmost importance, time, temperature and quench are all carefully controlled processes, to assure a top class product. INNOVATEST Europe BV performs supplier audits to assure this.

## FINISHING

The next step in the process to ensure high quality 'blanks' is the grinding, polishing and lapping of the block surfaces. Any concerns on the surface quality are eliminated due to thorough selection after inspection. INNOVATEST performs supplier audits to assure this.

## QUALITY CONTROL

Before proceeding with the ultimate calibration and engraving of the block hardness, blocks are undergoing a full inspection to ensure that they meet the physical requirements of ISO and ASTM (thickness, flatness, parallelism, surface roughness, magnetism and uniformity).

© INNOVATEST Europe BV

Changes in products and/or product specifications can emerge due to new technologies and/or continuous development.

We reserve the right to change or modify specifications of products without prior notice.

We recommend you to contact our sales office for up-to-date information.

© All rights reserved  
C24CAT/01/EN

**INNOVATEST**<sup>®</sup>

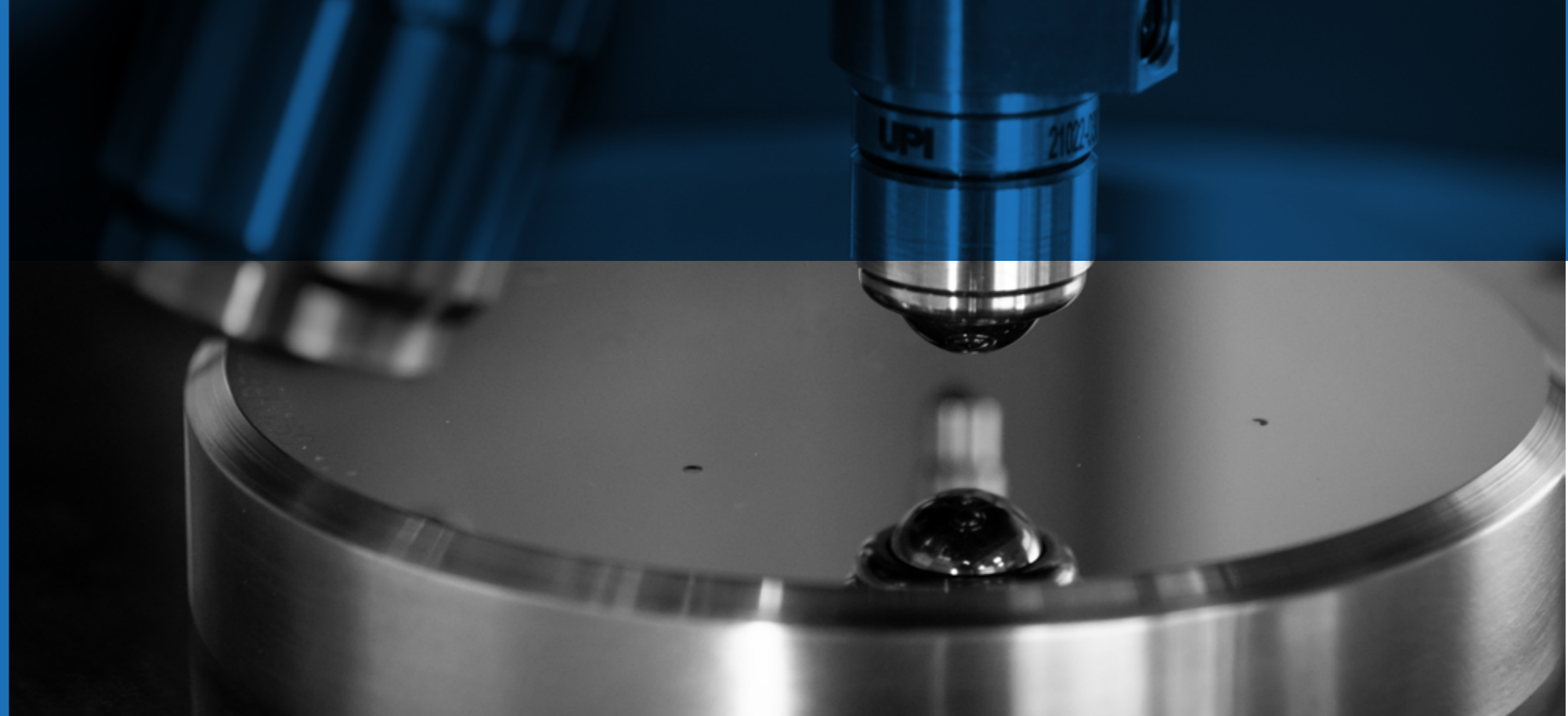
## TRACEABILITY

INNOVATEST hardness calibration blocks and indenters are calibrated & DUAL-certified by UPI Laboratories Europe BV traceable to National/ International standards according to ISO 6506, ISO 6507, ISO 6508, ISO 4545, ASTM E18, ASTM E92 and ASTM E10.





