

# ISO 18275:2018 (E)

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

---

### Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Classification
4.1	General
4.2	Compulsory and optional sections
5	Symbols and requirements
5.1	Symbol for the product/process
5.2	Symbol for tensile properties of all-weld metal
5.3	Symbol for impact properties of all-weld metal
5.4	Symbol for chemical composition of all-weld metal
5.5	Symbol for type of electrode covering
5.6	Symbol for condition of post-weld heat treatment of all-weld metal
5.7	Symbol for electrode efficiency and type of current
5.8	Symbol for welding position
5.9	Symbol for diffusible hydrogen content of deposited metal
5.10	Mechanical property and composition requirements
6	Mechanical property tests
6.1	General
6.2	Preheating and interpass temperatures
6.3	Pass sequence
7	Chemical analysis
8	Rounding procedure
9	Retests
10	Technical delivery conditions
11	Examples of designation
Annex A	(informative) Classification systems
A.1	ISO 18275-A
A.2	ISO 18275-B
Annex B	(informative) Description of types of electrode covering — Classification by yield strength and 47 J impact energy
B.1	General
B.2	Basic covered electrodes
B.3	Other electrode covering types
Annex C	(informative) Description of types of electrode covering — Classification by tensile strength and 27 J impact energy

- C.1 General
- C.2 Type 10 covering
- C.3 Type 11 covering
- C.4 Type 13 covering
- C.5 Type 15 covering
- C.6 Type 16 covering
- C.7 Type 18 covering
- C.8 Type 45 covering

**Annex D** (informative) Notes on diffusible hydrogen

**Annex E** (informative) Description of chemical composition symbols — Classification by yield strength and 47 J impact energy

**Annex F** (informative) Description of chemical composition symbols — Classification by tensile strength and 27 J impact energy

- F.1 XMX (manganese-molybdenum) type
- F.2 Other types

**Page count: 29**