

## **Naval Arsenal Clock Tower**

The Naval Arsenal Clock Tower was originally mounted atop the former Kure Naval Arsenal Engineering Department, where it was used to coordinate the work of engineers and shipyard workers. The clock was built in 1921, when the country was in the midst of implementing the industrial-scale production of armaments. Keeping production on a coordinated schedule improved productivity, which in turn reduced the time needed to build battleships, and this large clock played an essential role in enforcing that schedule.

The clock tower is 10 meters tall, and each of its four faces displays a dial that is 1.5 meters in diameter. The clock's interior mechanism is constructed of naval brass, an alloy of copper, zinc, and tin that is resistant to corrosion by seawater and was originally developed for ship hardware. The Kure Naval Arsenal was one of the first sites of large-scale military production in Japan, and the shipyard clock is the first electromechanical master-slave impulse clock built in Japan. It utilizes a then-groundbreaking mechanism with an internal clock that sends electrical impulses to all four dials, moving them simultaneously.

The clock tower was retired after the end of World War II and moved to the Irifuneyama Memorial Museum soon after. In 1981, the clock was designated a Tangible Cultural Property by the city of Kure and was repaired and renovated. It now keeps time and plays a melody composed by elementary and middle school students four times a day.