

# 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    |
| <b>A1</b> European foreword to Amendment <b>A1</b>  |  | 5    |
| <b>A1</b> Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of Directive 2006/42/EC Machinery aimed to be covered <b>A1</b> |  | 6    |
| <b>A1</b> Foreword to Amendment <b>A1</b>   |  | 10   |
| Introduction  |  | 11   |
| <b>1</b> Scope  |  | 12   |
| <b>2</b> Normative references   |  | 12   |
| <b>3</b> Terms and definitions  |  | 14   |
| <b>4</b> 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   |
| <b>5</b> 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   |
| <b>6</b> 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        |
| <b>7</b>   | <b>Verification of safety requirements or protective measures.....</b>                                  | <b>33</b> |
| <b>8</b>   | <b>Information for use.....</b>   | <b>34</b> |
| 8.1  | General.....  | 34        |
| 8.2  | Operator's manual.....  | 34        |
| 8.3  | Safety and instructional signs.....   | 36        |
| 8.4  | Marking.....  | 36        |
| <b>Annex A (informative) List of significant hazards.....</b>  |   | <b>37</b> |
| <b>Annex B (normative) Noise test code (engineering method grade 2).....</b>   |   | <b>41</b> |
| <b>Annex C (normative) Strength tests.....</b>   |   | <b>45</b> |
| <b>Annex D (informative) Stability of tractor machine combinations.....</b>  |   | <b>47</b> |
| <b>Annex E (informative) Guidance for risk assessment and determination of performance levels for safety-related parts of control systems <sup>(A1)</sup>.....</b> |   | <b>49</b> |
| <b>Bibliography.....</b>   |   | <b>51</b> |