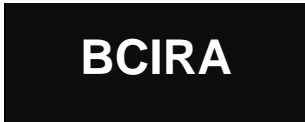




CAST IRON SETTING UP SAMPLES



for

DIRECT-READING SPECTROGRAPHS

issued by

BUREAU OF ANALYSED SAMPLES LIMITED

Newham Hall, Newby, Middlesbrough, England, TS8 9EA

in association with

CASTINGS TECHNOLOGY INTERNATIONAL

(formerly BCIRA/CDC)

INFORMATION SHEET

SAMPLE 5/39 DUCTILE (NODULAR) IRON

These samples were prepared by Castings Technology International (formerly BCIRA/CDC) 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 spectroscopically and found to give reproducible results. The chemical analysis of representative samples was undertaken independently by both Bureau of Analysed Samples Ltd and another laboratory experienced in the analysis of ferrous materials.

APPROXIMATE COMPOSITION (%)

| | | | |
|--------------|--------|-----------|--------|
| Total Carbon | 3.8-- | Copper | <0.005 |
| Silicon | 2.0-- | Tin | 0.06- |
| Manganese | 0.58- | Titanium | 0.005 |
| Sulphur | 0.01 | Vanadium | 0.48- |
| Chromium | 0.03- | Magnesium | 0.08- |
| Nickel* | 1.1-- | Antimony | 0.04 |
| Aluminium | 0.04- | Cerium | 0.03- |
| Arsenic | <0.005 | | |

**Please note that there appears to be a slight increase in nickel content throughout the working depth of the blocks.*

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 60 mm x 35 mm x 18 mm 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. 10 mm).

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

For BUREAU OF ANALYSED SAMPLES LTD.
R. P. MEERES,

For CASTINGS TECHNOLOGY INTERNATIONAL,
Dr. M.C. ASHTON,



April 2004

Managing Director

Certificate No Q 3993

Chief Executive