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Standard qualification procedure for welding technique of titanium

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JAPANESE INDUSTRIAL STANDARD **JIS Z 3805 : 1997**

Standard qualification procedure for welding technique of titanium

1 Scope This Japanese Industrial Standard specifies the standard qualification procedure for the welding technique of titanium by TIG welding and MIG welding in the atmosphere. However, the full automatic welding and the TIG semi-automatic welding shall be excluded.

Remarks: The normative references to this Standard are as follows.

JIS H 4600 *Titanium sheets, plates and strips*

JIS H 4630 *Titanium pipes for ordinary piping*

JIS K 1105 *Argon*

JIS Z 3001 *Welding terms*

JIS Z 3122 *Methods of bend test for butt welded joint*

JIS Z 3331 *Titanium and titanium alloy rods and wires for inert gas shielded arc welding*

2 Definitions For the main terms used in this Standard the definitions in **JIS Z 3001** apply, and the rest of the terms are as follows:

(1) **test material** Plates or pipes prepared for test

(2) **test specimen** Plates or a pipes welded

(3) **test piece** A piece cut out into the specified dimensions from a test specimen in order to carry out bend test

3 Classification of qualification procedure for welding technique The qualification procedure for welding technique shall be classified as indicated in Table 1 by the welding process, the division of the welding position, etc., and its name and symbol shall be as indicated in Table 1.

Table 1 Classification of qualification procedure for welding technique

Kind of qualification			Kind of joint			Test of test piece
Welding process	Welding position	Symbol	Shape of test material	Dimension of test material mm	With/without backing metal	
TIG welding	Flat position	RT–F	Plate	Thickness : 3	Without	Face bend and root bend
	Vertical position	RT–V				
	Horizontal position	RT–H				
	Overhead position	RT–O				
	Horizontally fixed, vertically fixed	RT–P	Pipe	Nominal diameter : 80 to 100A Wall thickness: 3		
MIG welding	Flat position	RM–F	Plate	Thickness : 6	With	