ISO 19085-8:2024-07 (E)

Woodworking machines - Safety - Part 8: Wide belt sanding machines and surface treating machines

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 2

3 Termsanddefinitions 2

4 Safety requirements and measures for controls 8
4.1 Safety and reliability of control systems 8
4.2 Control devices 8
4.3 Start 8
4.3.1 Direct start 8
4.3.2 Start via control power-on 8
4.4 Safe stops 8
4.4.1 General 8
4.4.2 Normal stop 8
4.4.3 Operational stop 9
4.4.4 Emergency stop 9
4.5 Braking function of tools 9
4.6 Mode selection 9
4.7 Tool speed changing 9
4.7.1 Speed changing by shifting the belts on the pulleys 9
4.7.2 Speed changing by incremental speed change motor 9
4.7.3 Infinitely variable speed frequency inverter 9
4.8 Failure of any power supply 10
4.9 Manual reset control 10
4.10 Standstill detection and monitoring 10
4.11 Machine moving parts speed monitoring 10
4.12 Time delay 10
4.13 Teleservice 10

5 Safety requirements and measures for protection against mechanical hazards 10
5.1 Stability 10
5.2 Risk of break-up during operation 10
5.3 Tool holder and tool design 10
5.4 Braking 11
5.4.1 Braking of tools 11
5.4.2 Maximum run-down time 11
5.4.3 Brake release 11
5.5 Safeguards 11
5.5.1 Fixed guards 11
5.5.2 Interlocking moveable guards 11
5.5.3 Hold-to-run control 11
5.5.4 Two-hand control 11
5.5.5 Electro-sensitive protective equipment (ESPE) 11
5.5.6 Pressure sensitive protecting device (PSPE) 11
5.5.7 Enabling control 11
5.6 Prevention of access to hazardous moving parts 12

5.6.1 Guarding of tools 12
5.6.2 Safeguarding of shearing zones, crushing zones and drawing-in points 13
5.6.3 Guarding of drives 13
5.7 Impact hazard 13
5.8 Clamping devices 13
5.9 Measures against ejection 14
5.9.1 General 14
5.9.2 Guards material and characteristics 14

5.9.3 Anti-kickback devices 14
5.9.4 Adjustment of machine work height 16
5.10 Workpiece support and guides 16

6 Safety requirements and measures for protection against other hazards 16
6.1 Fire 16
6.2 Noise 17
6.2.1 Noise reduction at the design stage 17
6.2.2 Noise emission measurement and declaration 17
6.3 Emission of chips and dust 17
6.4 Electricity 17
6.5 Ergonomics and handling 17
6.6 Lighting 17
6.7 Pneumatics 17
6.8 Hydraulics 17
6.9 Electromagnetic compatibility 17
6.10 Laser 18
6.11 Static electricity 18
6.12 Errors of fitting 18
6.13 Isolation 18
6.14 Maintenance 18
6.15 Relevant but not significant hazards 18

7 Information for use 18
7.1 Warning devices 18
7.2 Markings 18
7.2.1 General 18
7.2.2 Additional markings 18
7.3 Instruction handbook 19
7.3.1 General 19
7.3.2 Additional information 19

Annex A (informative)Listofsignificanthazards 20

Annex B (informative) Performance level required 22

Annex C (informative) Stability test 24

Annex D (normative) Test for braking function 25

Annex E (normative) Impact test for guards 26

Annex F (normative) Noise test code 27

Annex G (normative) Anti-kickback test 31

Annex H (normative)Testforanti-kickbackdevicesoffingertype 32