DIN EN ISO 636:2024-12 (E)

Welding consumables - Rods, wires and deposits for tungsten inert gas welding of non-alloy and fine-grain steels - Classification (ISO 636:2024)

Contents

Page

European foreword ... **3**

Foreword ... **4**

Introduction ... **5**

1 Scope ... **6**

2 Normative references ... **6**

3 Terms and definitions ... **6**

4 Classification ... **7**
4.1 General ... 7
4.2 Classification systems ... 7

5 Symbols and requirements ... **7**
5.1 Symbol for the product/process ... 7
5.2 Symbol for strength and elongation of all-weld metal ... 7
5.3 Symbol for impact properties of all-weld metal ... 8
5.3.1 System A - Classification by yield strength and 47 J impact energy ... 8
5.3.2 System B - Classification by tensile strength and 27 J impact energy ... 8
5.4 Symbol for the chemical composition of rods or wires ... 9

6 Mechanical tests ... **13**
6.1 Mechanical tests and conditions ... 13
6.2 Preheating and interpass temperatures ... 13
6.3 Welding conditions and pass sequence ... 14
6.4 PWHT condition ... 14

7 Chemical analysis ... **14**

8 Rounding procedure ... **14**

9 Retesting ... **15**

10 Technical delivery conditions ... **15**

11 Designation examples ... **15**
11.1 General ... 15
11.2 Example 1 – Classification by yield strength and 47 J impact energy – System A ... 15
11.3 Example 2 – Classification by tensile strength and 27 J impact energy – System B ... 15
11.4 Example 3 - Classification by yield strength and 47 J impact energy – System A ... 16
11.5 Example 4 - Classification by tensile strength and 27 J impact energy – System B ... 16
11.6 Example 4 - Classification by tensile strength and 27 J impact energy – System B ... 17

Bibliography ... **18**