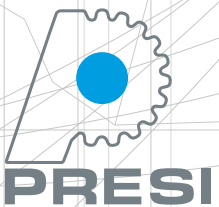


**HARDNESS TESTERS**

**HZ BY PRESI**



THE RANGE OF  
**7** HZ HARDNESS TESTERS  
BY PRESI

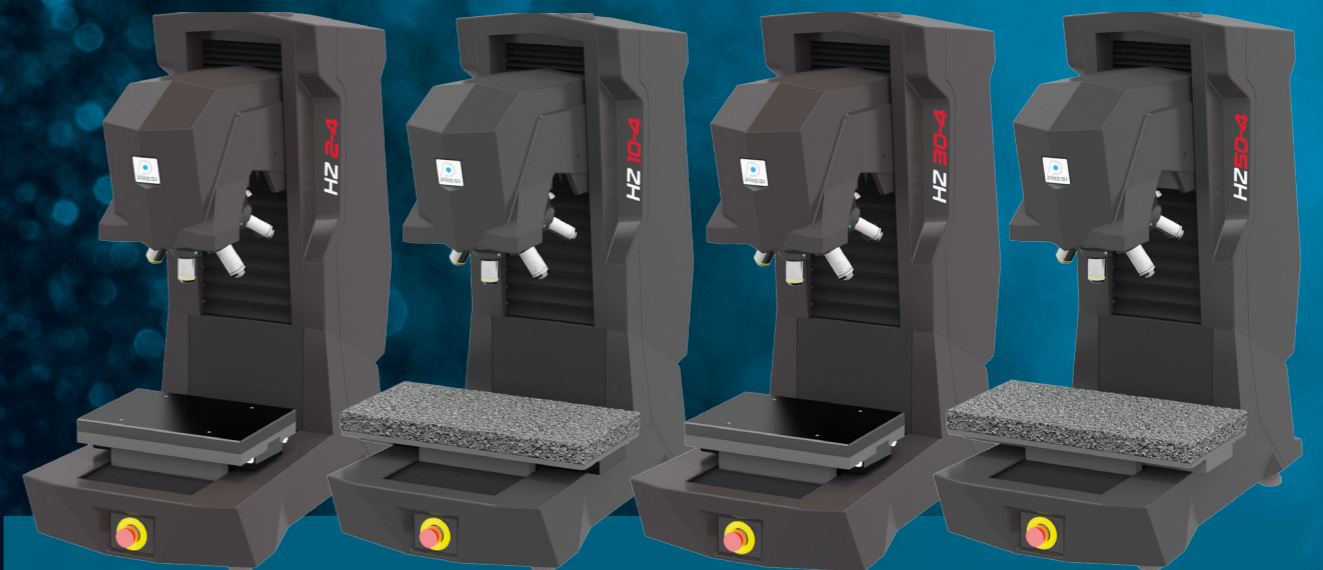


HZ2-2

HZ10-2

HZ30-2

3 SEMI-AUTOMATIC HARDNESS TESTERS



HZ2-4

HZ10-4

HZ30-4

HZ50-4

4 AUTOMATIC HARDNESS TESTERS

# HZ HARDNESS TESTERS

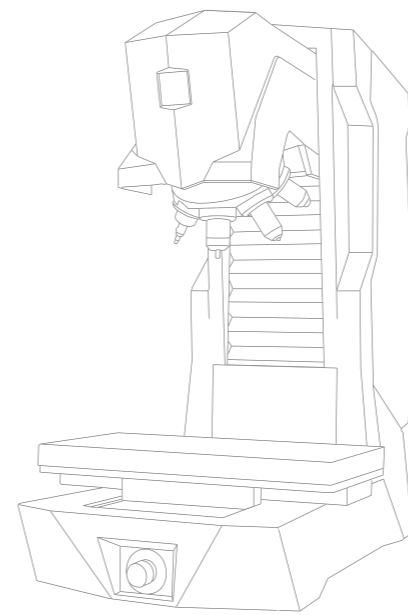
## THE HARDNESS TESTERS RANGE BY PRESI

Semi-automatics or automatics, HZ hardness testers are instantly recognizable. 100% made in France, its original design along with its robustness and highly technical capacities make it an essential work tool.

