ISO 11257:2022-03 (E)

Iron ores for shaft direct-reduction feedstocks - Determination of the low-temperature reduction-disintegration index and degree of metallization

Contents

Page

Foreword ... **iv**

Introduction ... **v**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Principle ... **2**

5 Sampling, sample preparation, and preparation of test portions ... **2**
5.1 Sampling and sample preparation ... 2
5.2 Preparation of test portion ... 2

6 Apparatus ... **2**

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

8 Procedure ... **4**
8.1 Number of determinations for the test ... 4
8.2 Reduction ... 4
8.3 Sieving ... 5
8.4 Chemical analysis ... 5

9 Expression of results ... **5**
9.1 Calculation of the reduction-disintegration index (D_{DR}) ... 5
9.2 Calculation of the degree of metallization (M) ... 6
9.3 Repeatability and acceptance of test results ... 6

10 Test report ... **6**

11 Verification ... **7**

Annex A (normative) **Flowsheet of the procedure for the acceptance of test results** ... **8**

Bibliography ... **9**