

Australian/New Zealand Standard™

**Electrical equipment for coal mines—
Introduction and maintenance**

Part 1: For hazardous areas

AS/NZS 2290.1:2005

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-023, Electrical Equipment in Coal Mines. It was approved on behalf of the Council of Standards Australia on 16 December 2004 and on behalf of the Council of Standards New Zealand on 23 December 2004.
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The following are represented on Committee EL-023:

Australian Chamber of Commerce and Industry
Australian Coal Association
Australian Electrical and Electronic Manufacturers Association
Australian Industry Group
Department of Natural Resources and Mines (Qld)
Department of Primary Industries, Mine Safety (NSW)
Electrical Apparatus Service Association
Electrical Regulatory Authorities Council
Mining Electrical and Mining Mechanical Engineers Society
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Originated as AS 2290.1—1979.
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-023, Electrical Equipment in Coal Mines to supersede AS 2290.1—1990, *Electrical equipment for coal mines—Maintenance and overhaul, Part 1: Maintenance of electrical equipment for hazardous areas*.

The objective of this Standard is to provide guidance for the maintenance of electrical equipment in coal mines. It is part of a series of Standards on the maintenance and overhaul of electrical equipment used in association with underground mining machines.

Each Section of this Standard deals with the maintenance requirements appropriate to one of the types of explosion-protection techniques which may be used to achieve electrical safety or with basic requirements and considerations which are fundamental to the safe use of electrical equipment in hazardous areas.

This Standard differs from the 1990 edition as follows:

- (a) The Scope has been extended to include the introduction and initial commissioning of equipment.
- (b) The preparation and maintenance of a verification dossier has been included.
- (c) The designation of the types of periodic equipment examination has been changed from Codes A, B, C and C1 to External examination, Internal examination and Pre-overhaul audit.
- (d) The recommended frequency of examination has, in some cases, been extended.
- (e) Flameproof enclosures (Ex 'd'), intrinsically safe equipment (Ex 'i'), increased safety equipment (Ex 'e') and pressurized enclosures (Ex 'p') are also now covered.
- (f) Illustrations of the condition of the surfaces of flameproof enclosures and flamepath gaps have been referenced to AS/NZS 3800.
- (g) Typical examination report forms, provided as appendices, have been updated.
- (h) It has been published as a Joint Australian/New Zealand Standard.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

CONTENTS

	<i>Page</i>
FOREWORD.....	5
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	7
1.2 REFERENCED DOCUMENTS	7
1.3 DEFINITIONS	8
1.4 EQUIPMENT VERIFICATION DOSSIER.....	8
SECTION 2 INTRODUCTION, COMMISSIONING AND DOCUMENT CONTROL	
2.1 GENERAL	10
2.2 CERTIFICATION DOCUMENTS	10
2.3 PROGRAMMABLE ELECTRONIC SYSTEM	10
2.4 MANUFACTURING, OVERHAUL AND INSPECTION TEST REPORTS	10
2.5 PROTECTION DEVICES	10
2.6 TRAINING.....	11
2.7 DOCUMENTED MAINTENANCE PROCEDURES/FREQUENCY.....	11
2.8 MAINTENANCE OF RECORDS	11
2.9 COMMISSIONING CHECK SHEETS.....	12
SECTION 3 FLAMEPROOF ENCLOSURE (Ex ‘d’)	
3.1 GENERAL	13
3.2 REPAIR IN SITU	13
3.3 REPLACEMENT OF INTERNAL COMPONENTS.....	13
3.4 EQUIPMENT CERTIFICATION	13
3.5 EXAMINATION FREQUENCY	14
3.6 EQUIPMENT EXAMINATION.....	14
3.7 PERIODIC INSPECTIONS.....	14
3.8 EQUIPMENT OVERHAUL.....	15
SECTION 4 INTRINSICALLY SAFE EQUIPMENT (Ex ‘i’)	
4.1 GENERAL	18
4.2 REPAIR.....	18
4.3 EQUIPMENT CERTIFICATION	18
4.4 EXAMINATION FREQUENCY	18
4.5 EQUIPMENT EXAMINATION.....	19
4.6 PERIODIC INSPECTION	19
4.7 EQUIPMENT OVERHAUL.....	19
SECTION 5 INCREASED SAFETY EQUIPMENT (Ex ‘e’)	
5.1 GENERAL	20
5.2 REPAIR IN SITU.....	20
5.3 EQUIPMENT CERTIFICATION	20
5.4 EXAMINATION FREQUENCY	20
5.5 EQUIPMENT EXAMINATION.....	21
5.6 PERIODIC INSPECTIONS.....	21
5.7 EQUIPMENT OVERHAUL.....	22

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