

Directions Governing Type Approval of Water Meters

[Chronicle of Promulgation and Amendments]

Adopted and promulgated by Ministerial Order on 5 January 2004

1. These Directions are established for the conduction of type approval/series type approval of water meters and other relevant activities.
2. To apply for type approval, series type approval or approbation, the applicant shall submit the following technical documents and testing samples:
 - (1) Sample structure scale drawings, 3-D decomposed system drawings (known as explosion drawing) and a list of major parts (not required for applications for series type approval or approbation if testing is not required);
 - (2) One copy each of circuit diagram and detailed electronic function operation handbook in Chinese for applications for type approval of electronic water meters (not required for applications for series type approval or approbation);
 - (3) A diagram of lead seal location and a list of lead seal types (not required for applications for series type approval or approbation);
 - (4) One copy of shell material test report against related Chinese National Standard (not required for applications for series type approval or approbation if testing is not required);
 - (5) 3 testing samples (not required for applications for series type approval or approbation if testing is not required);
 - (6) The original type approval certificate (not required for type approval applications); and
 - (7) Description of any differences resulted from changes intended to be made (not required for type approval applications).
3. To apply for type approval or series type approval, the applicant shall submit the following appearance photographs (attached to A4 paper and made it available in four binding copies; the photographs shall not be smaller than $12.7 \times 8.8 \text{ cm}^2$):
 - (1) A total of six photographs, illustrating the front, back, left, right, upper and lower of the instrument; and
 - (2) The image of the instrument shall occupy at least 4/5 of the photograph area and the wording and marking on the sample shall be shown clearly.
4. An applicant for type approval may attend the conduction of relevant performance tests at the performance test laboratories after the appearance, structure, material test reports, and relevant technical documents has been reviewed.
5. Under any of the following circumstances, there is no need for applying for series type approval or approbation for type-approved water meters:
 - (1) A change of colors;
 - (2) A change of painting and coating;
 - (3) A change of printing methods; or
 - (4) A change of screening devices.
6. Under any of the following circumstances, application for series type approval or approbation for type-approved water meters shall be filed without the need for testing:
 - (1) A change of exterior marking, connector method, adjuster, scale or lead sealing methods;
 - (2) A change of dial measurement markings, maximum capacity or minimum scale intervals; or
 - (3) A change of dial measurement moving indicators or pointer types.
7. Under any of the following circumstances, application for series type approval or approbation for type-approved water meters may be filed after the conduction of relevant performance tests:
 - (1) The conduction of tests on shell materials and pressure-resist tests for a change of shell materials;
 - (2) The conduction of error of measuring instrument tests for all flow points for a change of measurement or precision grade; or
 - (3) The conduction of pressure loss and error of measuring instrument tests for all flow points for a change of pressure loss grade.
8. Under any of the following circumstances, application for type re-approval shall be re-filed for type-approved water meters:
 - (1) A change of flow range;

- (2) A change of measuring methods;
 - (3) A change of major interior parts; or
 - (4) A change of the shell other than the one being type approved.
9. For type-approved water meters, in the event of any changes made other than those listed in the preceding four clauses, the dedicated weights and measures authority may examine the relevant technical documents to determine the items needed to be tested.
10. To apply for extension of the validity period of a type approval certificate, the original applicant for type approval or the successor shall submit the following documents:
- (1) Technical documents and testing samples of the instruments in question as listed in clause 2;
 - (2) Appearance photographs of the instruments in question as listed in clause 3; and
 - (3) Declaration.