

**Avlopp – Stålrör och rördelar, längssvetsat rör
med insticksmuff, varmförzinkat –**

Del 1: Krav, provning, kvalitetskontroll

**Pipes and fittings of longitudinally welded
hot-dip galvanized steel pipes with spigot and
socket for waste water systems –**

Part 1: Requirements, testing, quality control

Europastandarden EN 1123-1:1999/A1:2004 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 1123-1:1999/A1:2004.

The European Standard EN 1123-1:1999/A1:2004 has the status of a Swedish Standard. This document contains the official English version of EN 1123-1:1999/A1:2004.

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English version

Pipes and fittings of longitudinally welded hot-dip galvanized steel pipes with spigot and socket for waste water systems - Part 1: Requirements, testing, quality control

Tubes et raccords de tubes soudés longitudinalement en acier galvanisé à chaud, à manchon enfichables pour réseaux d'assainissement - Partie 1: Prescriptions, essais, contrôle de qualité

Rohre und Formstücke aus längsnachtgeschweißtem, feuerverzinktem Stahlrohr mit Steckmuffe für Abwasserleitungen - Teil 1: Anforderungen, Prüfungen, Güteüberwachung

This amendment A1 modifies the European Standard EN 1123-1:1999; it was approved by CEN on 1 July 2004.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 1123-1:1999/A1:2004) has been prepared by Technical Committee CEN/TC 165 "Waste water engineering", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2005, and conflicting national standards shall be withdrawn at the latest by March 2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This annex includes the requirements of the Mandate given under the EU Construction Products Directive (89/106). CE marking is affixed to the product only after compliance with the requirements with Annex ZA is achieved.

For reasons of conformity with Mandate M 131 for harmonised European Standards on pipes, tanks and ancillaries not in contact with water intended for human consumption, EN 1123-1:1999 has been amended by the addition of Annex ZA (see Resolution CEN/BT 113/1994 and CEN/BT 63/1996) and the following amendments to the text of the standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

EN 1123-1:1999/A1:2004 (E)

Editorial**Contents*****Delete 12 Quality control******Add 12 Evaluation of conformity******Add 13 Reaction to fire******Add 14 Durability******Add 15 Dangerous substances******Add 16 Longitudinal bending strength******Rename Annex A (normative) Third party assessment*****Technical*****Replace in Clause 2***

EN ISO 1461 including title by EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles - Specifications and test methods (ISO 1461:1999)* in clause 2

Add in Clause 2

prEN 1123-3, *Pipes and fittings of longitudinally welded hot-dip galvanized steel pipes with spigot and socket for waste water systems - Part 3: Dimensions and special requirements for vacuum drainage systems and for drainage systems in ship-building;*

Replace in 9.1

prEN ISO 1461 by EN ISO 1461

Delete Clause 12 and add the following**12 Evaluation of conformity****12.1 General**

The compliance of pipes and fittings with the requirements of this standard and with the stated values (including classes) shall be demonstrated by:

- initial type testing,
- factory production control by the manufacturer, including product assessment [In this example, the “designer” is also the “manufacturer”, i.e. is responsible for the CE marking].

Where third party assessment is required it shall be carried out under the provisions of Annex A (normative).

For the purposes of testing, pipes and fittings covered by clause 1 of this standard may be grouped into families where it is considered that the selected property is common to all pipes and fittings within that family

12.2 Type testing

12.2.1 Initial type testing

Initial type testing shall be performed to show conformity with this standard. Tests previously performed in accordance with the provisions of this standard (same product, same characteristic(s), test method, sampling procedure, system of attestation of conformity, etc.) may be taken into account. In addition, initial type testing shall be performed at the beginning of the production of a new pipe or fitting type (unless a member of the same family) or at the beginning of a new method of production (where this may affect the stated properties).

Where a component is used whose characteristics have already been determined, by the component manufacturer, on the basis of conformity with other product standards, these characteristics need not be reassessed (e.g. seals).

All characteristics in Clauses 5, 6, 7, 8 and 9 shall be subject to initial type testing, with the following exceptions:

- release of dangerous substances may be assessed indirectly by controlling the content of the substance concerned;
- reaction to fire where the product is Class A 'No contribution to fire' provided for in Decision 94/611/EC
- durability which is inherent in the material and by a prescriptive requirement on corrosion protection.

12.2.2 Further type testing

Whenever a change occurs in the raw material or supplier, or the production process (subject to the definition of a family), which would change significantly one or more of the characteristics, the type tests shall be repeated for the appropriate characteristic(s).

12.2.3 Sampling

The samples shall be taken from a large stock or from released production and shall represent the average manufactured product.

Undamaged samples can also be taken from a wholesaler or, in special cases, from a construction site.

Products designated as defective by the manufacturer shall be only excluded from the sampling when they have been clearly marked as such and separately stored.

The samples shall be marked immediately and distinctively.

Sampling shall be recorded on file and signed by the person taking the samples. The file shall be countersigned by the foreman or his deputy. The file shall include at least the following details:

- manufacturer and production plant;
- sample location - where appropriate;
- designation of the product (e.g. EN number);
- marking of the samples;
- place and date;
- signatures;

12.2.4 Recording of test results

The results of all type tests shall be recorded and held by the manufacturer for at least 5 years.

EN 1123-1:1999/A1:2004 (E)**12.3 Factory production control (FPC)****12.3.1 General**

The manufacturer shall establish, document and maintain an FPC system to ensure that the products placed on the market conform with the stated performance characteristics. The FPC system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control raw and other incoming materials or components, equipment, the production process and the product.

An FPC system conforming with the requirements of EN ISO 9001, and made specific to the requirements of this standard, is considered to satisfy the above requirements.

The results of inspections, tests or assessments requiring action shall be recorded, as shall any action taken. The action to be taken when control values or criteria are not met shall be recorded and retained for the period specified in the manufacturer's FPC procedures.

12.3.2 Equipment

Testing - All weighing, measuring and testing equipment shall be calibrated and regularly inspected according to documented procedures, frequencies and criteria.

Manufacturing - All equipment used in the manufacturing process shall be regularly inspected and maintained to ensure use, wear or failure does not cause inconsistency in the manufacturing process. Inspections and maintenance shall be carried out and recorded in accordance with the manufacturer's written procedures and the records retained for the period defined in the manufacturer's FPC procedures.

12.3.3 Raw materials and components

The specifications of all incoming raw materials and components shall be documented, as shall the inspection scheme for ensuring their conformity.

12.3.4 Product testing and evaluation

The manufacturer shall establish procedures to ensure that the stated values of all of the characteristics are maintained. The characteristics, and the means of control shall be no less than Table 2 and Table 3.