INTERNATIONAL STANDARD

ISO 10627-1

First edition
1992-06-15

Agricultural sprayers — Data sheet —

Part 1:
Typical layout

Pulvérisateurs agricoles — Fiche technique —

Partie 1: Plan type de présentation

Reference number
ISO 10627-1:1992(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 10627-1 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Sub-Committee SC 6, *Equipment for crop protection*.

ISO 10627 consists of the following parts, under the general title *Agricultural sprayers — Data sheet*:

— *Part 1: Typical layout*

— *Part 2: Technical specifications related to components*

Annex A of this part of ISO 10627 is for information only.

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Agricultural sprayers — Data sheet —

Part 1:
Typical layout

1 Scope

This International Standard establishes directives for the presentation of a typical data sheet layout, for the preparation of documents giving the dimensions and performance of non-air-assisted agricultural sprayers.

It applies to preparation of data sheets by manufacturers and importers of non-air-assisted agricultural sprayers, whether mounted, trailed or self-propelled, used for the protection and/or fertilization of crops.

NOTE 1 Terminology used in this part of ISO 10627 is in accordance with ISO 5681:—, *Equipment for crop protection — Vocabulary* (to be published; revision of ISO 5681:1981).

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 10627. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 10627 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 789-3:1982, *Agricultural tractors — Test procedures — Part 3: Turning and clearance diameters.*

ISO 2288:1989, *Agricultural tractors and machines — Engine test code (bench test) — Net power.*

ISO 4254-1:1989, *Tractors and machinery for agriculture and forestry — Technical means for ensuring safety — Part 1: General.*

ISO 5682-2:1986, *Equipment for crop protection — Spraying equipment — Part 2: Test methods for agricultural sprayers.*

3 Data sheet typical layout

3.1 General

Manufacturer: .....

Type: .....

Model: .....

Capacity: l

Working width: ..... m

Date of manufacture: .....

Data sheet in conformity with ISO 10627,

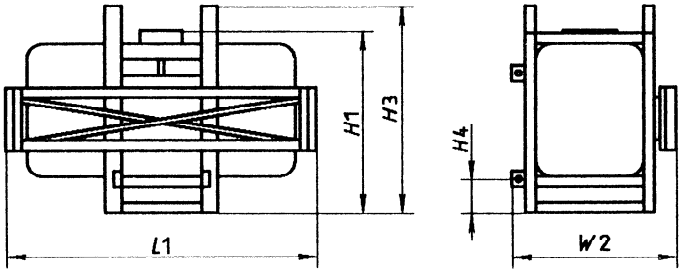
drawn up by: .....

Date: .....

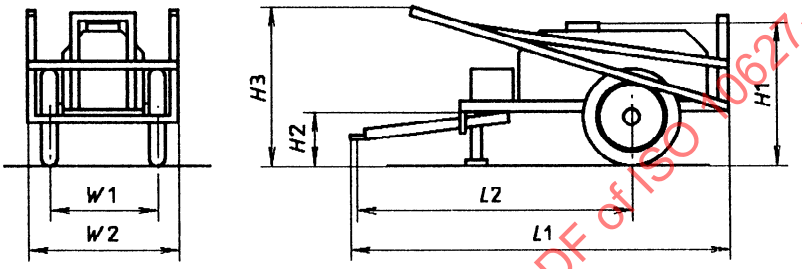
3.2 Dimensions (see figure 1)

	Mounted equipment	Trailed equipment	Self-propelled equipment
Total length, *L* 1:	m	m	m
Axle-coupling length, *L* 2:		m	
Wheelbase, *L* 3:		m	m
Wheel track, *W* 1			
non-variable:		m	m
minimum:		m	m
maximum:		m	m
Height to top of tank filler, *H* 1:	m	m	m
Clearance (below chassis at axle), *H* 2:		m	m
Transport width (boom folded), *W* 2:	m	m	m
Total height during transport, *H* 3:	m	m	m
Height of lower coupling points, *H* 4:	m		

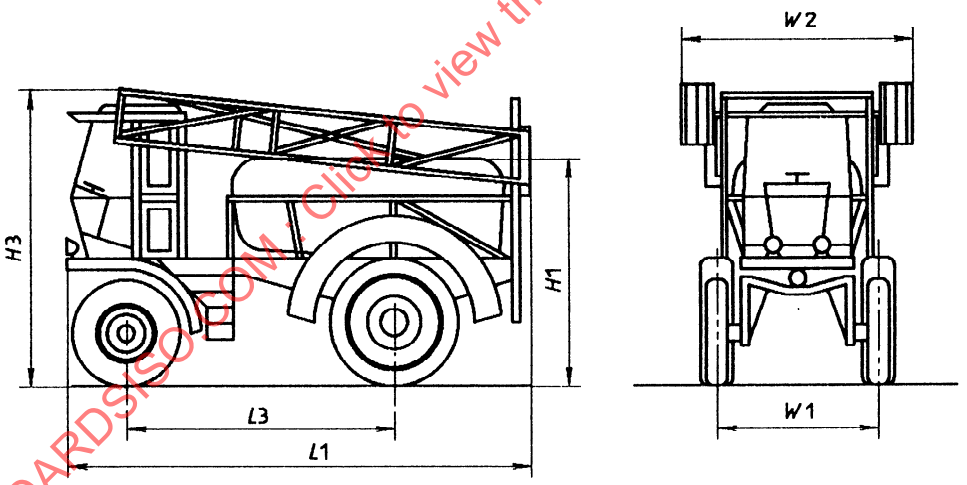
Minimum turning radius (determined in accordance with ISO 789-3): ..... m



