

ISO 17633:2025-03 (E)

Welding consumables - Tubular cored electrodes and rods for gas shielded and non-gas shielded metal arc welding of stainless and heat-resisting steels - Classification

Contents

Page

Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Classification.....	2
4.1 General.....	2
4.2 Classification systems.....	2
5 Symbols and requirements.....	2
5.1 General.....	2
5.2 Symbol for the product.....	3
5.2.1 Classification according to nominal composition – System A.....	3
5.2.2 Classification according to alloy type – System B.....	3
5.3 Symbol for the chemical composition of all-weld metal.....	3
5.3.1 Classification according to nominal composition – System A.....	3
5.3.2 Classification according to alloy type – System B.....	3
5.4 Symbol for type of core.....	18
5.5 Symbol for shielding gas.....	18
5.6 Symbol for welding position.....	19
6 Mechanical test.....	19
6.1 General.....	19
6.2 Preheating and interpass temperatures.....	20
6.3 Pass sequence.....	21
7 Chemical analysis.....	21
8 Rounding procedure.....	21
9 Retests.....	21
10 Technical delivery conditions.....	21
11 Examples of designation.....	22
11.1 General.....	22
11.2 Example 1 – Classification according to nominal composition – System A.....	22
11.3 Example 2 – Classification according to alloy type – System B.....	22
11.4 Example 3 – Z Classification according to nominal composition – System A.....	22
Annex A (informative) Comparison charts of alloy designation according to nominal composition and alloy type.....	24
Annex B (informative) Description core types — Classification according to nominal composition.....	26
Annex C (informative) Description of types of tubular cored electrodes and rods — Classification according to alloy type.....	27
Annex D (informative) Considerations on weld metal ferrite contents.....	28
Bibliography.....	31