

# DIN EN 1870-10:2013-07 (E)

## Safety of woodworking machines - Circular sawing machines - Part 10: Single blade automatic and semi-automatic up-cutting cross-cut sawing machines

---

<b>Contents</b>		<b>Page</b>
Foreword .....		4
Introduction .....		6
<b>1</b>	<b>Scope .....</b>	<b>7</b>
<b>2</b>	<b>Normative references .....</b>	<b>7</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>9</b>
3.1	General .....	9
3.2	Definitions .....	9
<b>4</b>	<b>List of significant hazards .....</b>	<b>11</b>
<b>5</b>	<b>Safety requirements and/or measures .....</b>	<b>14</b>
5.1	General .....	14
5.2	Controls .....	14
5.2.1	Safety and reliability of control systems .....	14
5.2.2	Position of controls .....	15
5.2.3	Starting .....	18
5.2.4	Normal stopping .....	19
5.2.5	Emergency stop .....	19
5.2.6	Integrated feed .....	20
5.2.7	Mode selection .....	20
5.2.8	Failure of the power supply .....	20
5.2.9	Failure of the control circuits .....	21
5.3	Protection against mechanical hazards .....	21
5.3.1	Stability .....	21
5.3.2	Risk of break up during operation .....	21
5.3.3	Tool holder and tool design .....	22
5.3.4	Braking .....	23
5.3.5	Devices to minimise the possibility or effect of ejection .....	24
5.3.6	Work piece supports and guides .....	25
5.3.7	Prevention of access to moving parts .....	26
5.3.8	Clamping devices .....	35
5.4	Protection against non-mechanical hazards .....	35
5.4.1	Fire .....	35
5.4.2	Noise .....	35
5.4.3	Emission of chips and dust .....	36
5.4.4	Electricity .....	37
5.4.5	Ergonomics and handling .....	37
5.4.6	Pneumatics .....	38
5.4.7	Hydraulics .....	38
5.4.8	Electromagnetic compatibility .....	38
5.4.9	Laser .....	38
5.4.10	Static electricity .....	38
5.4.11	Errors of fitting .....	39
5.4.12	Supply disconnecting device (isolation) .....	39
5.4.13	Maintenance .....	39
<b>6</b>	<b>Information for use .....</b>	<b>39</b>

6.1	Warning devices .....	39
6.2	Marking .....	40
6.3	Instruction handbook .....	40
Annex A (normative) Saw spindle dimensional tolerances .....		44
Annex B (normative) Braking tests .....		45
B.1	Conditions for all tests .....	45
B.2	Tests .....	45
B.2.1	Un-braked run-down time .....	45
B.2.2	Braked run-down time .....	45
Annex C (normative) Impact test method for guards .....		46
C.1	General .....	46
C.2	Test method .....	46
C.2.1	Preliminary remarks .....	46
C.2.2	Testing equipment .....	46
C.2.3	Projectile for guards .....	46
C.2.4	Sampling .....	46
C.2.5	Test procedure .....	47
C.3	Results .....	47
C.4	Assessment .....	47
C.5	Test report .....	47
C.6	Test equipment for impact test .....	47
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC .....		49
Bibliography .....		50