

National Bureau of Standards

Certificate of Analysis

Standard Reference Material 123c

Stainless Steel

Cr 17-Ni 11-Nb 0.6 (AISI 348)

This material is available in chip form primarily for use in checking chemical methods of analysis. A companion material, SRM 1172 in solid form, also is available for application in optical emission and x-ray spectrometric methods of analysis.

Element	Percent by Weight
Carbon	0.056
Manganese	1.7 ₅
Phosphorus	0.024
Sulfur014
Silicon59
Copper103
Nickel	11.3 ₄
Chromium	17.4 ₀
Molybdenum	0.22
Niobium65
Tantalum	<.001
Cobalt12

ANALYTICAL CERTIFICATION: The value listed for an element is the best estimate of the true value based on the results of the analytical program. The value listed 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 .

Analyses for this certificate were performed in the laboratories of the Analytical Chemistry Division, National Bureau of Standards; Advanced Materials Division, Armco Steel Corporation, Baltimore, Maryland; and Research Laboratories, General Motors Corporation, Warren, Michigan.

Material for this standard was prepared at Duquesne Works, U.S. Steel Corporation, Pittsburgh, Pennsylvania.

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

The technical and support aspects involved in the preparation, certification, and issuance of this Standard Reference Material were coordinated through the Office of Standard Reference Materials by R. E. Michaelis.

Washington, D.C. 20234
October 1, 1981
(Revision of Certificate dated
7/7/71)

George A. Uriano, Chief
Office of Standard Reference Materials