

Certificate of Analysis

Standard Reference Material 654a

Titanium Alloy, 6Al-4V

This standard is in the form of disks 31 mm (1 ¼ in) in diameter and 6.4 mm (¼ in) thick, primarily for application in x-ray spectrometric analysis.^a

<u>Element</u>	<u>Percent, by weight</u>
Al	6.3 ₄
V	3.9 ₅
Fe	(0.20) ^b
Cr	(.20)
Mn	(<.1)
Mo	(<.05)

^aThis standard also may be useful in optical emission spectrometric analysis. Because the standard is thin, bonding it to a more massive backing will permit a greater efficiency in consumption of the material. See ASTM Designation E401-70, Recommended Practice for Bonding Thin Spectrochemical Samples and Standards to a Greater Mass of Material.

^bValues in parenthesis are not certified but are given as additional information on the composition.

ANALYTICAL CERTIFICATION: The value listed for a certified element is the present best estimate of the true value based on the results of two independent methods of analysis. Deviation of the true value by more than ± 5 in the last subscript figure is not expected. Based on the results of homogeneity testing, maximum variations within and among samples are estimated to be less than the accuracy figure given above.

PLANNING, PREPARATION, TESTING, ANALYSIS: This standard was prepared, in part, to serve in round-robin testing and in calibration of an ASTM method (E02 SM8-20).

The material for the standard was provided in wrought form by the Research Center, Armco Steel Corporation, Middletown, Ohio.

Homogeneity testing and analyses for certification were performed in the Analytical Chemistry Division of the National Bureau of Standards by S. D. Rasberry and J. L. Weber, Jr.

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

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3/22/71)

George A. Uriano, Chief
Office of Standard Reference Materials