ISO 3581:2023-08 (E)

Welding consumables - Covered electrodes for manual metal arc welding of stainless and heat-resisting steels - Classification

Contents

Page

Foreword iv

Introduction vi

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Classification 2
4.1 General 2
4.2 Classification systems 4
4.2.1 General 4
4.2.2 Classification: nominal composition -- A 5
4.2.3 Classification: alloy type -- B 5

5 Symbols and requirements 5
5.1 Symbol for the product or process 5
5.1.1 Classification according to nominal composition -- A 5
5.1.2 Classification according to alloy type -- B 5
5.1.3 Symbol for the chemical composition of all-weld metal 5
5.2 Symbol for type of electrode covering 6
5.2.1 General 6
5.2.2 Classification according to nominal composition -- A 6
5.2.3 Classification according to alloy type -- B 6
5.3 Symbol for nominal electrode efficiency and type of current 18
5.3.1 Classification according to nominal composition -- A 18
5.3.2 Classification according to alloy type -- B 18
5.4 Symbol for welding position 19

6 Chemical analysis 19

7 Mechanical property tests 19
7.1 General 19
7.2 Preheat and interpass temperatures 19
7.3 Pass sequence 20

8 Fillet weld test 20

9 Rounding procedure 21

10 Retests 21

11 Technical delivery conditions 22

12 Examples of designation 22
12.1 General 22
12.2 Example 1: classification according to nominal composition -- A 22
12.3 Example 2: classification according to alloy type -- B 22
12.4 Example 3: Z classification 23

Annex A (informative) Types of covering 24

Annex B (informative) Considerations on weld metal ferrite contents 26

Bibliography 29