# Australian Standard®

Fixed fire protection installations— Pumpset systems This Australian Standard was prepared by Committee FP/8, Fire Service Pumps. It was approved on behalf of the Council of Standards Australia on 24 February 1995 and published on 5 June 1995.

The following interests are represented on Committee FP/8:

Association of Hydraulic Services Consultants Australia

Australian Chamber of Commerce and Industry

Australian Fire Authorities Council

Australian Institute of Petroleum

Australian Pump Manufacturers Association

Confederation of Australian Industry

Fire Protection Industry Association of Australia

Insurance Council of Australia

Railways of Australia Committee

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## Australian Standard®

## Fixed fire protection installations— Pumpset systems

#### **PREFACE**

This revision of the Standard was prepared by the Standards Australia Committee FP/8—Fire Service Pumps.

The purpose of this Standard is to provide a reasonable degree of protection for life and property from fire through installation requirements for fire pumpsets based on sound engineering principles, test data and field experience.

Although the installation of a pumphouse is not a requirement of this Standard, the Committee has considered the fire pumpset and its ancillary equipment as being ideally located in a pumphouse. Requirements are established for the selection, installation and operation of fire pumps, pump drivers and associated equipment. However, the Standard does not consider the number, disposition or types of driver considered appropriate for a given fixed fire protection system. The term 'driver' is used in lieu of the term 'engine'.

The committee does not consider the initiation of the starting sequence outside the pumphouse to be within the scope of this Standard. Instead, it has considered the processing of signals entering the pumphouse.

The Standard provides minimum performance requirements for pumpsets including motors, engines, fire pump controllers, batteries and related ancillaries. The Standard requires that pumpsets be shop tested as an assembly, i.e. the pump driver and fire pump controller are to be checked as a working combination (and appropriate test certification issued) prior to dispatch from the pumpset assembler's works. Further testing is required following final installation on site, and the Standard requires the incorporation of a flow measuring device at each pumpset, unless provided elsewhere, to facilitate commissioning and subsequent periodic testing.

The Standard requires that each pump be provided with circulation relief to protect the pump from damage when exposed to extended periods of operation at or near shut off head. It also requires that each pump be provided with a pressure relief/flow control valve to protect downstream piping from overpressurization and the pump against suction and discharge recirculation. Circulation and pressure relief flow control requirements are addressed in Section 3.

This edition also includes requirements for residential/domestic pumpsets.

Maintenance requirements for fire pumpsets are to be included in a part of AS 1851—Maintenance of fire protection equipment.

The symbols used in this Standard comply with those shown in SAA HB20 and have been developed from ISO Standards.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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