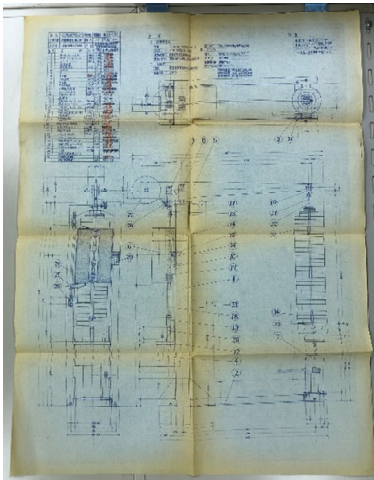


Testing technology that supported multi-decade-spanning, long-term creep testing

Registration No.	Number 00380		
Registration Date	September 10, 2024	Registration Category	Category 2

Name (Model, etc.)	Creep machines, and their design drawings and blueprints
Location	Tsukuba-shi, Ibaraki
	National Institute for Materials Science
Owner (Custodian)	National Institute for Materials Science
Manufacturer (Company)	National Research Institute for Metals(Current:National Institue for Materials Science)
Year Manufactured	1965～1969
Year first appeared	1965
Reason For Selection	These items were machines used in tests that became the foundation for the enhancement of reliability for domestically produced heat-resistant metal materials, producing the world's longest creep test records. They were developed and installed by the National Research Institute for Metals in the 1960s. The machine's design drawings and blueprints, etc. from the original development period are also preserved. With the transition to Tsukuba in 2011, they were consolidated into 500 units. Expendable parts like the electric furnaces, etc. have been switched with the latest equipment, but portions like the original body frames are still in their initial forms. They are contributing greatly to the world of industry, as exemplified by achievements such as performing the world's longest creep test lasting over 40 years. They are important as foundational materials concerning iron and steel reliability-enhancing technology in Japan.
Registration Standard	1-A (Show an important aspect or stage of the development of science and technology.) 1-B (Show a uniquely Japanese scientific or technological development from an international perspective.)

Open/Closed to Public	Closed to Public(Open to Public:Creep testing machines)
Photo	 Creep testing machines  Creep testing machine blueprints
Other useful information	