

AS 2203.1—1990

Australian Standard[®]

Cored electrodes for arc welding

Part 1: Ferritic steel electrodes

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Bureau of Steel Manufacturers of Australia
Confederation of Australian Industry
Department of Defence
Lloyd's Register of Shipping
Railways of Australia Committee
Welding Technology Institute of Australia

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PREFACE

This Standard was prepared by the Standards Australia Committee on Welding Consumables, to supersede AS 2203—1981, *Carbon steel electrodes, cored (for arc welding)*.

This edition includes requirements for low or intermediate alloy ferritic steel electrodes along with carbon steel electrodes. The classification system adopted is compatible with AS 1858, *Electrodes and fluxes for submerged-arc welding*, and AS 2717, *Welding—Electrodes—Gas metal-arc*, and similarly has mechanical requirements complying with the Ship Classification Societies' unified rules. It also takes into consideration documents of the International Institute of Welding and the American National Standards Institute.

For ease of selection, the weld metal is classified according to its tensile strength and is divided into grades related to its Charpy V-notch impact energy value. The intent here is that the designer needs only to specify on the drawing the weld metal classification which will thereby nominate the mechanical properties required for the satisfactory functioning of the welded joint. The fabricator, taking into account recommendations by the manufacturer of the consumables, can select the electrode or electrode/gas combination appropriate to the materials of construction and the conditions pertaining at the time.

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