# TEST BLOCKS



## UNRIVALED ACCURACY

INNOVATEST hardness comparison blocks are at the forefront of material testing, known for their unparalleled accuracy and reliability in hardness measurement. These precision-engineered blocks are indispensable for calibrating and verifying the accuracy of hardness testers across various scales, such as Rockwell, Vickers, and Brinell.

Crafted with meticulous attention to detail, each block undergoes rigorous inspection to ensure its hardness values are within strict tolerances. This commitment to quality guarantees consistency and reliability, making these blocks a trusted standard in laboratories and manufacturing facilities globally.

## GLOBALLY CERTIFIED PRECISION

Compliance with international standards (ISO or ASTM) further enhances the value of INNOVATEST's blocks, ensuring their acceptance and reliability worldwide. This certification underscores their role in quality control, R&D, and production testing across diverse industries, from aerospace to automotive and metallurgy.

INNOVATEST's hardness comparison blocks not only exemplify precision but also the company's dedication to innovation and quality assurance in material science. As a benchmark for hardness testing, these blocks are essential for ensuring accurate, consistent, and internationally recognized measurements, solidifying INNOVATEST's position as a leader in the field.



## TEST BLOCKS RANGE

25 MM BLOCK



60 MM BLOCK



65 MM BLOCK



90 MM BLOCK



## ROCKWELL REFERENCE BLOCKS

## ROCKWELL REFERENCE BLOCKS

### ROCKWELL DIAMOND SCALES

INNOVATEST Rockwell cone hardness calibration blocks are calibrated & DUAL-certified by UPI Laboratories Europe BV traceable to National/International standards according to ISO 6508/3 & ASTM-E18 A4.



#### ROUND (dia. 60mm X 10mm thickness)

All mentioned hardness values are nominal, the actual calibrated values may vary.

ITEM NO.	DESCRIPTION											
<b>HRC</b>	20	25	30	35	40	45	50	55	60	63	65	67
<b>HRA Soft</b>	22	26	31	35	40	45	47	50	53	55	59	62
<b>HRA Hard</b>	60	63	65	68	70	73	76	78	81	83	84	85
<b>HRD</b>	40	44	48	51	55	59	63	67	71	75		
<b>HR15N</b>		71	74	76	79	82	85	88	90	92		
<b>HR30N</b>		46	50	55	59	64	68	72	77	81		
<b>HR45N</b>		25	31	37	43	49	55	60	66	72		

Deviating scales or hardness can be ordered by custom request.  
Blocks can be supplied with NADCAP compliant grid.

### ROCKWELL CARBIDE BALL SCALES

INNOVATEST Rockwell ball hardness calibration blocks are calibrated & DUAL-certified by UPI Laboratories Europe BV traceable to National/International standards according to ISO 6508/3 & ASTM-E18 A4.



#### ROUND (dia. 60mm X 10mm thickness)

All mentioned hardness values are nominal, the actual calibrated values may vary.

ITEM NO.	DESCRIPTION													
<b>HRB</b>	10	20	30	40	50	60	65	70	75	80	85	90	95	
<b>HRE (alu)</b>				75	81	87	93	100						
<b>HRF (alu)</b>				74	80	86	91	97						
<b>HRG</b>	40	65	87						33	41	49	58	66	74
<b>HRH</b>		94	98											
<b>HRK</b>		47	56	65	73	81	86	91	95	99				
<b>HRL</b>	102	121												
<b>HRM</b>	85	110												
<b>HRP</b>	62	102												
<b>HRR</b>	105			125										
<b>HRS</b>	111	116												
<b>HRV</b>	92	112												
<b>HR15T</b>				70	73	77	80	83	85	86	88	90	91	93
<b>HR30T</b>				36	43	49	56	63	66	69	73	76	80	83
<b>HR45T</b>					12	22	32	43	48	53	58	63	68	73
<b>HR15W</b>	84	95												
<b>HR30W</b>	52	83												
<b>HR45W</b>	29	75												
<b>HR15X</b>	84	94												
<b>HR30X</b>	69	90												
<b>HR45X</b>	54	85												
<b>HR15Y</b>	89	97												
<b>HR30Y</b>	74	94												
<b>HR45Y</b>	71	91												

Deviating scales or hardness can be ordered by custom request.  
Blocks can be supplied with NADCAP compliant grid.

## VICKERS REFERENCE BLOCKS

### MACRO VICKERS SCALES

INNOVATEST Macro Vickers hardness calibration blocks are calibrated & DUAL-certified by UPI Laboratories Europe BV traceable to National/International standards according to ISO 6507/3 & ASTM-E92 A4.



#### Standard high grade polishing

#### ROUND (dia. 60mm X 10mm thickness)

All mentioned hardness values are nominal, the actual calibrated values may vary.

