

Product Information

Metallographic Specimen Mounts



Fig. 1: Specimen mount in a ZHVµ hardness tester

Features

- · Robust and simple construction for long life
- Manufactured from powder coated alloyed aluminium for lightness and rigidity
- Composed of a base with removable drawers to increase flexibility and reduce the cost to cover a range of specimen diameters and shapes

Range of application

Indentec metallographic specimen mounts are used in Vickers testing, primarily in Micro but also Macro ranges. They are useful when testing welded specimens and cut and mounted cross sections for case depth analysis. Mounts increase the effectiveness and efficiency of testing particularly when using automatic and semi-automatic Vickers testing systems.

Effectiveness is improved because a flat face, parallel to the X-Y stage is presented which allows for more reliable, square indentations (i.e. within standard) and reliable measurement without the need for frequent refocussing. Efficiency is improved because the specimen can be fixed in a known position on the table and when used with scanning functionality of HD software an image of the specimen can be quickly acquired.



Fig. 2: Specimen mount: seperate, sliding in, closed up

- Designed to fix to the full range of Indentec X-Y tables
- Single point of upward pressure to ensure a level specimen surface is presented to the indenter and lens, parallel to the X-Y table
- Can be fixed in at known point on the X-Y table

Operation

The mount is composed of either two or three parts: a base, a drawer, and sizing rings. Each base can hold drawers for single and multiple moulded or welded specimens. The base is mounted in a fixed position on the stage. The appropriate drawer and ring combination is chosen for the specimen size and the specimen is fixed within the drawer. The drawer is then inserted into the base and the specimen is ready to test, and is easily located by the operator.

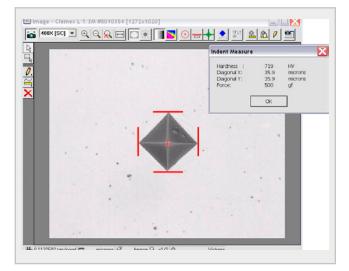


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Operation with ZHµ.HD software and a scanner

Specimen mounts are uniquely effective when used as part of Indentec's automatic Vickers testing system. The automatic system comprises a hardness tester, PC, ZHµ.HD software and flat bed scanner with location tool and mount. The mount drawer with sample fixed is placed in the tool on the scanner and a scanned image transferred to the ZHµ.HD software. The drawer is then inserted into the base which has been pre-located on the X-Y table and users are ready to test.



Sample Size	Max. #	Drawer	Drawer Item #	Req. Base	Base Item #	Rings
25 mm	10	10 x 25 mm	2111250	Large *	2111244	-
30 mm / 1" / 1.25"	1	1 x Ø 25 - 40 mm	2111233	Small	2111232	✓ (see below)
	2	2 x Ø 25 - 40 mm	2111243	Medium	2111240	✓ (see below)
	10	10 x 30 mm	2111248	Large *	2111244	-
		10 x 1"	2111249	Large *	2111244	-
		10 x 1.25"	2111247	Large *	2111244	-
40 mm / 1.5"	1	1 x Ø 25 - 40 mm	2111233	Small	2111232	✓ (see below)
	2	2 x Ø 25 - 40 mm	2111243	Medium	2111240	✓ (see below)
	8	8 x 40 mm	2111246	Large *	2111244	-
		8 x 1.5"	2111245	Large *	2111244	-
50 mm	1	1 x 50 mm	2111239	Small	2111232	-
	1**	1 x 50 mm **	2111242 **	Medium	2111240	-
55 mm	(Width	Welded	2111241	Medium	2111240	-
	dependent)	55 x 100 mm max				
70 mm	(Width	Welded	2111251	Large *	2111244	-
	dependent)	70 x 150 mm max				

Specimen mount configuration

* Large base will require a 200 x 100 mm travel XY table.
** Enables customers purchasing a medium base for testing other sample sizes to use the same base for their 50 mm testing.

Ring Size (for Ø 25 - 40 mm drawer)	Item number
1 "	2111234
30 mm	2111235
1.25 "	2111236
40 mm	2111237
1.5 "	2111238