DIN EN 1870-16:2013-01 (E)

Safety of woodworking machines - Circular sawing machines - Part 16: Double mitre sawing machines for V cutting

Contents

Page

Foreword 4

Introduction 6

1 Scope 7

2 Normative references 7

3 Terms and definitions 9
3.1 General 9
3.2 Terms 10
3.3 Definitions 11

4 List of significant hazards 14

5 Safety requirements and/or measures 17
5.1 General 17
5.2 Controls 17
5.2.1 Safety and reliability of control systems 17
5.2.2 Position of controls 18
5.2.3 Starting 19
5.2.4 Normal stopping 20
5.2.5 Emergency stop 21
5.2.6 Mode selection 21
5.2.7 Failure of the power supply 22
5.3 Protection against mechanical hazards 22
5.3.1 Stability 22
5.3.2 Hazards of break-up during operation 22
5.3.3 Tool holder and tool design 23
5.3.4 Braking 24
5.3.5 Devices to minimise the possibility or the effect of ejection 25
5.3.6 Workpiece supports and guides 25
5.3.7 Prevention of access to moving parts 26
5.3.8 Workpiece clamping devices 30
5.4 Protection against non-mechanical hazards 31
5.4.1 Fire 31
5.4.2 Noise 32
5.4.3 Emission 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 Electromagnetic compatibility 35
5.4.8 Static electricity 35
5.4.9 Errors of fitting 35
5.4.10 Supply disconnection (Isolation) 35
5.4.11 Maintenance 36

6 Information for use 36
6.1 General 36
6.2 Warnings and warning devices 36
6.3 Marking 37

6.4 Instruction handbook 37

Annex A (normative) Saw spindle dimensional tolerances 42

Annex B (normative) Braking tests 43

B.1 Conditions for all tests 43
B.2 Tests 43
B.2.1 Un-braked run-down time 43
B.2.2 Braked run down time 43

Annex C (normative) Impact test method for guards 44

C.1 General 44
C.2 Test method 44
C.2.1 Preliminary remarks 44
C.2.2 Testing equipment 44
C.2.3 Projectile for guards 44
C.2.4 Sampling 44
C.2.5 Test procedure 44
C.3 Results 45
C.4 Assessment 45
C.5 Test report 45
C.6 Test equipment for impact test 45

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC 47

Bibliography 50