

**Certificate of Analysis
Part No. B2630
Steel Pin Standard**

Certificate Number 917C
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Total Hydrogen (melted/fused)

**Mean Value = 0.95 ($\mu\text{g/g}$) (0.000095 wt. %)
Standard Deviation = 0.13 ($\mu\text{g/g}$) (+/- 0.000013 wt. %)
Expanded Uncertainty = 0.29 ($\mu\text{g/g}$) (+/- 0.000029 wt. %)
(Expanded uncertainty $k=2$, 95% confidence, $n=47$)**

Method of analysis:
LECO RH404, ELTRA ONH 2000 Inert Gas Fusion, TC Detection

Reference Materials used for certification
NCS NS20025b, NS11043
JSS GS-1d, GS 9-1
ALPHA AR546-114A, AR555-1013A

Notes

The intended use of this reference standard is for the calibration and continued quality validation of hydrogen in steel by inert gas fusion thermal conductivity detection analysis. The precision values represent the standard deviation and expanded uncertainty ($k=2$, 95% confidence)

The material used in production of this standard was sampled in accordance with ARI 032. The samples for round robin testing were selected in accordance with ARI 014. This standard is intended only to be used for Hydrogen gas analysis of steel and minimum/typical sample size is 1g. The above values relate only to the material used to produce this standard. This bottle contains 100, 1g pins (nominal), to be used directly from the bottle. While unable to determine a definite shelf life, this reference should be reviewed every 25 years from the date of certification. Keep sealed and store under normal laboratory conditions.

Remedies for any claimed defect in this product will be limited to product replacement or refund of the purchase price. In no event shall Elemental Microanalysis Ltd be liable for incidental or consequential damages.

This is a Certified Reference Material (working standard) and is traceable to the above-mentioned standards. For good laboratory practice it is recommended that all standards be verified as fit for purpose prior to use.

Elemental Microanalysis Limited

Certified August 14, 2018