

DIN EN 12012-4:2010-01 (E)

Plastics and rubber machines - Size reduction machines - Part 4: Safety requirements for agglomerators (includes Amendment A1:200 8)

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	List of significant hazards	8
4.1	Mechanical hazards	8
4.2	Thermal hazards	8
4.3	Noise hazards	8
4.4	Hazards generated by dust, fumes and gases	8
4.5	Hazards due to electrical energy	9
4.6	Hazards due to unexpected start-up	9
4.7	Falls from height	9
5	Safety requirements and/or protective measures	9
5.1	General	9
5.2	Mechanical hazards	9
5.2.1	Access through openings in the agglomerator chamber	9
5.2.2	Feed material that is not pre-cut	9
5.2.3	Ejection of parts or materials from the agglomerator chamber	10
5.2.4	Strength	10
5.3	Thermal hazards	10
5.4	Noise hazards	10
5.4.1	Noise reduction at source by design	10
5.4.2	Noise reduction by protective measures	11
5.4.3	Information connected with noise hazards	11
5.5	Hazards generated by dust, fumes and gases	11
5.6	Hazards due to electrical energy	11
5.6.1	Electrical equipment	11
5.6.2	Accumulation of electrostatic charges	12
5.7	Unexpected start-up	12
5.8	Falls from height	12
6	Verification of conformity with the safety requirements and/or protective measures	13
7	Information for use	14
7.1	Instruction manual	14
7.2	Marking	15
Annex A (normative) Noise test code		16
A.1	Scope	16
A.2	Determination of sound power levels	16
A.2.1	Basic standards	16
A.2.2	Measurement uncertainty	16
A.3	Determination of emission sound pressure level at the workstation(s)	17

A.3.1	Basic standards	17
A.3.2	Measurement uncertainty	17
A.4	Installation and mounting conditions for the noise measurement	17
A.5	Operating conditions	17
A.6	Information to be recorded and reported	18
A.6.1	General	18
A.6.2	General agglomerator data	18
A.6.3	Agglomerator chamber data	18
A.6.4	Standards	18
A.6.5	Noise data	18
A.6.6	Specified test parameters	19
A.6.7	Installation and operating conditions	19
A.7	Declaration and verification of noise emission values	19
Annex ZA (informative)	Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC	20
Annex ZB (informative)	!!Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC""	21
Bibliography		22