

# DIN EN 15436-2:2015-09 (E)

## Road service area maintenance equipment - Part 2: Performance assessment

---

<b>Contents</b>		<b>Page</b>
Foreword .....		4
Introduction .....		5
<b>1</b>	<b>Scope .....</b>	<b>6</b>
<b>2</b>	<b>Normative references .....</b>	<b>6</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>6</b>
<b>4</b>	<b>Cutting specifications check .....</b>	<b>6</b>
4.1	Articulated-arm grass cutter - brushcutter .....	6
4.1.1	Cutting width (w) .....	6
4.1.2	Cutting height (h) .....	6
4.1.3	Cutting rotor stop time .....	6
4.2	In-line flail mower .....	7
4.2.1	Cutting width (w) .....	7
4.2.2	Cutting height (h) .....	7
4.2.3	Cutting tool stop time .....	7
4.3	Mechanical plant cutting .....	7
4.3.1	Cutting width (w) .....	7
4.3.2	Cutting tool stop time .....	8
<b>5</b>	<b>Kinematic properties check .....</b>	<b>8</b>
5.1	General .....	8
5.2	Articulated-arm grass cutters - brushcutters .....	9
5.2.1	General .....	9
5.2.2	Horizontal range (A) .....	10
5.2.3	Embankment range (E) .....	10
5.2.4	Ditch range (D1) .....	10
5.2.5	Ditch range with slide rail (D2) .....	10
5.2.6	Offset (S) .....	13
5.2.7	Cutting head clearance angle .....	13
5.2.8	Cutting head rotation angle .....	13
5.3	In-line flail mower .....	13
5.3.1	General .....	13
5.3.2	Horizontal range (A) .....	14
5.3.3	Horizontal clearance (Dh) .....	14
5.3.4	Embankment range (R = E + F) .....	14
5.3.5	Ditch range (D = E + F) .....	15
5.3.6	Cutting head clearance angle .....	15
5.4	Mechanical plant cutting .....	15
5.4.1	General .....	15
5.4.2	Vertical range (B) .....	16
5.4.3	Hedge side range (I) .....	16
5.4.4	Hedge side position variation ( I) .....	17
5.4.5	Maximum hedge topping height (C) .....	17
5.4.6	Offset (Dp) .....	17
5.4.7	Cutting head clearance angle .....	18
<b>6</b>	<b>Weights and dimensions check .....</b>	<b>18</b>
6.1	General .....	18

6.2	Transport dimensions .....	20
6.2.1	General .....	20
6.2.2	Height (H) .....	20
6.2.3	Width (L1 + L2) .....	20
6.2.4	Length (Lg1 + Lg2) .....	20
6.3	Total machine weight .....	20
7	Specifications check for machines driven over PTO shaft with mechanical or hydraulic power transmission .....	21
7.1	General .....	21
7.2	Measurements to be performed and data required .....	21
7.2.1	Hydraulic circuit oil temperature .....	21
7.2.2	Machine power supply .....	21
7.2.3	Cutting tool rotational speed .....	21
7.2.4	Cutting tool rotating torque .....	21
7.2.5	Cutting tool circumferential speed .....	22
7.2.6	Cutting head kinetic energy .....	22
7.3	Determination of power .....	22
7.3.1	General .....	22
7.3.2	Parameters to be measured .....	22
7.3.3	Formula to be applied .....	23
7.4	Performance characteristics .....	23
7.4.1	General .....	23
7.4.2	Maximum continuous power .....	23
7.4.3	Maximum instantaneous power .....	24
8	Specifications check for machines with power supplied by the carrying vehicle hydraulics .....	25
8.1	General .....	25
8.2	Measurements to be performed and data required .....	25
8.2.1	Hydraulic circuit oil temperature .....	25
8.2.2	Machine power supply .....	25
8.2.3	Cutting tool rotational speed .....	25
8.2.4	Cutting tool rotating torque .....	25
8.2.5	Cutting tool circumferential speed .....	26
8.2.6	Cutting tool kinetic energy .....	26
8.3	Determination of power .....	26
8.3.1	General .....	26
8.3.2	Parameters to be measured .....	26
8.3.3	Formula to be applied .....	27
8.4	Performance characteristics .....	27
8.4.1	General .....	27
8.4.2	Maximum continuous power .....	27
8.4.3	Maximum instantaneous power .....	28
	Annex A (informative) Presentation of results - Articulated-arm grass cutters - Brush cutters .....	29
	Annex B (informative) Presentation of results - In-line flail mowers .....	32
	Annex C (informative) Presentation of results - Mechanical plant cutting .....	34
	Annex D (normative) Tests with movable arms .....	37
	Bibliography .....	38