

Title: Calibration of Engineers Square

1 Scope

Work Instruction for the calibration of engineers squares. To be used in the absence of a manufacturers calibration instruction.

2 Preparation

Calibration shall be carried out using Category 'A' master instruments.

Equipment required:

- Engineer's square
- Set of metric feeler gauges

The Engineer's square and feeler gauges shall have the appropriate certificate of calibration traceable through United Kingdom Accreditation Service and shall be rechecked at intervals of no more than 5 years.

3 Method

3.1 Check that the identification number is clearly visible and that the square is free from damage, burrs, indentations or corrosion.

3.2 Check that the stock and blade are firmly fixed and that the blade is not twisted.

3.3 Check for squareness by placing the master square on the inside and outside of square under test. Measure any gap at tip of blade with master feeler gauge. Max gap shall be 0.2mm.

3.4 Check for bowing by positioning the blade face of the engineer's square on top edge of master gauge and measure any gap with master feeler gauge Max gap shall be 1.0mm.

3.5 Results shall be recorded on the calibration form (see Appendix A) and retained for audit purposes.

4 References

Appendix A. Engineer's Square Calibration Result Sheet.

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Appendix A. Engineer's Square Calibration Result Sheet

Square Number:		Date last checked:		Next check due:	
Master Equipment Used:					
Square:		Feeler Gauge:			

Visual Checks (Identify Pass or Fail as appropriate)			Comments
Check ID number is clearly visible	Pass	Fail	
Check for visible signs of damage	Pass	Fail	
Check for burrs. <i>Note. Light burrs may be removed by using a smooth cut file</i>	Pass	Fail	
Check for signs of indentation / corrosion <i>Note. light rusting is permissible</i>	Pass	Fail	
Check for rigidity of stock and blade	Pass	Fail	
Check for signs of twisting in blade	Pass	Fail	

Dimensional Checks (Identify Pass or Fail as appropriate)			Readings / Comments
Check for squareness of blade:	Pass	Fail	Maximum gap inside =
			Maximum gap outside =
Check for bowing of blade	Pass	Fail	Maximum gap =

Examined by:	Signed:	Date:
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NOTE Failed equipment is to be labelled 'Do Not Use' and quarantined until rectified or scrapped.