

STN	Štatistické prebierky porovnávaním Úvod do systému štatistických prebierok porovnávaním podľa ISO 2859	STN ISO 28590 01 0261
------------	---	---

Sampling procedures for inspection by attributes

Introduction to the ISO 2859 series of standards for sampling for inspection by attributes

Règles d'échantillonnage pour les contrôles par attributs

Introduction au système d'échantillonnage pour les contrôles par attributs de l'ISO 2859

Táto slovenská technická norma obsahuje anglickú verziu medzinárodnej normy ISO 28590: 2017 a má postavenie oficiálnej verzie.

This Slovak standard includes the English version of the International standard ISO 28590: 2017 and has the status of the official version.

141092

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2025

Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

Anotácia

Táto medzinárodná norma poskytuje všeobecný úvod do štatistickej prebierky porovnávaním, poskytuje krátky prehľad schém prebierok a preberacích plánov použitých v ISO 2859-1, ISO 2859-2, ISO 2859-3, ISO 2859-4 a ISO 2859-5, ktoré opisujú špecifické typy systémov vyberania porovnávaním. Poskytuje aj praktické rady pri výbere vhodného kontrolného systému, ktorý sa použije v príslušných situáciách.

Národný predhovor

Normatívne referenčné dokumenty

Na nasledujúce dokumenty sa odkazuje v texte takým spôsobom, že časť ich obsahu alebo celý obsah predstavuje požiadavky tohto dokumentu. Pri datovaných odkazoch sa používa len citované vydanie. Pri nedatovaných odkazoch sa používa najnovšie vydanie citovaného dokumentu (vrátane akýchkoľvek zmien).

POZNÁMKA 1. – Ak bola medzinárodná publikácia zmenená spoločnými modifikáciami, čo je indikované označením (mod), použije sa príslušná EN/HD.

POZNÁMKA 2. – Aktuálne informácie o platných a zrušených STN a TNI možno získať na webovom sídle www.unms.sk.

ISO 2859-1: 1999 prijatá ako STN ISO 2859-1: 2004 Štatistické prebierky porovnávaním. Časť 1: Preberacie plány AQL na kontrolu každej dávky v sérii (01 0261)

ISO 2859-2: 1985 prijatá ako STN ISO 2859-2: 1992 Štatistické prebierky porovnávaním. Časť 2: Preberacie plány LQ pre kontrolu izolovaných dávok (01 0261)

POZNÁMKA 3. – ISO 2859-2: 1985 bola zrušená a nahradená ISO 2859-2: 2020 prijatá ako STN ISO 2859-2: 2025 Štatistické prebierky porovnávaním. Časť 2: Preberacie plány LQ pre kontrolu izolovaných dávok (01 0261)

ISO 2859-3 prijatá ako STN ISO 2859-3 Štatistické prebierky porovnávaním. Časť 3: Občasná prebierka (01 0261)

ISO 2859-4: 2002 prijatá ako STN ISO 2859-4: 2006 Štatistické prebierky porovnávaním. Časť 4: Postupy pri posudzovaní deklarovaných úrovní kvality (01 0261)

POZNÁMKA 4. – ISO 2859-4: 2002 bola zrušená a nahradená ISO 2859-4: 2020 prijatá ako STN ISO 2859-4: 2025 Štatistické prebierky porovnávaním. Časť 4: Postupy pri posudzovaní deklarovaných úrovní kvality (01 0261)

ISO 2859-5: 2005 prijatá ako STN ISO 2859-5: 2007 Štatistické prebierky porovnávaním. Časť 5: Systém sekvenčných preberacích plánov AQL na kontrolu každej dávky v sérii (01 0261)

ISO 3534-1 prijatá ako STN ISO 3534-1 Štatistika. Slovník a značky. Časť 1: Všeobecné štatistické termíny a termíny používané v teórii pravdepodobnosti (01 0216)

ISO 3534-2 prijatá ako STN ISO 3534-2 Štatistika. Slovník a značky. Časť 2: Aplikovaná štatistika (01 0216)

Vypracovanie

Spracovateľ: Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, Bratislava

Technická komisia: TK 71 Aplikácie štatistických metód

Contents

Page

Foreword	iv
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General introduction to acceptance inspection	2
4.1 Aim of sampling inspection	2
4.2 Acceptance sampling	2
4.3 Other inspection practices	2
4.3.1 General	2
4.3.2 Statistical sampling	3
4.3.3 Ad hoc sampling	3
4.3.4 100 % inspection	3
4.3.5 Other sampling practices	4
4.4 Concepts of AQL and LQ	4
5 The ISO 2859 series	4
5.1 ISO 2859-1, <i>Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection</i>	4
5.1.1 General	4
5.1.2 Application	4
5.2 ISO 2859-2, <i>Sampling plans indexed by limiting quality (LQ) for isolated lot inspection</i>	5
5.2.1 General	5
5.2.2 Application	6
5.3 ISO 2859-3, <i>Skip-lot sampling procedures</i>	7
5.3.1 General	7
5.3.2 Application	7
5.4 ISO 2859-4, <i>Procedures for assessment of declared quality levels</i>	8
5.4.1 General	8
5.4.2 Application	8
5.5 ISO 2859-5, <i>System of sequential sampling plans indexed by acceptance quality limit (AQL) for lot-by-lot inspection</i>	9
5.5.1 General	9
5.5.2 Application	9
Bibliography	11

ISO 28590:2017(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 69, *Applications of statistical methods*, Subcommittee SC 5, *Acceptance sampling*.