ITEM NO.	DESCRIPTION																
<b>HV0.1</b>	40	70	100	150	200	250	300	350	400	450	500*	550*	600*	650*	700*	750*	800*
<b>HV0.2</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV0.3</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV0.5</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV1</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV2</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV3</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV5</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV10</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV20</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV30</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV50</b>	40*	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV60</b>	40*	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV100</b>	40*	70*	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV120</b>	40*	70*	100*	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV150</b>	40*	70*	100*	150	200	250	300	350	400	450	500	550	600	650	700	750	800

Deviating scales or hardness can be ordered by custom request.

Blocks can be supplied with NADCAP compliant grid.

\* Hardness value is outside the scope of the ISO/ASTM standards due to indentations smaller than 0,020mm



## VICKERS REFERENCE BLOCKS

### MICRO VICKERS SCALES

INNOVATEST Micro Vickers hardness calibration blocks are calibrated & DUAL-certified by UPI Laboratories Europe BV traceable to National/International standards according to ISO 6507/3 & ASTM-E92 A4.



#### Extreme mirror polishing

#### ROUND (dia. 25mm X 6mm thickness)

All mentioned hardness values are nominal, the actual calibrated values may vary.

ITEM NO.	DESCRIPTION																
<b>HMV0.010</b>	40	70*	100*	150*	200*	250*	300*	350*	400*	450*	500*	550*	600*	650*	700*	750*	800*
<b>HMV0.015</b>	40	70	100*	150*	200*	250*	300*	350*	400*	450*	500*	550*	600*	650*	700*	750*	800*
<b>HMV0.02</b>	40	70	100*	150*	200*	250*	300*	350*	400*	450*	500*	550*	600*	650*	700*	750*	800*
<b>HMV0.025</b>	40	70	100	150*	200*	250*	300*	350*	400*	450*	500*	550*	600*	650*	700*	750*	800*
<b>HMV0.05</b>	40	70	100	150	200	250*	300*	350*	400*	450*	500*	550*	600*	650*	700*	750*	800*
<b>HV0.1</b>	40	70	100	150	200	250	300	350	400	450	500*	550*	600*	650*	700*	750*	800*
<b>HV0.2</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV0.3</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV0.5</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV1</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
<b>HV2</b>	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800

Deviating scales or hardness can be ordered by custom request.

\* Hardness value is outside the scope of the ISO/ASTM standards due to indentations smaller than 0,020mm.





## KNOOP REFERENCE BLOCKS

## BRINELL REFERENCE BLOCKS

### KNOOP SCALES

INNOVATEST Knoop hardness calibration blocks are calibrated & DUAL-certified by UPI Laboratories Europe BV traceable to National/International standards according to ISO 4545/3 & ASTM-E92 A4.



### BRINELL SCALES

INNOVATEST Brinell hardness calibration blocks are calibrated & DUAL-certified by UPI Laboratories Europe BV traceable to National/International standards according to ISO 6506/3 & ASTM-E10 A4.



#### ROUND (dia. 25mm X 6mm thickness)

All mentioned hardness values are nominal, the actual calibrated values may vary.

ITEM NO.	DESCRIPTION																					
HK0.01	40	70	100	150	200	250	300	350									600*	650*	700*	750*	800*	
HK0.015	40	70	100	150	200	250	300	350	400	450	500						600*	650*	700*	750*	800*	
HK0.02	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750*	800*					
HK0.025	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800					
HK0.05	40	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800					
HK0.1	40*	70	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800					
HK0.2	40*	70*	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800					
HK0.3	40*	70*	100*	150	200	250	300	350	400	450						600	650	700	750	800		
HK0.5	40*	70*	100*	150*	200	250	300	350	400						600	650	700	750	800			
HK1	40*	70*	100*	150*	200*	250*	300*	350						600	650	700	750	800				
HK2	40*	70*	100*	150*	200*	250*	300*	350*	400*	450*	500*	550*	600*	650*	700*	750	800					

Deviating scales or hardness can be ordered by custom request.

\* Hardness value is outside the scope of the ISO/ASTM standards due to indentations smaller than 0,020mm

#### ROUND (dia. 90mm X 16mm thickness)

All mentioned hardness values are nominal, the actual calibrated values may vary.

ITEM NO.	DESCRIPTION																												
HBW 10/3000																70*	100	150	170	200	250	300	350	400	450	500	550	600	650
HBW 10/1500																70	100	150	170	200	250	300	350*	400*	450*	500*	550*	600*	650*
HBW 10/1000																70	100	150	170	200	250*	300*	350*	400*	450*	500*	550*	600*	650*
HBW 10/500	40	70	100	150*	170*	200*	250*	300*	350*	400*	450*	500*	550*	600*	650*														
HBW 5/750																70*	100	150	170	200	250	300	350	400	450	500	550	600	650
HBW 5/250																70	100	150	170	200	250*	300*	350*	400*	450*	500*	550*	600*	650*
HBW 5/125	40	70	100	150*	170*	200*	250*	300*	350*	400*	450*	500*	550*	600*	650*														

Deviating scales or hardness can be ordered by custom request.  
Blocks can be supplied with NADCAP compliant grid.