🎯 OPTICAL QUALITY

📏 PRECISION

👍 RELIABILITY



↑ 800mm    ↘ 700mm  
↔ 370mm    📦 80kg

### Large work space

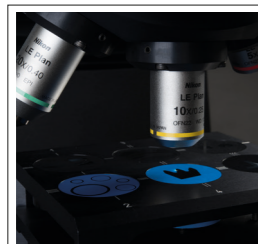
Thanks to a major vertical extension.

### Motorized turret

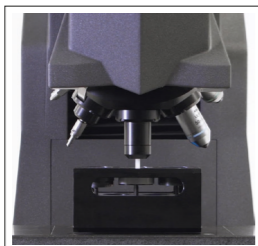
Up to 7 positions, with touch sensor.

### 2 LED lighting systems

for micro and macroscopy use



**Nikon objectives**  
with a magnification up to 2000x.



### Ergonomic joystick

with customizable sensitivity



A wide load range from 5g to 65kg.

Very high image quality.

Accuracy and repeatability of the measurements.

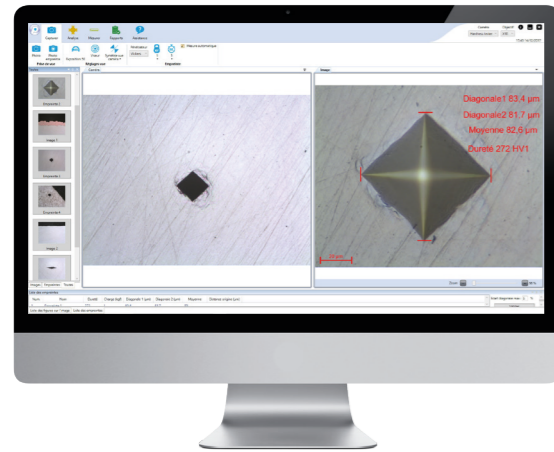
Work and reading comfort.

# SOFTWARE

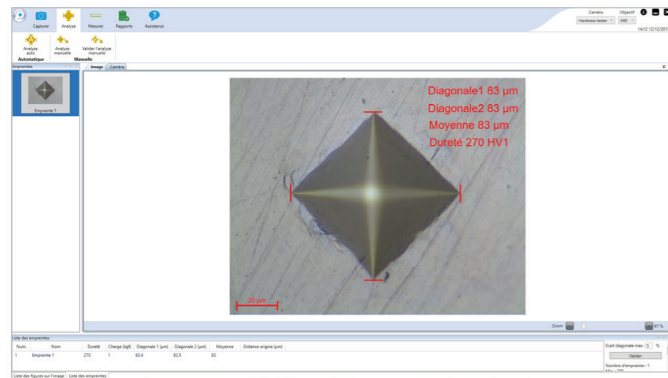
## FOR SEMI-AUTOMATIC HZ

### PRESI TOUCH ESSENTIAL

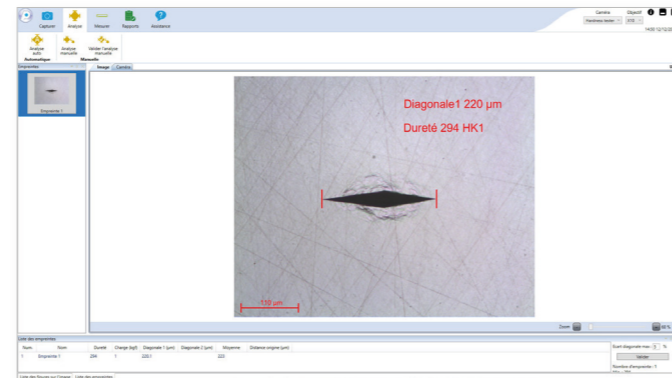
Intuitive software with a graphic menu.  
100% customizable interface.  
Permanent overall view of the results and data.  
Built-in search engine.  
Automatic or manual indent measurement.  
Single indent.



