

AS 2490—1997
ISO 3951:1989

Australian Standard[®]

**Sampling procedures and charts for
inspection by variables for percent
nonconforming**

This Australian Standard was prepared by Committee QR/4, Statistical Quality Procedures. It was approved on behalf of the Council of Standards Australia on 14 February 1997 and published on 5 May 1997.

The following interests are represented on Committee QR/4:

Australian Organisation for Quality
Australian Quality Council
Bureau of Steel Manufacturers
CSIRO - Division of Mathematics and Statistics
National Association of Testing Authorities, Australia
Quality Society of Australasia
Statistical Society of Australia
Queensland University of Technology
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for inspection by variables for
percent nonconforming**

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee QR/4 on Statistical Quality Procedures as an Australian Standard.

The Standard is identical with and has been reproduced from ISO 3951:1989, *Sampling procedures and charts for inspection by variables for percent nonconforming*.

This Standard supersedes AS 2490—1981, which was based on ISO 3951:1981 and therefore is consistent with the changes that have occurred in the evolution of ISO 3951.

This Standard continues to be complimentary to AS 1199 and AS 1399, since it provides alternative methods of sampling inspection indexed in terms of ‘acceptable quality levels’ (AQL). It should be noted, however, that the variables sampling plans given in this Standard can be more economical in that they require relatively smaller sample sizes (for a particular value of AQL) since more effective use can be made of data from the sample results if the measurements can be assumed to follow a normal distribution.

The theory of this Standard assumes independence of the data. Hence this Standard should not be applied where the data may be highly auto-correlated, either as a result of auto-correlation of the production process or the sampling process or both.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on its cover and title page.
- (b) In the source text, ‘this international Standard’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal point.

For the purposes of this Standard, the ISO references should be modified by replacing references to ISO Standards with references to Australian Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
2854	Statistical interpretation of data— Techniques of estimation and tests relating to means and variances	—	
2859	Sampling procedures for inspection by attributes	—	
2859-0	Part 0: Introduction to the ISO 2859 attribute sampling system	1399	Guide to AS 1199—Sampling procedures and tables for inspection by attributes
2859-1	Part 1: Sampling plans indexed by acceptable quality level (AQL) for lot-by-lot inspection	1199	Sampling procedures and tables for inspection by attributes
2859-2	Part 2: Sampling plans indexed by limiting quality (LQ) for isolated lot inspection	—	
2859-3	Part 3: Skip-lot sampling procedures	—	
3534	Statistics—Vocabulary and symbols	—	
5725	Accuracy (trueness and precision) of measurement methods and results	—	

NOTE: The ISO Standard also makes reference to ISO 5479. This is still at the Draft International Standard stage and refers to ISO/DIS 5479, issued 16 February 1996.

CONTENTS

	<i>Page</i>
Section one : General	1
1 Scope and field of application	1
2 References	1
3 Definitions and symbols	1
4 Acceptable Quality Level (AQL)	3
5 Switching rules for normal, tightened and reduced inspection	4
6 Relation to ISO 2859	4
7 Non-continuous production and operating characteristic curves	5
 Section two : Choice of sampling plan	 6
8 Planning	6
9 Choice between variables and attributes	6
10 Choice of method	6
11 Choice of inspection level and AQL	6
12 Choice of sampling plan	7
 Section three : Operation of a variables sampling plan	 8
13 Preliminary operations	8
14 Standard procedure for “s” method	8
15 Standard procedure for “σ” method	12
16 Procedure during continuing inspection	15
17 Normality and outliers	15
18 Records	15
19 Operation of switching rules	16
20 Discontinuation and resumption of inspection	16
21 Acceptance curves for tightened and reduced inspection	16
22 Switching to “σ” method	16

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