\* Hardness value is outside the scope of the ISO/ASTM standards

#### ROUND (dia. 60mm X 10mm thickness)

All mentioned hardness values are nominal, the actual calibrated values may vary.

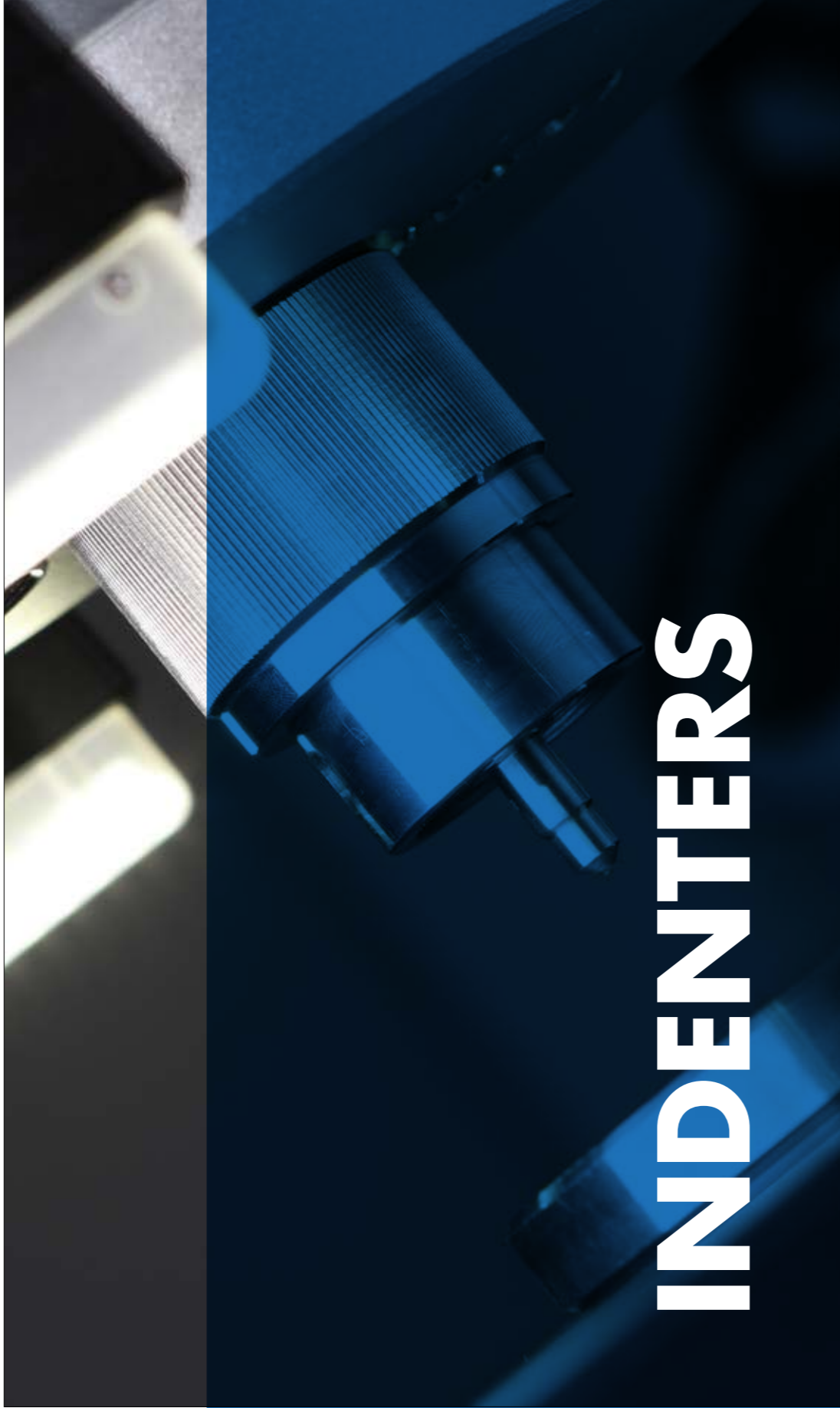
ITEM NO.	DESCRIPTION																									
HBW 2.5/187.5	40*	70*	100	150	170	200	250	300	350	400	450	500	550	600	650											
HBW 2.5/62.5	40	70	100	150	170	200	250*	300*	350*	400*	450*	500*	550*	600*	650*											
HBW 2.5/31.25	40	70	100	150*	170*	200*	250*	300*	350*	400*	450*	500*	550*	600*	650*											
HBW 1/30	40*	70*	100	150	170	200	250	300	350	400	450	500	550	600	650											
HBW 1/10	40	70	100	150	170	200	250*	300*	350*	400*	450*	500*	550*	600*	650*											
HBW 1/5	40	70	100	150*	170*	200*	250*	300*	350*	400*	450*	500*	550*	600*	650*											

Deviating scales or hardness can be ordered by custom request.  
Blocks can be supplied with NADCAP compliant grid.

