

# ISO 11143:2008-07 (E)

## Dentistry - Amalgam separators

---

<b>Contents</b>		<b>Page</b>
Foreword .....		v
Introduction .....		vi
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Classification .....	2
5	Requirements .....	3
5.1	Efficiency .....	3
5.2	Warning system for collecting container .....	3
5.3	Alarm system for collecting container .....	3
5.4	Alarm system for malfunction of amalgam separator .....	3
5.5	Removal of removable filled collecting container .....	3
5.6	Maximum fillable volume of the removable collecting container .....	4
5.7	Electrical safety .....	4
6	Sampling .....	4
7	Test apparatus .....	4
7.1	Set-up of test apparatus .....	4
7.2	Installation of amalgam separator .....	5
8	Test sample .....	7
8.1	Preparation of test sample .....	7
8.2	Particle fraction sizes .....	7
8.3	Mass of dry test sample .....	7
8.4	Particle fraction size distribution .....	7
8.5	Preparation of test slurry .....	9
8.5.1	Reagents .....	9
8.5.2	Apparatus .....	9
8.5.3	Procedure .....	9
9	Test method .....	10
9.1	General .....	10
9.2	Preconditioning .....	10
9.3	Efficiency test .....	10
9.4	Number of tests .....	13
9.5	Calculation of efficiency .....	13
9.6	Determination of efficiency .....	14
9.7	Test of warning system for removable collecting container .....	14
9.8	Test of alarm system for removable collecting container .....	14
9.9	Test of alarm system for malfunction of amalgam separator .....	14
9.10	Removal of filled collecting container .....	14
9.11	Maximum fillable volume of the removable collecting container .....	14
9.12	Electrical safety .....	14
10	Test report .....	15

11	Manufacturer's instructions for installation, use, maintenance and service .....	16
12	Marking .....	16
12.1	General .....	16
12.2	Marking of amalgam separator .....	17
12.3	Marking of liquid inlet and outlet of the amalgam separator .....	17
12.4	Marking of removable collecting container .....	17
Annex A (informative) Preparation of amalgam test sample .....		18
Annex B (informative) Procedure for grinding the hardened amalgam .....		21
Annex C (informative) Examination of particle fraction 3 using sedimentation with X-ray absorption .....		22
Annex D (informative) Particle fraction size distribution of amalgam in dental waste water .....		24
Bibliography .....		25