

ISO 18275:2026-05 (E)

Welding consumables - Covered electrodes for manual metal arc welding of high-strength steels - Classification

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Classification	2
4.1	General	2
4.2	Classification systems	2
4.3	Compulsory and optional sections	3
4.3.1	General	3
5	Symbols and requirements	3
5.1	Symbol for the product/process	3
5.2	Symbol for tensile properties of all-weld metal	4
5.2.1	System A	4
5.2.2	System B	4
5.3	Symbol for impact properties of all-weld metal	4
5.3.1	System A	4
5.3.2	System B	4
5.4	Symbol for chemical composition of all-weld metal	5
5.4.1	System A	5
5.4.2	System B	6
5.5	Symbol for type of electrode covering	7
5.5.1	System A	7
5.5.2	System B	7
5.6	Symbol for condition of post-weld heat treatment of all-weld metal	8
5.6.1	System A	8
5.6.2	System B	8
5.7	Symbol for electrode efficiency and type of current	8
5.7.1	System A	8
5.7.2	System B	9
5.8	Symbol for welding position	9
5.8.1	System A	9
5.8.2	System B	9
5.9	Symbol for diffusible hydrogen content of deposited metal	9
5.10	Mechanical property and composition requirements	10
5.10.1	System A	10
5.10.2	System B	10
6	Mechanical property tests	15
6.1	General	15
6.2	Preheating and interpass temperatures	15
6.2.1	System A	15
6.2.2	System B	15
6.3	Pass sequence	15
6.3.1	General	15

6.3.2	System A	16
6.3.3	System B	16
7	Chemical analysis	16
7.1	General	16
7.1.1	System A	16
7.1.2	System B	16
8	Rounding procedure	16
9	Retests	16
10	Technical delivery conditions	16
11	Examples of designation	17
11.1	General	17
11.2	Example 1 - System A	17
11.3	Example 2 - System B	17
11.4	Example 3 - System A	18
11.5	Example 4 - System B	19
Annex A (informative) Classifications systems		20
Annex B (informative) Description of types of electrode covering -- System A		22
Annex C (informative) Description of types of electrode covering -- System B		23
Annex D (informative) Notes on diffusible hydrogen		25
Annex E (informative) Description of chemical composition symbols -- System A		26
Annex F (informative) Description of chemical composition symbols -- System B		27
Bibliography		28