ISO 7992:2015-08 (E)

Iron ores for blast furnace feedstocks - Determination of reduction under load

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Principle 1

5 Sampling, sample preparation and preparation of test portions 1
5.1 Sampling and sample preparation 1
5.2 Preparation of test portions 2

6 Apparatus 2
6.1 General 2

7 Test conditions 3
7.1 General 3
7.2 Reducing gas 3
7.2.1 Composition 3
7.2.2 Purity 3
7.2.3 Flow rate 3
7.3 Heating and cooling gas 4
7.4 Temperature of the test portion 4
7.5 Loading of the test portion 4

8 Procedure 4
8.1 Number of determinations for the test 4
8.2 Chemical analysis 4
8.3 Reduction 4

9 Expression of results 5
9.1 Preparation of the reduction curve 5
9.2 Calculation of the differential pressure at 80 % reduction (p80) 5
9.3 Calculation of the change in the height of the test bed at 80 % reduction (h80) 6
9.4 Repeatability and acceptance of test results 6

10 Test report 6

11 Verification 6

Annex A (normative) Flowsheet of the procedure for the acceptance of test results 11

Annex B (informative) Derivation of equation for reducibility 12