

DIN EN 940:2012-05 (E)

Safety of woodworking machines - Combined woodworking machines (includes Amendment A1:2012)

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	8
3.1	!!!General"....."	8
3.2	!!!Definitions"....."	8
4	List of significant hazards	15
5	Safety requirements and/or measures	19
5.1	General	19
5.2	Controls	19
5.2.1	Safety and reliability of control systems	19
5.2.2	Position of controls	20
5.2.3	Starting	20
5.2.4	Normal stopping	21
5.2.5	Emergency stop	21
5.2.6	Unit selection and operating mode selection	22
5.2.7	Speed !!!control"....."	23
5.2.8	Direction of rotation	23
5.2.9	Failure of the power supply	24
5.2.10	Failure of the control circuits	24
5.3	Protection against mechanical hazards	24
5.3.1	Stability	24
5.3.2	Risk of break-up during operation	25
5.3.3	Tool holder and tool design	25
5.3.4	Braking system	26
5.3.5	Devices to minimise the possibility or the effect of ejection	26
5.3.6	Workpiece supports and guides	26
5.3.7	Prevention of access to moving parts	29
5.3.8	Clamping devices	32
5.3.9	Safety appliances	33
5.4	Protection against non-mechanical hazards	33
5.4.1	Fire	33
5.4.2	Noise	33
5.4.3	Emissions of chips and dust	33
5.4.4	Electricity	34
5.4.5	Ergonomics and handling	34
5.4.6	Pneumatics	35
5.4.7	Hydraulics	35
5.4.8	Electromagnetic compatibility	35
5.4.9	Laser	35
5.4.10	Static electricity	35
5.4.11	Errors of fitting	36
5.4.12	Supply disconnecting devices (Isolation)	36
5.4.13	Maintenance	36

6	Information for use	37
6.1	General	37
6.2	Marking	37
6.3	Instruction handbook	38
Annex A (normative) Stability test for displaceable machines		41
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC		43
Bibliography		47