

# 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

<b>Annex A (informative) Types of covering .....</b>	<b>24</b>
<b>Annex B (informative) Considerations on weld metal ferrite contents .....</b>	<b>26</b>
<b>Bibliography .....</b>	<b>29</b>