

# DIN EN ISO 11806-1:2022-08 (E)

**Agricultural and forestry machinery - Safety requirements and testing for portable, hand-held, powered brush-cutters and grass-trimmers - Part 1: Machines fitted with an integral combustion engine (ISO 11806-1:2022)**

---

<b>Contents</b>		<b>Page</b>
European foreword .....		4
Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered .....		5
Foreword .....		8
Introduction .....		9
<b>1</b>	<b>Scope .....</b>	<b>10</b>
<b>2</b>	<b>Normative references .....</b>	<b>10</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>11</b>
<b>4</b>	<b>Safety requirements and/or protective measures .....</b>	<b>13</b>
4.1	General .....	13
4.2	Handles .....	14
4.2.1	Requirements .....	14
4.2.2	Verification .....	15
4.3	Barrier and distance to cutting attachment for brush-cutters .....	15
4.3.1	Requirements .....	15
4.3.2	Verification .....	16
4.4	Harness .....	17
4.4.1	Requirements .....	17
4.4.2	Verification .....	17
4.5	Balance .....	17
4.5.1	Requirements .....	17
4.5.2	Verification .....	18
4.6	Cutting attachment strength .....	18
4.6.1	Requirements .....	18
4.6.2	Verification .....	18
4.7	Cutting attachment retention .....	18
4.7.1	Requirements .....	18
4.7.2	Verification .....	18
4.8	Cutting attachment guards .....	19
4.8.1	Requirements .....	19
4.8.2	Verification .....	19
4.9	Transport cover .....	19
4.9.1	Requirements .....	19
4.9.2	Verification .....	19
4.10	Length of flexible cutting lines .....	19
4.10.1	Requirements .....	19
4.10.2	Verification .....	20
4.11	Engine starting device .....	20
4.11.1	Requirements .....	20
4.11.2	Verification .....	20
4.12	Engine stopping device .....	20
4.12.1	Requirements .....	20

4.12.2	Verification .....	20
4.13	Throttle control .....	20
4.13.1	Position .....	20
4.13.2	Operation .....	20
4.13.3	Throttle control latch .....	22
4.14	Clutch .....	23
4.14.1	Requirements .....	23
4.14.2	Verification .....	23
4.15	Tanks .....	23
4.15.1	General .....	23
4.15.2	Fuel tank structural integrity .....	24
4.15.3	Fuel feed line strength and accessibility .....	24
4.16	Protection against contact with parts of the machine under high voltage .....	24
4.16.1	Requirements .....	24
4.16.2	Verification .....	24
4.17	Protection against contact with hot parts .....	24
4.17.1	Requirements .....	24
4.17.2	Verification .....	24
4.18	Exhaust gases .....	25
4.18.1	Requirement .....	25
4.18.2	Verification .....	25
4.19	Vibration .....	26
4.19.1	Reduction by design at source and by protective measures .....	26
4.19.2	Vibration measurement .....	26
4.20	Noise .....	26
4.20.1	Reduction by design at source and by protective measures .....	26
4.20.2	Noise measurement .....	26
4.21	Electromagnetic immunity .....	26
4.21.1	Requirements .....	26
4.21.2	Verification .....	26
5	Information for use .....	27
5.1	Instructions .....	27
5.1.1	General .....	27
5.1.2	Technical data .....	27
5.1.3	Other information .....	27
5.2	Marking .....	29
5.3	Warnings .....	30
5.4	Test of labels .....	31
5.4.1	Preparation of test specimens and control specimens .....	31
5.4.2	Wipe resistance test .....	31
5.4.3	Adhesion test .....	32
Annex A (normative) Cutting attachment impact and spin test .....		33
Annex B (normative) Thrown objects test .....		35
Annex C (informative) List of significant hazards .....		39
Annex D (normative) Structural integrity of fuel tanks .....		41
Annex E (normative) Procedures for the evaluation of the strength and accessibility of fuel feed lines .....		42
Bibliography .....		43