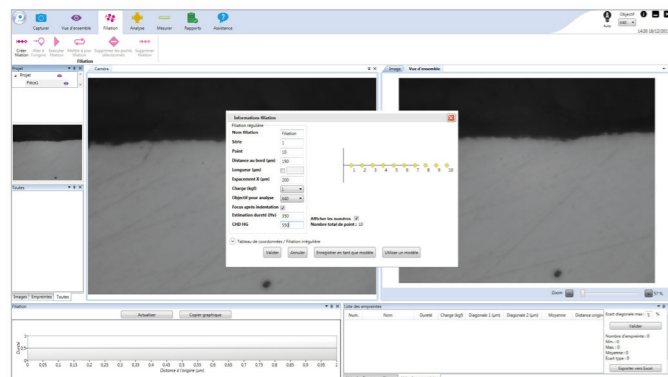
EASY AND INTUITIVE  
IMAGE FLUIDITY  
DATA STORAGE



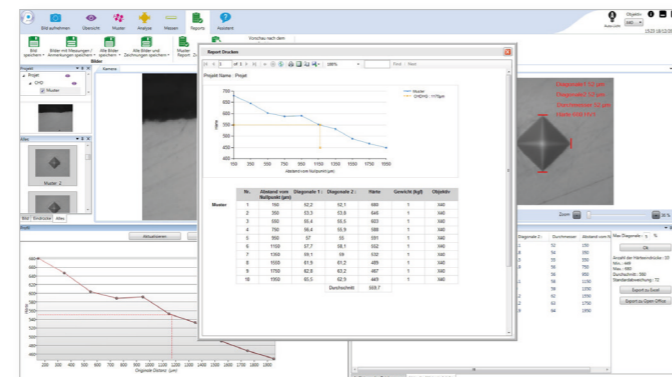
**PRESI Touch Essential**  
Automatic or manual measurement of Vickers indents.



**PRESI Touch Essential**  
Automatic or manual measurement of Knoop indents.



**PRESI Touch Manual**  
Pattern creation. A graphic and dynamic assistant allows pattern visualisation during its programming.



**PRESI Touch Manual**  
Automatic report. In one click, a report formats the results. This report is printable or recordable in many formats.

Also available in version  
 **PRESI TOUCH  
MANUAL**

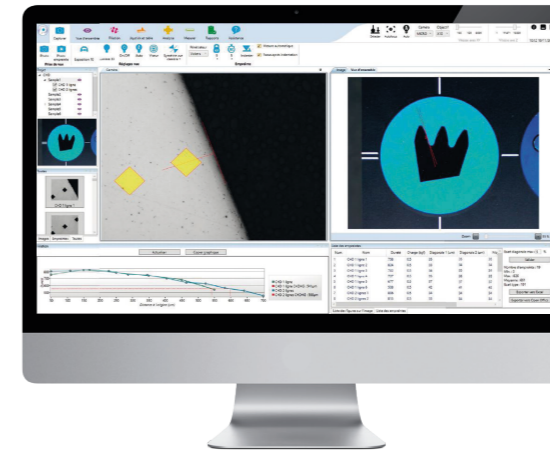
Higher version of the  
software that integrates  
**manual pattern.**

# SOFTWARE

## FOR AUTOMATIC HZ

### PRESI TOUCH AUTOMATIC "FULL"

User-friendly, intuitive and customizable software.  
All the features directly accessible.  
Permanent overall view of the results and data.  
Comprehensive software with all available applications.  
Single indent, regular or irregular pattern.  
Mapping with 2D / 3D image.

