MSW-20

- Professional manufacturer, best quality with competitive price
- Recommended by the world UT NDT inspection association for training and examination
- Core technology with independent intellectual property rights, certificate of CE, GOST and etc..

Digital Display Webster Hardness Tester

Overview

MSW-20 series aluminum Webster tester is also called clamp type hardness tester, They are divided into MSW-20, MSW-20a, MSW-20b three types, they are light and portable can be hold by one hand, do not need sample when testing, without high skill requirements. It can do fast NDT test of workpiece on site and meet the needs of quality control and qualified rate. It is widely used in production test, acceptance inspection and products quality inspection of aluminum industries and many companies of windows, door and curtain wall, as well as in engineering quality inspection and technical supervision departments. It is a necessary device in raising qualification rate and saving cost.

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MSW-20 Serial Products Technical Parameters

Technical Parameters	MSW-20	MSW-20a	MSW-20b
Measurement range	0~20HW	0~20HW	0~20HW
Accuracy	0.5HW	0.5HW	0.5HW
Accurate measurement range	5~18HW	5~18HW	5~18HW
Resolution	0.1HW	0.1HW	0.1HW
Hardness Range	25 ~ 110HRE，58 ~ 131HV	25 ~ 110HRE，58 ~ 131HV	25 ~ 110HRE，58 ~ 131HV
Test material	Aluminum Alloy (1100~7075 series)	Aluminum Alloy (1100~7075 series)	Aluminum Alloy (1100~7075 series)
Specimen Size (mm)	Thickness 0.4-6 Inner diameter > 10	Thickness 0.4-13 Inner diameter > 10	Thickness 0.4-8 Inner diameter > 6

Features

- No corrosion and keep precision after we have put them in salty water(5%) for 4 hour. After 1000 times 0.5meters falling test, the pointer does not deflect.Thus to ensure the quality of the instrument.
- Small portable instrument, small size, light weight, one-handed operation, can quickly measure the hardness of aluminum alloy;
- Test process without sampling, can be non-destructive testing of material hardness;
- Easy to learn, no high-skill skills of the operation requirements, the human operation on the measurement results less impact, very suitable for the production site for rapid hardness testing of materials;
- There is no strict limit on the shape of the workpiece to be measured, suitable for the detection of different shapes of aluminum;
- Equipped with calibration sets to solve the problem due to multiple full scale calibration if there is a calibration error;
- Detection and display separated, to avoid blocking display so that user can not read the value.

Working Principle

MW-20 series Webster hardness tester adopts indentation principle. Under pressure, the indentation is inversely proportional to the material hardness. HW is short for hardness of Webster, when the value is 16, it means the hardness is 16HW. The value can be read on the dial and can be changed into HV, HR. If the sample hardness is out of range, the needle will point at 20, if the range is too low, the needle will not move and it will stay at 0.

Application

- Aluminum outer material
- Doors and windows curtain wall, decoration works
- Tourism, sports, stationery aluminum processing
- Aluminum tubes, aluminum, aluminum, aluminum rods and other aluminum products production and processing

Applied condition

- Sample surface should be clean and clean without oil, the surface of the dirt, especially fine sand will greatly affect
- the measurement accuracy;
- Sample surface coating will seriously affect the measurement accuracy, with sandpaper or solvent to remove the
- coating after the hardness measurement;

Test material: Aluminum Alloy(1100~7075 Series)

The instrument should be used in environments with strong vibrations, damp and corrosive gases;

This series of products according to the different thickness of the three models available for users to choos (MSW-20 , MSW-20a,MSW-20b) , different models have different display and measurement range.User according to the shape size and thickness of the sample to select the appropriate instrument.

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The Comparison Table of Webster Hardness Tester

Model	MW-20 Series	MSW-20 Series	MDW-ZJ Series	MDW-ZS Series
Testing Method	Manual	Manual	Electrical	Electrical
Display	Mechanical	Digital	Mechanical	Digital
Change stylus	By yourself	By yourself	By manufacturer	By manufacturer
Full scale calibration	Manual	Manual	Press calibration key	Press calibration key
Standard calibration	Calibration block	Calibration block	Calibration block	Calibration block
Maximum allowable error	±0.5HW	±0.5HW	±0.5HW	±0.5HW
Measurement range	0-20HW	0-20HW	0-20HW	0-20HW
Accuracy	0.5HW	0.5HW	0.5HW	0.5HW
Accurate measure range	5-18HW	5-18HW	5-18HW	5-18HW
Working principle	Indentation	Indentation	Indentation	Indentation
Connection	Integrated	Integrated	Separated	Separated

Notes：M means Mitech, W means Webster, S means digital, D means electrical, Z means not customized, J means mechanical display.

Configuration

	Item	Parts Name	QTY	Remarks
Standard Config	1	Main unit	1	
	2	Standard hardness block	1	
	3	Special Wrench	1	
	4	AC adapter	1	
	5	AAA battery	2	
	6	User's manual	1	
	7	Certificate	1	
	8	Warranty	1	
	9	Handle case	1	
Optional Config	10	AA battery	2	
	11	External digital display device	1	