

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols	2
5 Principles of correct sample reduction	2
6 Apparatus	2
6.1 Apparatus for sample division.....	2
6.1.1 General.....	2
6.1.2 Riffle boxes.....	2
6.1.3 Rotary sample dividers.....	3
6.1.4 Shovels and scoops.....	4
6.2 Apparatus for particle size-reduction.....	5
6.2.1 Coarse cutting mill or wood crusher.....	5
6.2.2 Cutting mill.....	5
6.2.3 Axe.....	6
6.2.4 Hand saw.....	6
6.2.5 Sieves.....	6
6.2.6 Balance.....	6
7 Sample reduction — General principles	6
8 Methods for sample division	8
8.1 General.....	8
8.2 Riffling.....	9
8.3 Strip mixing.....	9
8.4 Long pile-alternate shovel method.....	9
8.5 Rotary divider.....	10
8.6 Coning and quartering.....	10
8.7 Mass reducing straw-like material (handful sampling).....	10
9 Method for reducing laboratory samples to sub-samples and general analysis samples	11
9.1 Mixing.....	11
9.2 Initial sample division.....	11
9.3 Pre-drying.....	11
9.4 Coarse cutting (particle size reduction to <31,5 mm).....	12
9.5 Sample division of <31,5 mm material.....	12
9.6 Particle size reduction of <31,5 mm material to <1 mm.....	12
9.7 Sample division of <1 mm material.....	13
9.8 Particle size reduction of <1 mm material to <0,25 mm.....	13
10 Storage and labelling	13
11 Performance characteristics	13
Annex A (informative) Precision in relation to division method	14
Annex B (informative) Scheme of sample preparation for samples from single delivery	19
Annex C (informative) Scheme of sample preparation for samples from continuous delivery	20
Bibliography	22