

# DIN EN ISO 16122-3:2018-09 (E)

## Agricultural and forestry machinery - Inspection of sprayers in use - Part 3: Sprayers for bush and tree crops (ISO 16122- 3:2015)

---

<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>Requirements and method of verification</b> .....	<b>7</b>
4.1	Leaks and dripping.....	7
4.1.1	Static leaks.....	7
4.1.2	Dynamic leaks.....	7
4.1.3	Spraying and dripping on parts.....	7
4.2	Pump(s).....	7
4.2.1	Capacity.....	7
4.2.2	Pulsations.....	8
4.2.3	Air chamber.....	8
4.3	Spray mix agitation.....	8
4.3.1	Hydraulic.....	8
4.3.2	Mechanical.....	8
4.4	Spray liquid tank(s).....	8
4.4.1	Lid.....	8
4.4.2	Filling hole(s).....	8
4.4.3	Induction hopper.....	9
4.4.4	Pressure compensation.....	9
4.4.5	Tank content indicator(s).....	9
4.4.6	Tank emptying.....	9
4.4.7	Tank filling.....	9
4.4.8	Cleaning device for plant protection product containers.....	9
4.4.9	Cleaning equipment.....	9
4.5	Measuring systems, controls and regulation systems.....	10
4.5.1	General.....	10
4.5.2	Pressure indicator.....	10
4.5.3	Other measuring devices.....	11
4.5.4	Pressure adjusting devices.....	11
4.6	Lines (pipes and hoses).....	11
4.7	Filters.....	11
4.7.1	Filter presence.....	11
4.7.2	Isolating device.....	11
4.7.3	Filter insert changeability.....	11
4.8	Nozzles.....	11
4.8.1	Symmetry.....	11
4.8.2	Dripping.....	12
4.8.3	Switching off.....	12
4.8.4	Adjustment.....	12
4.9	Pressure drop.....	12
4.9.1	General.....	12
4.9.2	Compensative returns.....	12
4.9.3	Distribution.....	12

4.10	Blower .....	13
4.10.1	Switching off .....	13
4.10.2	Adjustability .....	13
4.11	Spray guns and lances .....	14
4.11.1	Trigger .....	14
4.11.2	Adjustment of flow rate and angle .....	14
<b>5</b>	<b>Test methods .....</b>	<b>14</b>
5.1	Test facilities .....	14
5.2	Spray and agitation pump(s) .....	14
5.2.1	Pump capacity test .....	14
5.2.2	Pump pulsations .....	15
5.3	Sprayer's pressure indicators .....	15
5.3.1	Specifications of pressure indicators used for verification .....	15
5.3.2	Verification method of the sprayer pressure indicator .....	16
5.4	Flow meters for controlling the volume/hectare rate .....	16
5.4.1	General .....	16
5.4.2	Operating procedure No. 1: Verification by nozzle flow rate measurement .....	16
5.4.3	Operating Procedure No. 2: Verification by installing a calibrated flow meter on the circuit of the sprayer .....	17
5.5	System for controlling forward speed .....	17
5.6	Flow rate of the spray nozzles .....	18
5.6.1	General .....	18
5.6.2	Measurement with nozzles fitted on the sprayer .....	18
5.6.3	Measurement with nozzles removed from the sprayer .....	18
5.7	Pressure drop .....	19
5.8	Pressure variation when the spray is switched off .....	19
5.9	Pressure distribution .....	19
<b>Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2009/128/EC .....</b>		<b>20</b>
<b>Bibliography .....</b>		<b>21</b>