

ISO 18276:2005-02 (E)

Welding consumables - Tubular cored electrodes for gas-shielded and non-gas-shielded metal arc welding of high-strength steels - Classification

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Classification	2
4	Symbols and requirements	4
4.1	Symbol for the product/process	4
4.2	Symbol for tensile properties of all-weld metal	4
4.3	Symbol for impact properties of all-weld metal	4
4.4	Symbol for chemical composition of all-weld metal	5
4.5	Symbol for type of electrode core or the usability characteristics of the electrodes	8
4.6	Symbol for shielding gas	9
4.7	Symbol for welding position	9
4.8	Symbol for hydrogen content of deposited metal	10
4.9	Symbol for conditions of post-weld heat treatment	10
4.10	Rounding-off procedure	10
5	Mechanical tests	10
5.1	Preheating and interpass temperatures	11
5.2	Pass sequence	12
5.3	Post-weld heat treatment (PWHT) condition	12
6	Chemical analysis	13
7	Fillet weld test	13
8	Retest	14
9	Technical delivery conditions	14
10	Examples of designations	14
Annex A (informative) Classification systems		16
Annex B (informative) Description of composition designations for electrodes in the classification system based upon tensile strength and average impact energy of 27 J		19
Annex C (informative) Description of types of electrode core in the classification system based upon yield strength and average impact energy of 47 J		20
Annex D (informative) Descriptions of types of usability characteristics in the classification system based upon tensile strength and average impact energy of 27 J		21
Annex E (informative) Notes on hydrogen content		23