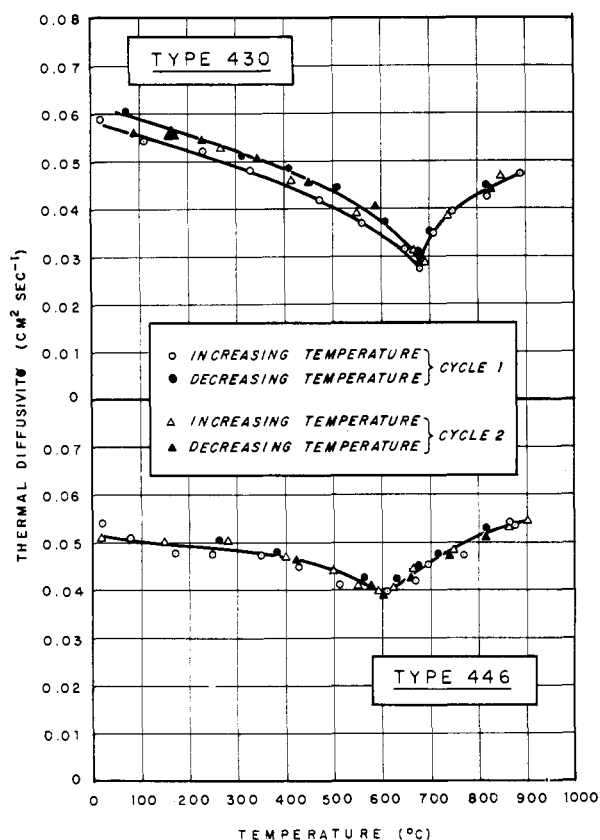
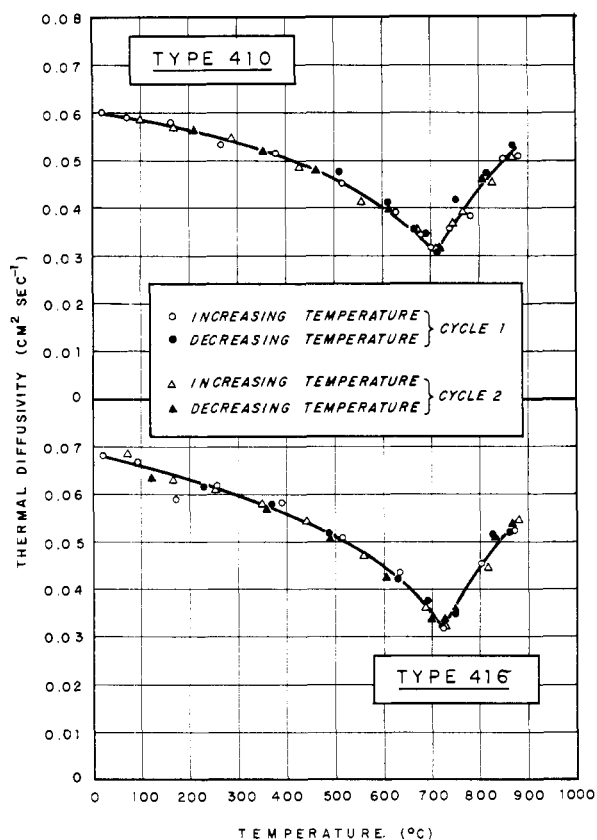


## Thermal Diffusivity of Martensitic Stainless Steel Types



sec.) or low carbon steel (0.16 cm.<sup>2</sup>/sec.) although this difference decreases as the temperature increases and becomes very small near 700° C.

Points recorded for the measurements were very stable and did not change with time. Samples of both Type 410 and 430 steel were held at 400°, 600°, 700°, and 750° C. on both increasing and decreasing temperatures for several hours, each with no change in the thermal diffusivity greater than the experimental error. Since 3 to 10 minutes were required to change the temperature of the furnace 100° C., nothing can be said about the very short time changes. There were no large differences in the curves on successive heating cycles, nor did the direction of temperature change appear to make much difference in the diffusivity at a specific temperature. In steel Types 202 and 430, however, there was enough difference between the curves obtained on the first heating and the curves obtained on the following

coolings and heatings to warrant drawing a separate curve for the increasing temperature part of the first heating cycle.

### LITERATURE CITED

- (1) Butler, C.P., Inn, E.C.Y., "Thermal Diffusivity of Metals at Elevated Temperatures," Thermodynamic and Transport Properties of Gases, Liquids, and Solids, Am. Soc. Mech. Engrs., 29 W. 39th St., New York.
- (2) Crucible Steel Co. of America, *Crucible Data Book*, Oliver Building, Mellon Square, Pittsburgh, Pa.
- (3) Parker, W.J., Jenkins, R.J., Butler, C.P., Abbott, G.L., *J. Appl. Phys.* **32**, 1679 (1961).

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### CORRECTION

The article, "Density and Viscosity of Anhydrous Hydrazine at Elevated Temperatures," by R.C. Ahlert, G.L. Bauerle, and J.V. Lecce [*J. CHEM. ENG. DATA* **7**, 158 (1962)], should be changed as follows:

On page 159, Equation 2, the first quantity after the equal sign should read

$$\rho = 1.2474 - 0.07226 (T/100) - 0.003191 (T/100)^2$$