ISO 4829-1:2018-03 (E)

Steel and cast iron - Determination of total silicon contents - Reduced molybdosilicate spectr ophotometric method - Part 1: Silicon contents between 0,05 % and 1,0 %

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Principle 1

5 Reagents 2

6 Apparatus 3

7 Sampling 4

8 Procedure 4
8.1 Test portion 4
8.2 Blank test 4
8.3 Determination 4
8.3.1 Dissolution of the test portion 4
8.3.2 Treatment of insoluble residue 5
8.3.3 Preparation of the test solution 5
8.3.4 Development of the colour 5
8.3.5 Spectrophotometric measurements 6
8.4 Establishment of the calibration curve 6
8.4.1 Preparation of the calibration solutions 6
8.4.2 Spectrophotometric measurements 6
8.4.3 Plotting of the calibration curves 6

9 Expression of results 7
9.1 Method of calculation 7
9.2 Precision 8

10 Test report 8

Annex A (informative) Additional information on the international interlaboratory test 9

Annex B (informative) Graphical representation of precision data 10

Bibliography 11