U. S. Department of Commerce
Malcolm Baldrige
Secretary
National Bureau of Standards
Ernest Ambler, Director

National Bureau of Standards

Certificate of Analysis

Standard Reference Materials 641, 642 and 643

Spectroscopic Titanium–Base Standards

TITANIUM ALLOY – 8 MANGANESE

SRM No.[1]	641	642	643
Designation	8 Mn(A)	8 Mn(B)	8 Mn(C)
Element	Percent		
Mn	6.6$_8$	9.0$_8$	11.6$_8$

[1] Size: Disks 1 1/4 in. in diameter and 3/4 in. thick.

The material for each standard was prepared at Armour Research Foundation under contract with the Air Force, Wright Air Development Center. Ingots were made by triple-arc melting under vacuum at Armour, followed by processing to rods by Allegheny-Ludlum Steel Corporation.

Preliminary studies of homogeneity were made by Armour Research Foundation, Watertown Arsenal, and Spectrochemical Laboratories Inc.; this was followed by an extensive examination of homogeneity at the National Bureau of Standards. Material was accepted for use when the variation in composition of the cross section and along the length did not exceed plus or minus one percent of the amount present by the specific testing employed.

Samples for chemical analysis were prepared by milling the cross section of the accepted rod material. Chemical analyses were made by the National Bureau of Standards, Washington, D.C. 20234; Allegheny-Ludlum Steel Corporation, Brackenridge, Pa.; Ordnance Corps, Frankford Arsenal, Philadelphia, Pa.; Ordnance Corps, Watertown Arsenal, Watertown, Mass.; and Ledoux and Company, Teaneck, N.J.

Washington, D.C. 20234
October 15, 1981
(Revision of Certificate dated
1/26/60)

George A. Uriano, Chief
Office of Standard Reference Materials