DIN EN 859:2012-09 (E)

Safety of woodworking machines - Hand fed surface planing machines (includes Amendment A2:2012)

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
3.3 Terms 10

4 List of significant hazards 12

5 Safety requirements and/or measures 14
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 15
5.2.4 Normal stopping 16
5.2.5 Emergency stop 17
5.2.6 Failure of the power supply 17
5.2.7 Failure of the control circuit 17
5.3 Protection against mechanical hazards 18
5.3.1 Stability 18
5.3.2 Hazard of break up during operation 18
5.3.3 Cutterblock holder and cutterblock design 18
5.3.4 Braking 18
5.3.5 Work piece supports and guides 19
5.3.6 Prevention of access to moving parts 23
5.3.7 Characteristics of guards 27
5.3.8 Safety appliances 27
5.4 Protection against non-mechanical hazards 28
5.4.1 Fire 28
5.4.2 Noise 28
5.4.3 Emission of chips and dust 29
5.4.4 Electricity 30
5.4.5 Ergonomics and handling 31
5.4.6 Pneumatics 32
5.4.7 Hydraulics 32
5.4.8 Electromagnetic compatibility 32
5.4.9 Supply disconnection (isolation) 32
5.4.10 Static electricity 33
5.4.11 Maintenance 33

6 Information for use 33
6.1 General 33
6.2 Marking 33
6.3 Instruction handbook 34

Annex A (normative) Tests for bridge type guards for surface planing machines 38

A.1 General 38
A.2 Compression test 38
A.3 Shock test 38
A.4 Strength test 38

Annex B (normative) Table lip resistance test 40

B.1 General 40
B.2 Work piece 40
B.3 Measurements 43
B.4 Test 43
B.5 Result 44

Annex C (normative) Stability test for displaceable machines 45

Annex D (normative) Impact test method for guards 46

D.1 General 46
D.2 Test method 46
D.2.1 Preliminary remarks 46
D.2.2 Testing equipment 46
D.2.3 Projectile for guards 46
D.2.4 Sampling 46
D.2.5 Test procedure 47
D.3 Results 47
D.4 Assessment 47
D.5 Test report 47
D.6 Test equipment for impact test 47

Annex E (normative) Braking tests 51

E.1 Conditions for all tests 51
E.2 ####Un-braked$$$$ run-down time 51
E.3 Braked run-down time 51

Annex ZA (informative) !Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC""""" 53

Bibliography 56