

# ISO/TR 4688-1:2017-04 (E)

## Iron ores - Determination of aluminium - Part 1: Flame atomic absorption spectrometric method

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Principle .....	1
5	Reagents .....	1
6	Apparatus .....	2
7	Sampling and samples .....	3
7.1	Laboratory sample .....	3
7.2	Preparation of predried test samples .....	3
8	Procedure .....	3
8.1	Number of determinations .....	3
8.2	Test portion .....	4
8.3	Blank test and check test .....	4
8.4	Determination .....	4
8.4.1	Decomposition of the test portion .....	4
8.4.2	Treatment of the residue .....	4
8.4.3	Preparation of the test solution .....	4
8.4.4	Adjustment of the atomic absorption spectrometer .....	5
8.4.5	Atomic absorption measurements .....	5
9	Expression of results .....	6
9.1	Calculation of mass fraction of aluminium .....	6
9.2	General treatment of results .....	6
9.2.1	Repeatability and permissible tolerance .....	6
9.2.2	Determination of analytical result .....	7
9.2.3	Between-laboratories precision .....	7
9.2.4	Check for trueness .....	7
9.2.5	Calculation of final result .....	8
9.3	Oxide factor .....	9
10	Test report .....	9
Annex A (informative)	Flowsheet of the procedure for the acceptance of analytical values for test samples .....	10
Annex B (informative)	Derivation of repeatability and permissible tolerance formulae .....	11
Annex C (informative)	Precision data obtained by international analytical trials .....	12
Bibliography .....		13