\* Hardness value is outside the scope of the ISO/ASTM standards

### CONVENIENT PACKAGING





# INDENTERS

## ROCKWELL INDENTERS

### ROCKWELL DIAMOND & BALL INDENTERS

INNOVATEST Rockwell Indenters are calibrated & DUAL-certified by UPI Laboratories Europe BV traceable to National/International standards according to ISO 6508/2 & ASTM-E18 A3.



ITEM NO.		DESCRIPTION
UPI/6003		Rockwell diamond indenter $\varnothing 3\text{mm}$ , acc. to ISO 6508/2 & ASTM-E18 A3
UPI/6004		Rockwell diamond indenter $\varnothing 3\text{mm}$ , L=12mm, acc. to ISO 6508/2 & ASTM-E18 A3
UPI/6005		Rockwell diamond indenter $\varnothing 6.35\text{mm}$ , acc. to ISO 6508/2 & ASTM-E18 A3
UPI/7503		1/16" Embedded carbide ball indenter $\varnothing 3\text{mm}$ , with 1 ball, acc. to ISO 6508/2 & ASTM-E18 A3
UPI/7603		1/8" Embedded carbide ball indenter $\varnothing 3\text{mm}$ , with 1 ball, acc. to ISO 6508/2 & ASTM-E18 A3
UPI/7703		1/4" Embedded carbide ball indenter $\varnothing 3\text{mm}$ , with 1 ball, acc. to ISO 6508/2 & ASTM-E18 A3
UPI/7808		1/2" Embedded carbide ball indenter $\varnothing 3\text{mm}$ , with 1 ball, acc. to ISO 6508/2 & ASTM-E18 A3
UPI/7506		1/16" Carbide ball indenter $\varnothing 6.35\text{mm}$ , with 1 ball, acc. to ISO 6508/2 & ASTM-E18 A3
UPI/7606		1/8" Carbide ball indenter $\varnothing 6.35\text{mm}$ , with 1 ball, acc. to ISO 6508/2 & ASTM-E18 A3
UPI/7706		1/4" Carbide ball indenter $\varnothing 6.35\text{mm}$ , acc. to ASTM-E18 A3
UPI/7806		1/2" Carbide ball indenter $\varnothing 6.35\text{mm}$ , acc. to ASTM-E18 A3
UPI/2507		1/16" Carbide ball, for Rockwell ball indenter, acc. to ISO 6508/2 & ASTM-E18 A3
UPI/2509		1/8" Carbide ball, for Rockwell ball indenter, acc. to ISO 6508/2 & ASTM-E18 A3
UPI/2514		1/4" Carbide ball, for Rockwell ball indenter, acc. to ISO 6508/2 & ASTM-E18 A3
UPI/2519		1/2" Carbide ball, for Rockwell ball indenter, acc. to ISO 6508/2 & ASTM-E18 A3

## VICKERS & KNOOP INDENTERS

## BRINELL INDENTERS



### MACRO & MICRO VICKERS INDENTERS




INNOVATEST (Micro) Vickers Indenters are calibrated & DUAL-certified by UPI Laboratories Europe traceable to National/International standards according to ISO 6507/2 & ASTM-E92 A3.

### KNOOP INDENTERS

INNOVATEST Knoop Indenters are calibrated & DUAL-certified by UPI Laboratories Europe traceable to National/International standards according to ISO 4545/2 & ASTM-E92 A3.



ITEM NO.		DESCRIPTION
UPI/8010		Vickers indenter ø6.35mm, acc. to ISO 6507/2 & ASTM-E92 A3
UPI/8105		Vickers indenter ø3mm, acc. to ISO 6507/2 & ASTM-E92 A3











ITEM NO.		DESCRIPTION
UPI/8205		Knoop indenter ø3mm, acc. to ISO 4545/2 & ASTM-E92 A3
UPI/8220		Knoop indenter ø6.35mm, acc. to ISO 4545/2 & ASTM-E92 A3
UPI/8221		Knoop indenter ø6.35mm, acc. to ISO 4545/2 & ASTM-E92 A3 Indenter is rotated 90°

∅ = shaft diameter for machine mounting.



### BRINELL BALL INDENTERS

INNOVATEST Brinell Indenters are calibrated & DUAL-certified by UPI Laboratories Europe BV traceable to National/International standards according to ISO 6506/2 & ASTM-E10 A3.

