

JAPANESE INDUSTRIAL STANDARD

Testing method for corrosivity of industrial water

JIS K 0100-1990

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by

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In the event of any doubt arising, the original Standard in Japanese is to be final authority.

JIS

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1. Scope

This Japanese Industrial Standard specifies the testing method to check the corrosivity of industrial water used in a plant.

Additionally, this testing method can be used to test the effect of corrosion inhibitors and the anticorrosivity of metallic material against industrial water.

- Remarks 1. In the case of a heating surface of a heat exchanger, this testing method cannot be applied because of its different corrosivity than that of test pieces.
 - 2. In the case of the measurement of the flow rate under the testing condition mentioned in testing method, JIS K 0094 shall be applied.

JIS K 0101 shall be applied for tests such as temperature, electric conductivity, pH, dissolved oxygen, and so on.

- 3. The corrosivity test for the closed cooling water system of an internal combustion engine shall be carried out in accordance with JIS K 2234.
- 4. The applicable standards in this Standard are as follows.
 - JIS G 3101-Rolled Steel for General Structure
 - JIS G 3141-Cold Rolled Carbon Steel Sheets and Strip
 - JIS K 0094-Sampling Methods for Industrial Water and Industrial Waste Water
 - JIS K 0101-Testing Methods for Industrial Water
 - JIS K 2234-Engine Antifreeze Coolants
 - JIS R 6251-Abrasive Cloths
 - JIS R 6252-Abrasive Papers
 - JIS R 6253-Waterproof Abrasive Papers

2. Summary

This testing method shall be carried out by either weight loss method or polarization-resistance method. In the case of weight loss method, an average corrosion rate (rate of corrosion) during testing period can be obtained from the weight loss by corrosion. In case of the polarization-resistance method, corrosion rate (rate of corrosion) can be obtained at the point of measurement from the electrochemical polarization resistance.