

DIN EN 14743:2007-09 (E)

Water conditioning equipment inside buildings - Softeners - Requirements for performance, safety and testing (includes Amendment A1:2007)

Contents		Page
Foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	6
4	Requirements	8
4.1	Softener specification	8
4.2	Quality of materials and chemicals	8
4.2.1	Cation exchange resin	8
4.2.2	Regenerating salt	8
4.3	Design and manufacturing specifications	9
4.3.1	Resistance to hydrostatic pressure	9
4.3.2	Resistance to cyclic pressure	9
4.3.3	Minimum and maximum operating pressure	9
4.3.4	Resistance to temperature	9
4.3.5	Electrical safety	9
4.3.6	Salt tank	9
4.3.7	Continuity of supply during regeneration	9
4.3.8	Protection against backflow and infiltration of brine	9
4.3.9	Noise level	9
4.3.10	Air vent	10
4.3.11	End connections	10
4.3.12	Drain connections	10
4.4	Operating specifications	10
4.4.1	Initiation of regeneration	10
4.4.2	Brining efficiency	10
4.4.3	Regeneration water	10
4.4.4	Quality of treated water after regeneration	10
4.4.5	Continuous flow rate	10
4.4.6	Pressure drop	10
4.4.7	Exchange capacity	11
4.5	Installation specifications	11
4.5.1	Connection to mains water supply and existing pipe network	11
4.5.2	Drain	11
4.5.3	Electrical connection	11
5	Labelling	11
5.1	Identification of equipment	11
5.2	Safety labelling	11
6	Technical documentation	12
7	Test methods	12
7.1	Test conditions	12
7.1.1	Ambiant air	12
7.1.2	Water and salt	12
7.1.3	Test rig	13
7.1.4	Analysis	13

7.2	Cation exchange resin	13
7.3	Technical documentation	14
7.4	Manufacturing tests	14
7.4.1	Resistance to hydrostatic pressure	14
7.4.2	Resistance to cyclic pressure	14
7.4.3	Continuity of water supply	15
7.4.4	Protection against backflow	15
7.4.5	Air displacement	15
7.5	Operating characteristics	15
7.5.1	General	15
7.5.2	Nominal flow rate	15
7.5.3	Regenerations	16
7.5.4	Exchange capacity	17
7.5.5	Brine efficiency	17
7.5.6	Regeneration water	17
7.5.7	Quality of treated water after a regeneration	17
Annex A (normative) !Installation, operation and maintenance		18
Bibliography		23