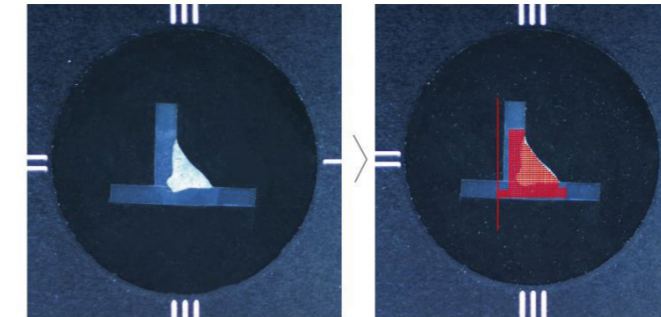


COMPLETE, RELIABLE AND POWERFUL  
VERY HIGH IMAGE QUALITY  
INTUITIVE NAVIGATION  
TIME SAVING

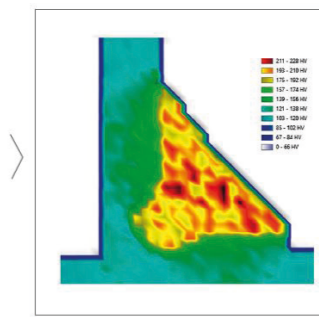
Also available in version  
 **PRESI TOUCH  
PATTERN**

Special version for  
**patterns, heat  
treatments, CHD, NHT.**

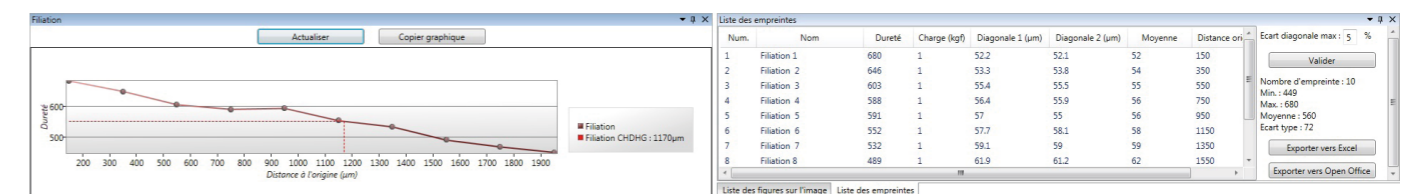
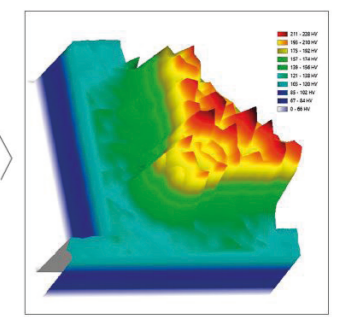
### Automatic mapping feature



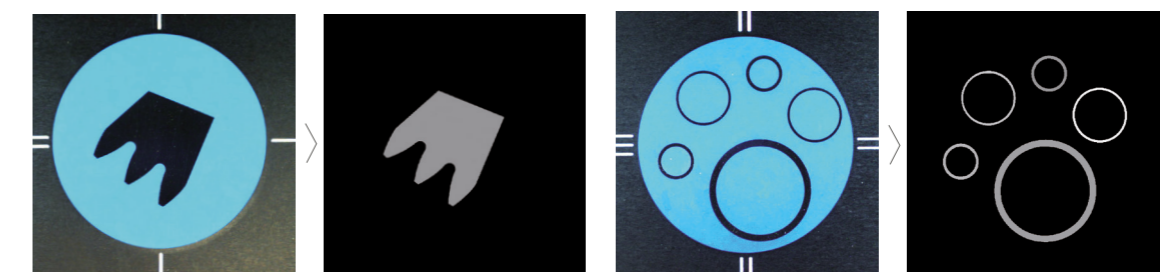
### 2D mapping



### 3D mapping



### Automatic sample detection



# HZ HARDNESS TESTERS

MODEL	SEMI-AUTOMATIC			AUTOMATIC			
	HZ2-2	HZ10-2	HZ30-2	HZ2-4	HZ10-4	HZ30-4	HZ50-4
Reference	71218	71216	71200	71219	71217	71201	71123
<b>LOAD APPLICATION</b>							
Load range	5 gf - 2 kgf	10 gf - 10 kgf	100 gf - 30 kgf	5 gf - 2 kgf	10 gf - 10 kgf	100 gf - 30 kgf	5 gf - 65 kgf
Indenter type	Vickers or Knoop	Vickers or Knoop	Vickers or Knoop	Vickers or Knoop	Vickers or Knoop	Vickers or Knoop	Vickers and Knoop
<b>FRAME</b>							
Load cells	1	1	1	1	1	1	2
Touch sensor	✓	✓	✓	✓	✓	✓	✓
Objectives	up to 4	up to 4	up to 4	up to 4	up to 4	up to 4	4
Magnification	200 to 2000x	200 to 2000x	200 to 2000x	200 to 2000x	200 to 2000x	200 to 2000x	200 to 2000x
Full HD microscopic camera	✓	✓	✓	✓	✓	✓	✓
Full HD macroscopic camera: observable scope 62x50mm	-	-	-	○	○	○	✓
LED light source	✓	✓	✓	✓	✓	✓	✓
Z axis travel	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm
<b>TABLES</b>							
<b>Fixed 200 x 200 mm</b>							
Maximum work piece weight: 50 kg	✓	✓	✓	-	-	-	-
Compatible with single place sample holder	✓	✓	✓	-	-	-	-
<b>Manual 110 x 110 mm</b>							
XY travels 25 x 25 mm	✓	✓	✓	✓	✓	✓	✓
Table feeding accuracy with analog micrometers: 10 µm	○	○	○	-	-	-	-
Table feeding accuracy with digital micrometers: 1 µm	○	○	○	-	-	-	-
Maximum work piece weight: 50 kg	✓	✓	✓	✓	✓	✓	✓
Compatible with single place sample holder	✓	✓	✓	✓	✓	✓	✓
<b>Motorized standard 280 x 200 mm</b>							
XY travels 100 x 130 mm	✓	✓	✓	✓	✓	✓	✓
Table feeding accuracy: 1 µm	-	-	-	✓	✓	✓	-
Maximum work piece weight: 80 kg	✓	✓	✓	✓	✓	✓	✓
Compatible with single place sample holder	✓	✓	✓	✓	✓	✓	✓
<b>Motorized marble 420 x 210 mm</b>							
XY travels 180 x 200 mm	✓	✓	✓	✓	✓	✓	✓
Table feeding accuracy: 1 µm	-	-	-	○	○	○	✓
Maximum work piece weight: 100 kg	✓	✓	✓	✓	✓	✓	✓
Compatible with multiple and single place sample holder	✓	✓	✓	✓	✓	✓	✓
<b>SOFTWARE</b>							
PRESI Touch Essential	✓	✓	✓	-	-	-	-
PRESI Touch Manual	○	○	○	-	-	-	-
PRESI Touch Pattern	-	-	-	✓	✓	✓	-
PRESI Touch Automatic « Full »	-	-	-	○	○	○	✓
External PC and 28" screen	✓	✓	✓	✓	✓	✓	✓
<b>GENERAL</b>							
Test load tolerance < 1 %	✓	✓	✓	✓	✓	✓	✓
Dwell time: 5 - 999 s	✓	✓	✓	✓	✓	✓	✓
Standard compliance : ISO 6507 & 4545, ASTM E384 and E92	✓	✓	✓	✓	✓	✓	✓

