

ISO 21339:2023-09 (E)

6Al-4V titanium alloys - Determination of aluminium and vanadium contents - Inductively coupled plasma atomic emission spectrometric method

Contents	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Reagents	1
5.1 General.....	1
5.2 Hydrochloric acid solution, 1+1.....	1
5.3 Nitric acid solution, 1+1.....	2
5.4 Hydrofluoric acid solution, 1+1.....	2
5.5 Titanium.....	2
5.6 Indium solution, 1 g/l.....	2
5.7 Cobalt solution, 1 g/l.....	2
5.8 Strontium solution, 1 g/l.....	2
5.9 Aluminium standard solution, 1 g/l.....	2
5.10 Vanadium standard solution, 1 g/l.....	2
6 Apparatus	2
6.1 General.....	2
6.2 Volumetric glassware.....	3
6.3 Plastic beaker, volumetric plastic flask and plastic watch glass.....	3
6.4 Atomic emission spectrometer, equipped with an inductively coupled plasma (ICP-AES).....	3
7 Sampling	3
8 Procedure	3
8.1 Test portion.....	3
8.2 Number of determinations.....	3
8.3 Preparation of the calibration solutions.....	3
8.4 Preparation of the test solutions.....	4
8.5 Determination.....	4
8.5.1 General.....	4
8.5.2 Spectrometric measurements of the calibration solutions.....	4
8.5.3 Spectrometric measurements of the test solutions.....	5
9 Expression of result	5
10 Precision	6
11 Test report	7
Annex A (informative) Additional information on the international inter-laboratory test	8
Annex B (informative) Graphical representation of the precision data	9
Bibliography	11

