

ISO 13909-5:2025-07 (E)

Coal and coke - Mechanical sampling - Part 5: Sampling of coke from moving streams

Contents

Page

Foreword	v	
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Establishing a sampling scheme	1
4.1	General.....	1
4.2	Design of the sampling scheme.....	2
4.2.1	Material to be sampled.....	2
4.2.2	Parameters to be determined on samples.....	2
4.2.3	Division of lots.....	2
4.2.4	Basis of sampling.....	2
4.2.5	Precision of sampling.....	3
4.2.6	Bias of sampling.....	3
4.3	Precision of results.....	3
4.3.1	Precision and total variance.....	3
4.3.2	Primary increment variance.....	4
4.3.3	Preparation and testing variance.....	4
4.3.4	Number of sub-lots and number of increments in each sub-lot.....	5
4.4	Minimum mass of sample.....	8
4.5	Mass of primary increment.....	8
4.6	Size analysis.....	9
5	Methods of sampling	10
5.1	General.....	10
5.2	Time-basis sampling.....	10
5.2.1	Method of taking primary increments.....	10
5.2.2	Sampling interval.....	10
5.2.3	Mass of increment.....	11
5.3	Stratified random sampling.....	11
5.3.1	General.....	11
5.3.2	Time-basis stratified random sampling.....	11
5.4	Reference sampling.....	11
6	Design of mechanical samplers	11
6.1	Safety.....	11
6.2	Sampling system.....	11
6.2.1	General.....	11
6.2.2	Checking for precision and bias.....	12
6.2.3	Operation of sampler.....	12
6.3	Location of sampling equipment.....	12
6.4	General requirements for designing mechanical samplers.....	12
6.5	Design of falling-stream-type samplers.....	13
6.5.1	General.....	13
6.5.2	Cutter velocity.....	16
6.6	Cross-belt-type primary samplers.....	16
6.6.1	Operation.....	16
6.6.2	Design of cross-belt samplers.....	17
6.6.3	Maintenance of sampling equipment.....	18

7 Handling and storage of samples 19

8 Sample preparation 19

9 Minimization of bias 20

 9.1 General..... 20

 9.2 Spacing of increments 20

 9.3 Incorrectly extracted increments 20

 9.4 Preservation of integrity of sample 20

 9.4.1 General 20

 9.4.2 Precautions to reduce bias 20

10 Verification 21

Bibliography 22