# CAST IRON SETTING-UP SAMPLES

**For**

# DIRECT-READING SPECTROGRAPHS

**issued by**

# BUREAU OF ANALYSED SAMPLES, LIMITED

Newham Hall, Newby, Middlesbrough, England

**in association with**

# BCIRA

# INFORMATION SHEET

# SAMPLE 6/6 MALLEABLE IRON

These samples were prepared at BCIRA, Alvechurch, Birmingham, U.K., using a special method of casting known to provide material of uniform composition in a form suitable for use in optical emission spectroscopy.

Representative samples were examined by vacuum direct-reading emission spectroscopy and found to give reproducible results. The chemical analysis of representative samples was undertaken by Bureau of Analysed Samples Ltd.

**APPROXIMATE COMPOSITION**

| | % | | % |
|---|---|---|---|
| **Total Carbon** .. .. .. .. | 2.5— | **Boron** .. .. .. .. | <0.001 |
| **Silicon** .. .. .. .. | 1.8— | **Copper** .. .. .. .. | 0.02- |
| **Manganese** .. .. .. .. | 0.65- | **Tin** .. .. .. .. | 0.05- |
| **Phosphorus** .. .. .. .. | 0.05- | **Titanium** .. .. .. .. | 0.02- |
| **Sulphur** .. .. .. .. | 0.12- | **Vanadium** .. .. .. .. | 0.02- |
| **Chromium** .. .. .. .. | 0.10- | **Bismuth** .. .. .. .. | 0.01- |
| **Aluminium** .. .. .. .. | <0.005 | | |

**The above figures are only supplied as an approximate guide to the composition and must not be regarded as certified values**

*NOTE: the sample consists of a chill-cast rectangular block approximately 60mm x 35mm x 18mm thick. Sparking must be made on the fully-ground surface only and the sample should be discarded when this face has been ground back as far as the small shoulder around the edge of the sample (approx. 10mm).*

N.B. These samples should not be confused with the Primary Spectroscopic Standard Certified Reference Materials of Cast Iron issued by Bureau of Analysed Samples Ltd.

*For* BUREAU OF ANALYSED SAMPLES LTD.
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