

DIN EN 1034-13:2010-07 (E)

Safety of machinery - Safety requirements for the design and construction of paper making and finishing machines - Part 13: Machines for de-wiring bales and units (includes Amendment A1:2009)

Contents

	Page
Foreword	3
Introduction	4
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 List of significant hazards	7
5 Safety requirements and/or measures	9
5.1 General	9
5.2 De-wiring device and loading	9
5.3 Wire ejection device	10
5.4 Workplaces, access stairs, catwalks, passageways	10
5.5 Start-up warning device	10
5.6 Emergency stop device	10
5.7 Isolation and energy dissipation, prevention of unexpected start-up	10
5.8 Equipment for make-ready and maintenance	10
5.9 Safety measures for cleaning operations	11
5.10 Control systems and actuators	11
5.11 Integrated lighting	11
5.12 Noise	11
5.13 Ergonomic aspects	11
5.14 Electrical equipment	11
5.15 Hydraulic equipment	11
5.16 Pneumatic equipment	11
6 Verification of safety requirements and/or measures	11
7 Information for use	12
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC	13
Annex ZB (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC	14
Figures Figure 1 -- Example of a machine for cutting bale wires	6
Figure 2 -- Example of a machine for unit de-wiring	6
Figure 3 -- Example of a machine for de-wiring cellulose bales	7
Tables Table 1 -- List of significant hazards	8
Table 2 -- Methods used to verify safety requirements and/or measures	12