



# CAST IRON SETTING-UP SAMPLES

BCIRA

for

## DIRECT-READING SPECTROGRAPHS

issued by

# BUREAU OF ANALYSED SAMPLES LIMITED

Newham Hall, Newby, Middlesbrough, England

in association with

## CASTINGS TECHNOLOGY INTERNATIONAL (formerly BCIRA)

# INFORMATION SHEET

## SAMPLE 5/45 DUCTILE (NODULAR) IRON

These samples were prepared by Castings Technology International (formerly BCIRA) 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	..	3.9	Copper	..	0.006
Silicon	.	2.0	Tin	..	0.06
Manganese	..	0.67	Titanium	..	<0.005
Sulphur	..	0.008	Vanadium	..	0.47
Chromium	..	0.02	Magnesium	..	0.06
Nickel	..	1.0	Antimony	..	0.04
Aluminium	..	0.04	Cerium	..	0.03
Arsenic		<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 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.

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