

Title: Calibration of Weld Inspection Gauges (Thermit Welding (GB) type)

1 Scope

Work Instruction for the calibration of Thermit type weld inspection gauges. 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
- Vernier calliper
- Set of metric feeler gauges

The Engineer's square, Vernier calliper 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 gauge is free from damage, burrs, indentations or corrosion.

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

3.3 Check for squareness of the gauge by placing the master square on outside of gauge and measuring any gap between the square and gauge at the tip of blade with master feeler gauge. The maximum gap shall be 0.2mm.

3.4 Check the width of the SkV-E collar cut-out where applicable with master Vernier calliper. The width of the cut-out shall be $32\text{mm} \pm 0.5\text{mm}$.

3.5 With the blade of the gauge positioned along the blade of the master engineer's square, check the width of the cut-out at the tip of the blade with the master Vernier calliper. The width of the cut-out shall be $4\text{mm} \pm 0.2\text{mm}$.

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

4 References

Appendix A. Weld Inspection Gauge Calibration Record.

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Appendix A. Weld Inspection Gauge Calibration Record.

Gauge Number:		Date last checked:		Frequency:	
Master Equipment Used:					
Square:		Vernier calliper:			

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 distortion in gauge	Pass	Fail	

Dimensional Checks (Identify Pass or Fail as appropriate)			Readings / Comments
Check for squareness of gauge. <i>Max gap = 0.2mm</i>	Pass	Fail	Maximum gap =
Check width of SkV-E collar cut-out <i>Width = 32mm ± 0.5mm.</i>	Pass	Fail	Width =
Check width of cut-out at tip of blade <i>Width = 4mm ± 0.2mm.</i>	Pass	Fail	Width =

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