This first edition of ISO 28590 cancels and replaces ISO 2859-10:2006, of which it constitutes a minor revision to change the reference number from 2859-10 to 28590.

With the view to achieve a more consistent portfolio, TC 69/SC 5 has simultaneously renumbered the following standards, by means of minor revisions:

Old reference	New reference	Title
ISO 2859-10:2006	ISO 28590:2017	Sampling procedures for inspection by attributes — Introduction to the ISO 2859 series of standards for sampling for inspection by attributes
ISO 8422:2006	ISO 28591:2017	Sequential sampling plans for inspection by attributes
ISO 28801:2011	ISO 28592:2017	Double sampling plans by attributes with minimal sample sizes, indexed by producer's risk quality (PRQ) and consumer's risk quality (CRQ)
ISO 18414:2006	ISO 28593:2017	Acceptance sampling procedures by attributes — Accept-zero sampling system based on credit principle for controlling outgoing quality
ISO 21247:2005	ISO 28594:2017	Combined accept-zero sampling systems and process control procedures for product acceptance
ISO 14560:2004	ISO 28597:2017	Acceptance sampling procedures by attributes — Specified quality levels in nonconforming items per million
ISO 13448-1:2005	ISO 28598-1:2017	Acceptance sampling procedures based on the allocation of priorities principle (APP) — Part 1: Guidelines for the APP approach
ISO 13448-2:2004	ISO 28598-2:2017	Acceptance sampling procedures based on the allocation of priorities principle (APP) — Part 2: Coordinated single sampling plans for acceptance sampling by attributes

Cross references between the above listed documents have been corrected in the minor revisions.

A list of all documents in the new ISO 28590 - ISO 28599 series of International Standards can be found on the ISO website.

ISO 28590:2017(E)

Introduction

This general introduction to the ISO 2859 acceptance sampling series describes the attribute sampling schemes and plans set forth in ISO 2859-1, ISO 2859-2, ISO 2859-3, ISO 2859-4 and ISO 2859-5. This introduction treats the subject of sampling inspection by attributes in a general way, introducing the essential operating procedures and the ways in which the systems were designed to be used. To understand fully the concepts and their applications, it is necessary to consult ISO 2859-1, ISO 2859-2, ISO 2859-3, ISO 2859-4, ISO 2859-5 and ISO/TR 8550-1.

The individual parts of this series of international standards extend this introductory explanation to more specific applications that are appropriate for the particular standard.

It is emphasized that ISO 2859-1 provides sampling schemes indexed by acceptance quality limit (AQL). The quality measure used can be percent nonconforming or the number of nonconformities per 100 items. ISO 2859-1 was developed primarily for the inspection of a continuing series of lots all originating from the same production or servicing process. In this situation, adequate protection (or the maximum process average percent nonconforming) is maintained by use of the switching rule from normal to tightened inspection should a certain (limiting) number of unacceptable lots be found in a short series of successive lots.

ISO 2859-2 provides sampling plans applicable for use when individual or isolated lots are to be sampled. These sampling plans are in many instances identical to those in ISO 2859-1. The tables of sampling plans in ISO 2859-2 include information regarding the quality level required to assure a high probability of lot acceptance.

ISO 2859-3 provides skip-lot procedures for use when the process quality is markedly superior to the AQL for a defined long period of delivery or observation. When the quality level is in this state of excellence, it is sometimes more economical to use ISO 2859-3 than to use the reduced sampling procedure of ISO 2859-1. Like ISO 2859-1, ISO 2859-3 is applicable to a continuing series of lots from a single source.

ISO 2859-4 provides a procedure that may be used to verify a quality level that has been declared for some entity. This function is not appropriate for the other parts of the series. The main reason for this is that those procedures have been indexed in terms of quality levels that are relevant solely for the purpose of acceptance sampling, and the various risks have been balanced appropriately. The procedures in ISO 2859-4 have been developed in response to the need for sampling procedures suitable for formal, systematic inspections such as reviews or audits.

ISO 2859-5 provides a method of establishing sequential sampling plans of discriminatory power essentially equivalent to that of corresponding plans of ISO 2859-1.

A complementary system of sampling plans for inspection by variables, also indexed by AQL, is provided by the ISO 3951 series, *Sampling procedures for inspection by variables*.

Sampling procedures for inspection by attributes — Introduction to the ISO 2859 series of standards for sampling for inspection by attributes

1 Scope

This International Standard provides a general introduction to acceptance sampling by attributes and provides a brief summary of the attribute sampling schemes and plans used in ISO 2859-1, ISO 2859-2, ISO 2859-3, ISO 2859-4 and ISO 2859-5, which describe specific types of attribute sampling systems. It also provides guidance on the selection of the appropriate inspection system for use in a particular situation.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2859-1:1999, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 2859-2:1985, *Sampling procedures for inspection by attributes — Part 2: Sampling plans indexed by limiting quality (LQ) for isolated lot inspection*

ISO 2859-3, *Sampling procedures for inspection by attributes — Part 3: Skip-lot sampling procedures*

ISO 2859-4:2002, *Sampling procedures for inspection by attributes — Part 4: Procedures for assessment of declared quality levels*

ISO 2859-5:2005, *Sampling procedures for inspection by attributes — Part 5: System of sequential sampling plans indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 3534-1, *Statistics — Vocabulary and symbols — Part 1: General statistical terms and terms used in probability*

ISO 3534-2, *Statistics — Vocabulary and symbols — Part 2: Applied statistics*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN