

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)

Contents		Page
Foreword.....		4
Introduction.....		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Requirements and method of verification	7
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
5	Test methods	14
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
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2009/128/EC		20
Bibliography		21