DIN EN ISO 19085-13:2026-10 (E)

Woodworking machines - Safety - Part 13: Multi-blade rip sawing machines with manual loading and/or unloading (ISO 19085-13:2025)

Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **2**

4 Safety requirements and measures for controls **5**
4.1 Safety and reliability of control systems 5
4.2 Control devices 5
4.3 Start 6
4.3.1 Direct start 6
4.3.2 Start via control power-on 6
4.4 Safe stops 6
4.4.1 General 6
4.4.2 Normal stop 6
4.4.3 Operational stop 7
4.4.4 Emergency stop 7
4.5 Braking function of tools 7
4.6 Mode selection 7
4.6.1 Pressure shoe or pressure board cutting mode 7
4.6.2 Cleaning mode 8
4.6.3 Powered axial adjustment mode 8
4.7 Tool speed changing 8
4.7.1 Speed changing by shifting the belts on the pulleys 8
4.7.2 Speed changing by incremental speed change motor 8
4.7.3 Infinitely variable speed by frequency inverter 8
4.8 Failure of any power supply 8
4.9 Manual reset control 8
4.10 Standstill detection and monitoring 8
4.11 Machine moving parts speed monitoring 9
4.12 Time delay 9
4.13 Teleservice 9
4.14 Powered adjustments when guards are closed 9

5 Safety requirements and measures for protection against mechanical hazards **9**
5.1 Stability 9
5.2 Risk of break-up during operation 9
5.3 Tool and tool fixing design 9
5.3.1 General 9
5.3.2 Spindle locking 10
5.3.3 Circular saw blade fixing device 10
5.3.4 Flanges dimensions for circular saw blades 10
5.4 Braking 10
5.4.1 Braking of tools 10
5.4.2 Maximum run-down time 10
5.4.3 Brake release 10
5.5 Safeguards 10
5.5.1 Fixed guards 10
5.5.2 Interlocking moveable guards 10
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 protective equipment (PSPE) 11
5.5.7 Enabling control 11
5.6 Prevention of access to hazardous moving parts 11
5.6.1 Access to the saw blades 11
5.6.2 Access to the saw blades through the chip and dust outlets 11
5.6.3 Access to the crushing and shearing points of the feed mechanism 11
5.6.4 Access to the feed rollers 11
5.6.5 Access to crushing points on conveyor chains 12
5.6.6 Access to hazardous movements of drives 12
5.7 Impact hazard 12
5.8 Clamping devices 12
5.9 Measures against ejection 13
5.9.1 General 13
5.9.2 Guards materials and characteristics 13
5.9.3 Measures against ejection through the infeed opening 13
5.9.4 Measures against ejection through the outfeed opening 26
5.10 Workpiece support and guide 29

6 Safety requirements and measures for protection against other hazards 29
6.1 Fire 29
6.2 Noise 29
6.2.1 Noise reduction at the design stage 29
6.2.2 Noise emission measurement and declaration 29
6.3 Emission of chips and dust 29
6.4 Electricity 30
6.5 Ergonomics and handling 30
6.6 Lighting 30
6.7 Pneumatics 30
6.8 Hydraulics 30
6.9 Electromagnetic compatibility 30
6.10 Laser 30
6.11 Static electricity 30
6.12 Errors of fitting 30
6.13 Isolation 30
6.14 Maintenance 31
6.15 Relevant but not significant hazards 31

7 Information for use 31
7.1 Warning devices 31
7.2 Marking 31
7.2.1 General 31
7.2.2 Additional marking 31
7.3 Instruction handbook 31
7.3.1 General 31
7.3.2 Additional information 31

Annex A (informative) **List of significant hazards 33**

Annex B (informative) **Performance level required 35**

Annex C (informative) **Stability test 36**

Annex D (normative) **Test for braking function 37**

Annex E (normative) **Impact test for guards 38**

Annex F (normative) **Noise test code 39**

Annex G (normative) **Test for the anti-splinter system on machines with one chain conveyor 42**

Bibliography 47