

ISO 19085-13:2025-09 (E)

Woodworking machines - Safety - Part 13: Multi-blade rip sawing machines with manual loading and/or unloading

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
ISO 19085-13:2025(en) 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