LEGEND - Incompatible ✓ included ○ option

## TABLES



Fixed table



Manual table



Motorized table - Standard



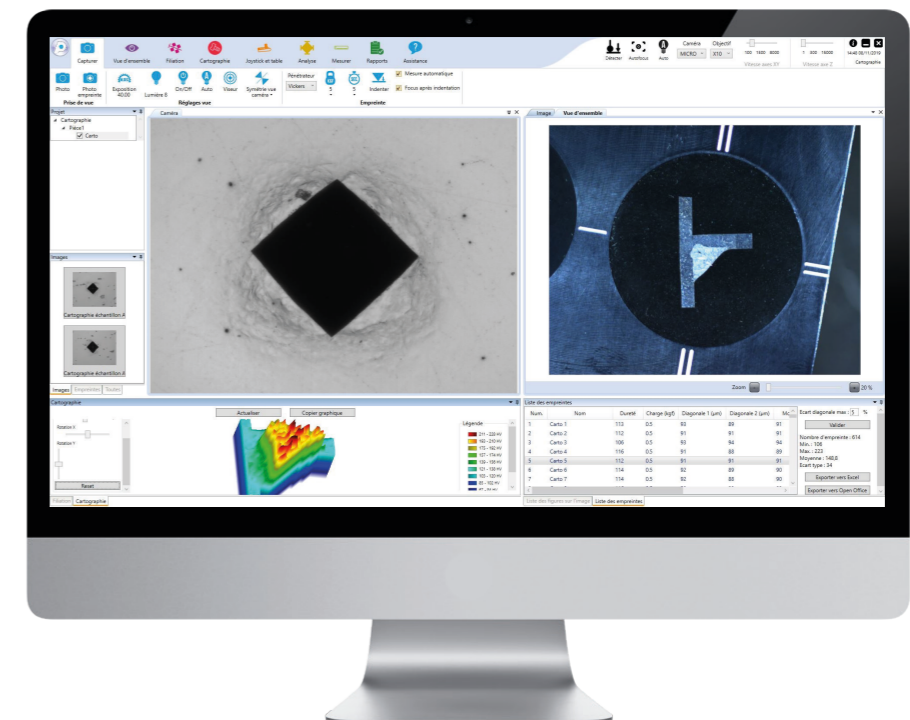
Motorized table - Marble

# SOFTWARE

	SEMI-AUTOMATIC HARDNESS TESTERS		AUTOMATIC HARDNESS TESTERS	
	PRESI TOUCH ESSENTIAL	PRESI TOUCH MANUAL	PRESI TOUCH PATTERN	PRESI TOUCH AUTOMATIC « FULL »
<b>INDENT TYPE</b>				
Single indent	✓	✓	✓	✓
Manual pattern	-	✓	✓	✓
Automatic pattern	-	-	✓	✓
Manual mapping	-	-	-	✓
Automatic mapping	-	-	-	✓
<b>FEATURES</b>				
Automatic measure of the indent	✓	✓	✓	✓
Manual measure of the indent	✓	✓	✓	✓
Autofocus	✓	✓	✓	✓
Automatic light	✓	✓	✓	✓
Incorrect measurements alerts	✓	✓	✓	✓
Pattern settings	-	✓	✓	✓
Simulation of the size of the indent	-	✓	✓	✓
Hardness value conversion	✓	✓	✓	✓
Analysis reports	-	✓	✓	✓
Measurement Toolboxes	○	✓	✓	✓
Macroscopic overview	-	-	(1)	(1)
Reconstitution of macroscopic images	-	-	(1)	(1)
Reconstitution of microscopic images	-	-	✓	✓
Automatic storage	✓	✓	✓	✓
Multilingual software	✓	✓	✓	✓
<b>EQUIPMENT</b>				
Full HD digital camera for microscopy	✓	✓	✓	✓
Full HD digital camera for macroscopy	-	-	(1)	(1)
Hardness tester / PC communication	✓	✓	✓	✓
Turret control	✓	✓	✓	✓
XYZ 3-axis joystick	-	-	✓	✓
1 axis Z joystick	✓	✓	-	-
External PC and 28" screen	✓	✓	✓	✓

