

# 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
<b>1 Scope.....</b>	<b>1</b>
<b>2 Normative references.....</b>	<b>1</b>
<b>3 Terms and definitions.....</b>	<b>1</b>
<b>4 Classification.....</b>	<b>2</b>
4.1 General.....	2
4.2 Classification systems.....	2
<b>5 Symbols and requirements.....</b>	<b>2</b>
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
<b>6 Mechanical test.....</b>	<b>19</b>
6.1 General.....	19
6.2 Preheating and interpass temperatures.....	20
6.3 Pass sequence.....	21
<b>7 Chemical analysis.....</b>	<b>21</b>
<b>8 Rounding procedure.....</b>	<b>21</b>
<b>9 Retests.....</b>	<b>21</b>
<b>10 Technical delivery conditions.....</b>	<b>21</b>
<b>11 Examples of designation.....</b>	<b>22</b>
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
<b>Annex A (informative) Comparison charts of alloy designation according to nominal composition and alloy type.....</b>	<b>24</b>
<b>Annex B (informative) Description core types — Classification according to nominal composition.....</b>	<b>26</b>
<b>Annex C (informative) Description of types of tubular cored electrodes and rods — Classification according to alloy type.....</b>	<b>27</b>
<b>Annex D (informative) Considerations on weld metal ferrite contents.....</b>	<b>28</b>
<b>Bibliography.....</b>	<b>31</b>