ITEM NO.		DESCRIPTION
UPI/7001		1mm Embedded carbide ball indenter ø3mm, acc. to ISO 6506/2 & ASTM-E10 A3
UPI/7006		2.5mm Embedded carbide ball indenter ø3mm, acc. to ISO 6506/2 & ASTM-E10 A3
UPI/7011		5mm Embedded carbide ball indenter ø3mm, acc. to ISO 6506/2 & ASTM-E10 A3
UPI/7000		1mm Carbide ball indenter ø6.35mm, acc. to ISO 6506/2 & ASTM-E10 A3
UPI/7005		2.5mm Carbide ball indenter ø6.35mm, acc. to ISO 6506/2 & ASTM-E10 A3
UPI/7010		5mm Carbide ball indenter ø6.35mm, acc. to ISO 6506/2 & ASTM-E10 A3
UPI/7015		10mm Carbide ball indenter ø6.35mm, acc. to ISO 6506/2 & ASTM-E10 A3
UPI/2005		1.0mm Carbide ball, for ø6.35mm indenters, acc. to ISO 6506/2 & ASTM-E10 A3
UPI/2010		2.5mm Carbide ball, for ø6.35mm indenters, acc. to ISO 6506/2 & ASTM-E10 A3
UPI/2015		5.0mm Carbide ball, for ø6.35mm indenters, acc. to ISO 6506/2 & ASTM-E10 A3
UPI/2020		10.0mm Carbide ball, for ø6.35mm indenters, acc. to ISO 6506/2 & ASTM-E10 A3

### RE-CALIBRATION COST (Examination and calibration of used indenters)

ITEM NO.		DESCRIPTION
UPI/9090		Rockwell C indenter
UPI/9190		Vickers indenter
UPI/9092		Micro Vickers indenter



# CALIBRATION SETS

## CALIBRATION SETS

### INNOVATEST CALIBRATION SETS

INNOVATEST Calibration sets are DUAL-certified by UPI Laboraties Europe BV traceable to National/International standards according to ISO & ASTM.



#### ROCKWELL CALIBRATION SETS

All mentioned hardness values are nominal, the actual calibrated values may vary.

ITEM NO.	DESCRIPTION
<b>SET-HRA</b>	Set of 3 blocks 40HRA   65HRA   81HRA packed in foam box, dual certified, by ISO 17025 accredited lab.
<b>SET-HRB</b>	Set of 3 blocks 40HRB   70HRB   90HRB packed in foam box, dual certified, by ISO 17025 accredited lab.
<b>SET-HRC</b>	Set of 3 blocks 25HRC   45HRC   60HRC packed in foam box, dual certified, by ISO 17025 accredited lab.

Deviating scales or hardness can be ordered by custom request.  
Blocks can be supplied with NADCAP compliant grid.

#### MACRO VICKERS CALIBRATION SETS

All mentioned hardness values are nominal, the actual calibrated values may vary.

ITEM NO.	DESCRIPTION
<b>SET-HV2</b>	Set of 3 blocks 200HV   450HV   700HV packed in foam box, dual certified, by ISO 17025 accredited lab.
<b>SET-HV5</b>	Set of 3 blocks 200HV   450HV   700HV packed in foam box, dual certified, by ISO 17025 accredited lab.
<b>SET-HV10</b>	Set of 3 blocks 200HV   450HV   700HV packed in foam box, dual certified, by ISO 17025 accredited lab.
<b>SET-HV50</b>	Set of 3 blocks 200HV   450HV   700HV packed in foam box, dual certified, by ISO 17025 accredited lab.

Deviating scales or hardness can be ordered by custom request.  
Blocks can be supplied with NADCAP compliant grid.

#### MICRO VICKERS CALIBRATION SETS

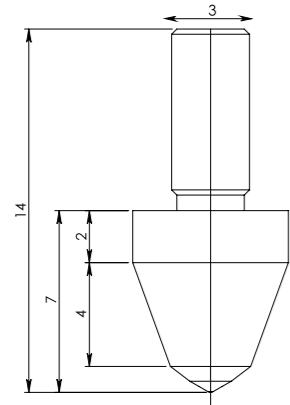
All mentioned hardness values are nominal, the actual calibrated values may vary.

ITEM NO.	DESCRIPTION
<b>SET-HMV0.1</b>	Set of 3 blocks 200HV   450HV   700HV packed in foam box, dual certified, by ISO 17025 accredited lab.
<b>SET-HMV0.2</b>	Set of 3 blocks 200HV   450HV   700HV packed in foam box, dual certified, by ISO 17025 accredited lab.
<b>SET-HMV0.3</b>	Set of 3 blocks 200HV   450HV   700HV packed in foam box, dual certified, by ISO 17025 accredited lab.
<b>SET-HMV0.5</b>	Set of 3 blocks 200HV   450HV   700HV packed in foam box, dual certified, by ISO 17025 accredited lab.
<b>SET-HMV1</b>	Set of 3 blocks 200HV   450HV   700HV packed in foam box, dual certified, by ISO 17025 accredited lab.
<b>SET-HMV2</b>	Set of 3 blocks 200HV   450HV   700HV packed in foam box, dual certified, by ISO 17025 accredited lab.

