ISO 5146:2023-11 (E)

Coal and coke - Coal preparation plant - Density tracer testing for measuring performances of coal density separators

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Test method 2
4.1 General 2
4.2 Apparatus 2
4.2.1 Density tracers 2
4.2.2 Density tracer retrieval or detection equipment 3
4.3 Procedure 3
4.3.1 Density tracer selection 3
4.3.2 Insertion of density tracers 3
4.3.3 Density tracer retrieval or detection and data capture 5
4.4 Data processing 5
4.4.1 Data acceptability 5
4.4.2 Calculation of partition coefficients 7
4.4.3 Confidence intervals for partition points 7
4.4.4 Two forms of the partition curve 8
4.4.5 Fitting the partition curves 9
4.4.6 Asymmetry factor for 5-parameter logistic 10
4.5 Test report 10

Annex A (informative) Density tracer properties 14

Annex B (informative) Test duration and aids for density tracer retrieval or detection 16

Annex C (informative) Selection of density tracers 19

Annex D (informative) Density tracer test report template 21

Annex E (informative) Interpretation of partition curves 24

Annex F (normative)Workingwithpartitioncoefficientstofloats 26

Annex G (informative) Formulae in linear format 27

Bibliography 28