U.S. Department of Commerce
Juanita M. Kreps
Secretary

National Bureau of Standards
Ernest Ambler, Director

National Bureau of Standards
Certificate of Analysis
Standard Reference Material 336
Cr-V Steel, 0.6 C (Carbon Only)

This standard is in the form of pins 3 mm in diameter, 19 mm long, and weigh 1 g each. The pins are intended for calibrating instruments used in the determination of carbon in steel.

Element	Percent by Weight	95% Confidence Interval for the Mean
Carbon	0.567[a]	0.566 to 0.568[b]

[a]SRM 363 (similar material to SRM 336) was used as a control with an assigned carbon value of 0.624 percent. An average carbon value of 0.622 percent was obtained (4 determinations).

[b]Based on 24 determinations, and reflecting predominantly analytical error.

[The pins of this SRM have been cut to a close tolerance. For 234 pins, which were weighed, the average weight was 1.0197 g with a standard deviation of 0.0047 g for the individual pins. If a laboratory does not weigh its pins, but rather uses an assumed weight of exactly 1 g, it should use an assigned value of 0.578 percent of carbon. In this case, the 95% tolerance interval ($P = 0.95$, $\gamma = 0.95$) for individual pins is 0.572 to 0.584 percent of carbon. This includes the uncertainty in the determined percent of carbon plus the variation in the weight among pins (based on 234 weight measurements).]

Carbon determinations were performed in the NBS Analytical Chemistry Division by S. A. Wicks under the overall direction of O. Menis and J. I. Shultz. Statistical evaluations were made by J. Mandel and R. C. Paule.

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

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Replaces Certificate of June 19, 1973.
(Only for information contained in brackets which is applicable to units issued after January 26, 1979.)

J. Paul Cali, Chief
Office of Standard Reference Materials