DIN EN ISO 4254-1:2022-12 (E)

Agricultural machinery - Safety - Part 1: General requirements (ISO 4254-1:2013 + Amd 1:2021) (includes Amendment A1:2021)

Contents

Page

European foreword ... **4**

[A1] European foreword to Amendment [A1] ... **5**

[A1] Annex ZA (informative) **Relationship between this European Standard and the Essential Requirements of Directive 2006/42/EC Machinery aimed to be covered [A1]** ... **6**

[A1] Foreword to Amendment [A1] ... **10**

Introduction ... **11**

1 Scope ... **12**

2 Normative references ... **12**

3 Terms and definitions ... **14**

4 Safety requirements and/or measures applicable to all machines ... **16**
4.1 Fundamental principles, design guidance ... 16
4.2 Protection from moving parts involved in the work ... 16
4.3 Noise ... 16
4.4 Vibration ... 17
4.5 Controls ... 17
4.6 Automatic mode of operation ... 18
4.7 Operator stations ... 18
4.8 Other than operator stations ... 21
4.9 Folding elements ... 23
4.10 Strength requirements for guards and barriers ... 23
4.11 Supports for service and maintenance ... 23
4.12 Electric equipment ... 24
4.13 Hydraulic components and fittings ... 24
4.14 Pneumatic systems ... 24
4.15 Operating fluids ... 24
4.16 Manual operation of individual assemblies ... 25
4.17 Service and handling of machine parts ... 25
4.18 Electromagnetic compatibility ... 25
4.19 Emergency stop ... 25
4.20 Safety-related parts of control systems ... 26

5 Safety requirements and/or measures — Self-propelled ride-on machines ... **26**
5.1 Operator station ... 26
5.2 Moving the machine ... 29
5.3 Electric ... 30
5.4 Fuel tank ... 30
5.5 Hot surfaces ... 30
5.6 Exhaust gases ... 30
5.7 Roll- and tip-over ... 30

6 Safety requirements and/or measures — Mounted, semi-mounted and trailed machines ... **31**
6.1 Controls ... 31
6.2 Stability ... 31
6.3 Hitches for towing ... 32

6.4 Transmission of mechanical power between self-propelled machines/tractors and recipient machinery 32
6.5 Hydraulic, pneumatic and electrical connections with a self-propelled machine or towing vehicle 33
7 Verification of safety requirements or protective measures 33
8 Information for use 34
8.1 General 34
8.2 Operator's manual 34
8.3 Safety and instructional signs 36
8.4 Marking 36
Annex A (informative) **List of significant hazards 37**
Annex B (normative) **Noise test code (engineering method grade 2) 41**
Annex C (normative) **Strength tests 45**
Annex D (informative) **Stability of tractor machine combinations 47**
〚A1〛 **Annex E** (informative) **Guidance for risk assessment and determination of performance levels for safety-related parts of control systems** 〚A1〛 **..... 49**
Bibliography 51