



National Institute of Standards & Technology

Certificate of Analysis

Standard Reference Material 11h

Basic Open-Hearth Steel, 0.2% Carbon

This Standard Reference Material (SRM) is in the form of chips sized between 0.5 mm and 1.0 mm sieve openings (35 and 18 mesh). It is intended for use in chemical methods of analysis.

<u>Element</u>	<u>% by Wt.</u>
Carbon	0.200
Manganese	0.510
Phosphorus	0.010
Sulfur	0.026
Silicon	0.21 ₁
Copper	0.061
Nickel	0.028
Chromium	0.025
Vanadium	0.001
Titanium	0.004

The value listed for an element is *the best estimate* of the "true" value based on the results of the cooperative analytical program. The value is not expected to deviate from the "true" value by more than ± 1 in the last significant figure reported. For a subscript figure, the deviation is not expected to be more than ± 5 .

The material for this SRM was provided by Inland Steel Company, East Chicago, Indiana.

The overall direction and coordination of the technical measurements at NIST leading to certification were performed under the direction of O. Menis and J.I. Shultz.

Cooperative analyses for certification were performed in the analytical laboratories of General Motors Corporation, Research Laboratories, Warren, Michigan, M.D. Cooper and R.E. Kohn; Bethlehem Steel Corporation, Sparrows Point, Maryland, F.G. Fick and W. Selig.

Analyses were performed in the NIST Analytical Chemistry Division by J.R. Baldwin, S.A. Wicks, R.K. Bell, K.M. Sappenfield, and E.L. Garner.

The technical and support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by R.E. Michaelis. Revision of this certificate was coordinated through the Standard Reference Materials Program by P.A. Lundberg.

This Certificate of Analysis has undergone editorial revision to reflect program and organizational changes at NIST and at the Department of Commerce. No attempt was made to reevaluate certificate values or any technical data presented in this certificate.

Gaithersburg, MD 20899
February 20, 1992
(Revision of certificate dated 4-30-74)

William P. Reed, Chief
Standard Reference Materials Program