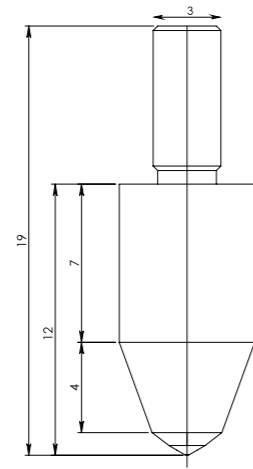
Deviating scales or hardness can be ordered by custom request.  
Blocks can be supplied with NADCAP compliant grid.



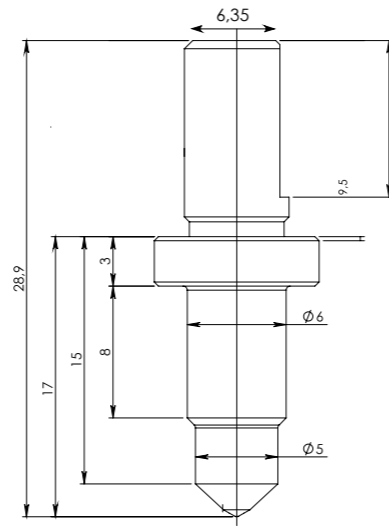
All dimensions are in mm.



UPI/6003

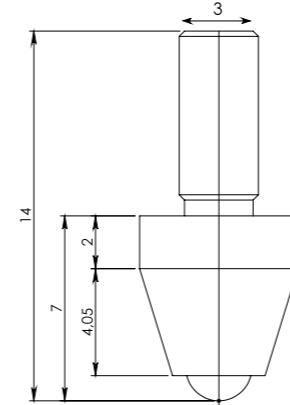


UPI/6004



UPI/6005

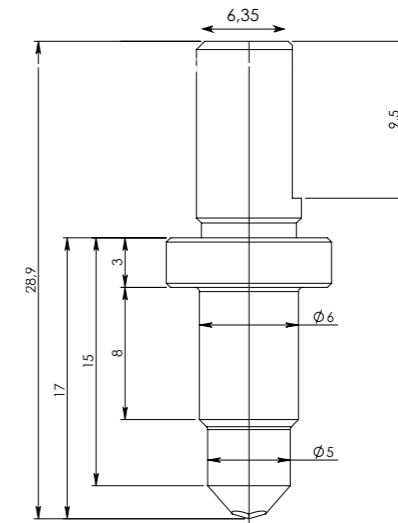
All dimensions are in mm.