LEGEND - Incompatible ✓ included ○ option

(1) Available with macroscopic camera



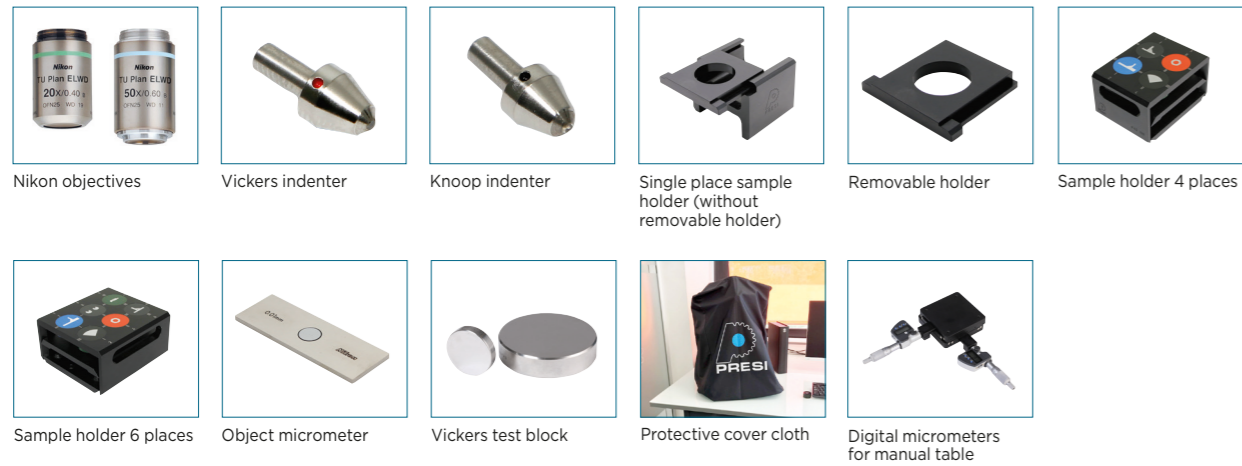
# ACCESSORIES

MODEL	SEMI-AUTOMATICS HARDNESS TESTERS			AUTOMATICS HARDNESS TESTERS			
	HZ2-2	HZ10-2	HZ30-2	HZ2-4	HZ10-4	HZ30-4	HZ50-4
Reference	71218	71216	71200	71219	71217	71201	71123
Ref. OBJECTIVES							
71205	o	o	o	o	o	o	✓
71206	o	o	o	o	o	o	✓
71207	o	o	o	o	o	o	✓
71208	o	o	o	o	o	o	✓
71209	o	o	o	o	o	o	o
71210	o	o	o	o	o	o	o
71204	-	-	-	o	o	o	✓
Ref. INDENTERS							
71164	✓	o	o	✓	o	o	o
71202	-	✓	✓	-	✓	✓	✓
71134	o	o	o	o	o	o	✓
Ref. SAMPLE HOLDERS							
71109	o	o	o	o	o	o	o
71174	o	o	o	o	o	o	o
71144	o	o	o	o	o	o	o
71100	o	o	o	o	o	o	o
71111	o	o	o	o	o	o	o
71145	o	o	o	o	o	o	o
71125	o	o	o	o	o	o	o
71173	o	o	o	o	o	o	o
71175	-	-	-	(2)	(2)	(2)	o
71176	-	-	-	(2)	(2)	(2)	o
Ref. VARIOUS							
71120	(3)	(3)	(3)	-	-	-	-
71503	o	o	o	o	o	o	o
71113	o	o	o	o	o	o	o
71141	o	o	o	o	o	o	o
71182	o	o	o	o	o	o	o
71161	o	o	o	o	o	o	o
71181	o	o	o	o	o	o	✓

LEGEND - Incompatible ✓ included o option

(2) Available with the motorized marble table 420 x 210 mm

(3) Available with the manual table 110x110mm



[WWW.PRESI.COM](http://WWW.PRESI.COM)

