

DIN EN ISO 19085-7:2025-12 (E)

Woodworking machines - Safety - Part 7: Surface planing, thickness planing and combined surface/thickness planing machines (ISO 19085-7:2024)

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.....	7
4.1 Safety and reliability of control systems.....	7
4.2 Control devices.....	7
4.3 Start.....	10
4.3.1 Direct start.....	10
4.3.2 Start via control power-on.....	10
4.4 Safe stops.....	10
4.4.1 General.....	10
4.4.2 Normal stop.....	10
4.4.3 Operational stop.....	10
4.4.4 Emergency stop.....	10
4.5 Braking function of tools.....	11
4.6 Mode selection.....	11
4.7 Tool speed changing.....	11
4.7.1 Speed changing by shifting the belts on the pulleys.....	11
4.7.2 Speed changing by incremental speed change motor.....	11
4.7.3 Infinitely variable speed by frequency inverter.....	11
4.8 Failure of any power supply.....	11
4.9 Manual reset control.....	11
4.10 Standstill detection and monitoring.....	11
4.11 Machine moving parts speed monitoring.....	11
4.12 Time delay.....	11
4.13 Teleservice.....	11
4.14 Power-operated adjustment of surface planing infeed table and thickness planing table.....	11
5 Safety requirements and measures for protection against mechanical hazards.....	12
5.1 Stability.....	12
5.2 Risk of break-up during operation.....	12
5.3 Tool and tool fixing design.....	12
5.3.1 General.....	12
5.3.2 Spindle locking.....	12
5.3.3 Circular saw blade fixing device.....	12
5.3.4 Flange dimension for circular saw blades.....	12
5.4 Braking.....	13
5.4.1 Braking of tools.....	13
5.4.2 Maximum run-down time.....	13
5.4.3 Brake release.....	13
5.5 Safeguards.....	13
5.5.1 Fixed guards.....	13
5.5.2 Interlocking moveable guards.....	13
5.5.3 Hold-to-run control.....	13
5.5.4 Two-hand control.....	13
5.5.5 Electro-sensitive protective equipment (ESPE).....	13
5.5.6 Pressure sensitive protective equipment (PSPE).....	13

5.5.7	Enabling control	14
5.6	Prevention of access to hazardous moving parts	14
5.6.1	Cutter block guarding during surface planing	14
5.6.2	Guarding the cutter block and the feed mechanism during thickness planing	17
5.6.3	Guarding during mortising	17
5.6.4	Guarding of drives	17
5.7	Impact hazard	17
5.8	Clamping devices	17
5.9	Measures against ejection	17
5.9.1	General	17
5.9.2	Guards' material and characteristics	18
5.9.3	Anti-kickback devices	18
5.10	Workpiece supports and guides	19
5.10.1	Conversion movements in combined surface/thickness planing machines	19
5.10.2	Surface planing tables	20
5.10.3	Thickness planing table	21
5.10.4	Mortising table	21
5.10.5	Workpiece guiding during surface planing	22
5.10.6	Workpiece guiding during thickness planing	22
5.11	Safety appliances	23
6	Safety requirements and measures for protection against other hazards	24
6.1	Fire	24
6.2	Noise	24
6.2.1	Noise reduction at the design stage	24
6.2.2	Noise emission measurement and declaration	24
6.3	Emission of chips and dust	24
6.4	Electricity	24
6.5	Ergonomics and handling	24
6.6	Lighting	25
6.7	Pneumatics	25
6.8	Hydraulics	25
6.9	Electromagnetic compatibility	25
6.10	Laser	25
6.11	Static electricity	25
6.12	Errors of fitting	25
6.13	Isolation	25
6.14	Maintenance	25
6.15	Relevant but not significant hazards	25
7	Information for use	26
7.1	Warning devices	26
7.2	Marking	26
7.2.1	General	26
7.2.2	Additional markings	26
7.3	Instruction handbook	26
7.3.1	General	26
7.3.2	Additional information	26
	Annex A (informative) List of significant hazards	28
	Annex B (informative) Performance levels required	30
	Annex C (normative) Stability test	31
	Annex D (normative) Test for braking function	34
	Annex E (normative) Impact test for guards	35
	Annex F (normative) Noise test code	36
	Annex G (normative) Tests for bridge-type guards	41
	Annex H (normative) Resistance test for table lips on surface planing machines	43
	Annex I (normative) Kickback test	46
	Bibliography	47