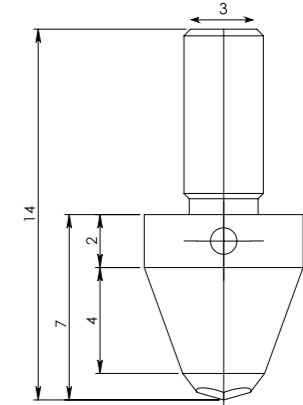
UPI/7001

UPI/7006

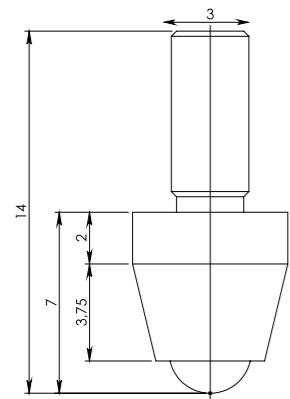
UPI/7011



UPI/8010



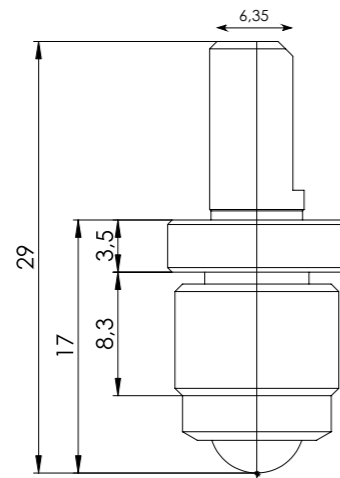
UPI/8105



UPI/7503

UPI/7603

UPI/7703

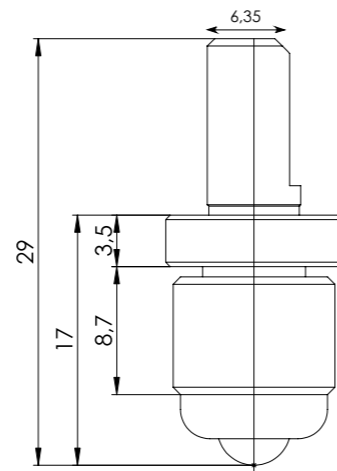


UPI/7506

UPI/7606

UPI/7706

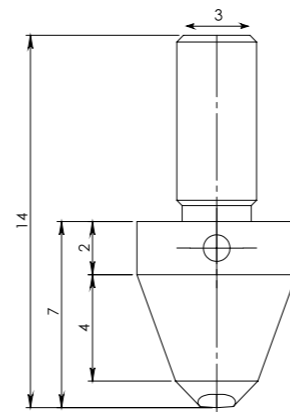
UPI/7806



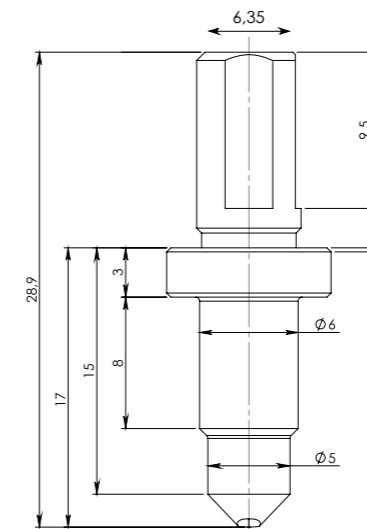
UPI/7005

UPI/7010

UPI/7015



UPI/8205



UPI/8221

# SALES CONDITIONS

## PRICES

Are in EURO, excluding VAT, EXWORKS Maastricht, Netherlands. Subject to changes without prior notice. Check our order confirmation for actual pricing. Our order confirmations are binding. Quotes for transportation or transportation charges on account or invoice are for administration purpose only, the delivery condition remains EX WORKS.

## ORDERS

Confirmed orders can only be cancelled after our written consent.

## DELIVERY TIME

All deliveries are from stock Maastricht. In those cases where a delivery time is indicated, these indications are for reference only and can change without prior notice. It is explicitly stated that INNOVATEST Europe BV accepts no liability nor penalties in case of late deliveries.

## DELIVERY

Special instructions are only accepted if stated in writing on your order and are subject to the approval of INNOVATEST Europe BV and reconfirmed in writing. All shipments travel for the full risk of Buyer regardless of the party that has instructed the forwarder. INNOVATEST Europe BV is explicitly not liable for loss or damage of any goods.

## ADDITIONAL CHARGES

The following charges apply for orders less than net:  
Euro 250,- costs Euro 25,-  
Euro 100,- costs Euro 30,-  
Euro 50,- costs Euro 35,-

## SHIPMENTS

We reserve the right to send partial or combined shipments for each individual order.

## PAYMENTS

Unless otherwise agreed, payments to be made in advance.  
A discount of 2% applies for advance payments. In case of an agreed open account, payments within 30 days of invoice date unless agreed otherwise in writing. Late payments are subjected to an interest rate 3% a month. Goods delivered remain the unconditional property of INNOVATEST Europe BV until they are fully paid for.

Dotted lines for notes



.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

## EUROPE

**INNOVATEST Deutschland GmbH.**  
**Sales & Service**  
Phone: +49 245 670 59 500  
info@innovatest-deutschland.com  
www.innovatest-deutschland.com

**INNOVATEST France SARL**  
**Sales & Service**  
Phone: +33 1 848 88038  
commercial@innovatest-france.com  
www.innovatest-france.com

**INNOVATEST UK Ltd.**  
**Sales & Service**  
Phone: +44 (0) 121 824 4775  
info@innovatest-uk.com  
www.innovatest-uk.com

**INNOVATEST Polska sp. z o.o**  
**Sales & Service**  
Phone: +48 697 099 826  
info@innovatest-polska.pl  
www.innovatest-poland.com

## MIDDLE EAST

**INNOVATEST Middle East LLC**  
**Sales & Service**  
Phone: +971- 4- 880 0875  
info@innovatest-mideast.com  
www.innovatest-mideast.com

## NORTH-AMERICA

**INNOVATEST USA Inc.**  
**Sales & Service**  
Phone: +1 267 317 4300  
info@innovatest-usa.com  
www.innovatest-usa.com

## ASIA

**INNOVATEST Shanghai Co., Ltd.**  
**Sales & Service**  
Phone: +86 21 60906200  
Fax: +86 21 60912595  
info@innovatest-shanghai.com  
www.innovatest-shanghai.com

**INNOVATEST Japan Co., Ltd.**  
**Sales & Service**  
Phone: +81 3 3527 3092  
Fax: +81 3 3527 3093  
info@innovatest-japan.com  
www.innovatest-japan.com

**INNOVATEST South East Asia**  
**Sales & Service**  
Phone: +65 6451 1123  
Fax: +65 6452 1011  
info@innovatest-singapore.com  
www.innovatest-singapore.com

Distributor :

## CORPORATE HEAD OFFICE

**INNOVATEST Europe BV**  
**Manufacturing, Distribution & Service**  
Borgharenweg 140  
6222 AA MAASTRICHT  
The Netherlands

Phone: +31 43 3520060  
Fax: +31 43 3631168  
info@innovatest-europe.com  
**www.innovatest-europe.com**