a) Mounted equipment



b) Trailed equipment



c) Self-propelled equipment

Figure 1 — Dimensions

3.3 Masses

			Mass on drawbar kg	Mass on wheels kg	Total mass kg	Front axle mass kg	Rear axle mass kg	Total mass kg
Sprayer empty	— Boom in transport							
	— Boom in operation							
Sprayer full	— Boom in transport							
	— Boom in operation							

3.4 Tyres

	Trailed equipment	Self-propelled equipment	
		Front	Rear
Make:			
Type:			
Size:			
Inflation pressure:			

3.5 Brakes

	Trailed equipment	Self-propelled equipment
Parking brake:		
Foot-brake (specify type):		

3.6 Self-propelled equipment – Other specifications

3.6.1 Engine

Make: .....

Type and cycle: .....

Supercharged: ..... YES NO

Cooling: .....

Number and arrangement of cylinders: .....

Engine capacity: ..... cm³

Rated speed: ..... r/min

Output (see ISO 2288): ..... kW

Fuel tank capacity: l

3.6.2 Transmission

Mechanical | Hydraulic | Hydraulic and mechanical

Speed range: ..... km/h to km/h

Drive-axle

front: ..... YES NO

rear: ..... YES NO

Clutch: .....

Steering: ..... Mechanical Hydraulic

3.6.3 Driving position

Location:..... Front | Central | Rear

Cab: ..... YES | NO

Seat

make:.....

type:.....

adjustable:..... YES | NO

Windscreen washer: ..... YES | NO

Number of windscreen wipers: .....

Cab filtering:..... Mechanical | Chemical

3.6.4 Other equipment

Spotlight:..... YES | NO

Auxiliary rinsing tank:..... YES | NO

Dividers on front wheels:..... YES | NO

Rear coupling device: ..... YES | NO

Tool kit: ..... YES | NO

Area meter: ..... YES | NO

3.6.5 Optional equipment

(To be specified.)

3.7 Sprayer tank

3.7.1 General specifications

Construction material : .....

Nominal capacity: l

Overflow capacity: l

Sump capacity: l

Shape of filler port: .....

Dimension of filler port: .....

Tank baffles: ..... YES NO

3.7.2 Tank discharge

Type: .....

Location of control: .....

3.7.3 Tank level gauge

Type: .....

Gauge measuring position: .....

Reading system: .....

Graduation: .....

3.7.4 Tank access arrangement

Type: .....

Dimensions: .....

Platform

non-slip: ..... YES NO

spillage-retaining: ..... YES NO

Guardrails in conformity with ISO 4254-1: ..... YES NO

Toeboards in conformity with ISO 4254-1: ..... YES NO

3.8 Pumps

3.8.1 Main pump

Type (e.g. diaphragm, centrifugal, etc.): .....

Model: .....

Manufacturer: .....

Drive: ..... Pulley PTO Other

Transmission to pump (e.g. shaft, chain, hydraulic, etc.): .....

Other transmission: ..... YES NO

Number of ratios: .....

Disengagement while on road: ..... YES NO

Flow rate (calculated in accordance with ISO 5682-2): ..... l/min

3.8.2 Auxiliary pump

Use (e.g. for stirring during filling, etc.): .....

Type (e.g. diaphragm, centrifugal, etc.): .....

Model: .....

Manufacturer: .....

Drive to pump (e.g. shaft, chain, hydraulic, etc.): .....

3.9 Filling sprayer tank

3.9.1 With water

Filling method: .....

Flow rate (in accordance with ISO 5682-2): ..... l/min

Filling time (in accordance with ISO 5682-2): ..... min

Non-return valve fitted: ..... YES NO

Non-return valve location: .....

3.9.2 With pesticides

Pesticide incorporator fitted as standard: ..... YES NO

type (e.g. probe/lance, container, etc.): .....

Pesticide metering device: ..... YES NO

Non-return valve: ..... YES NO

Can device be cleaned ? ..... YES NO

Storage of lance/probe — description: .....

If incorporator device not fitted, can pesticide be safely introduced to sprayer ? ..... YES NO

3.10 Filters

3.10.1 At filler port ..... YES NO

Type:.....

Location:.....

Wire diameter: ..... mm

Material of filter element:.....

3.10.2 At pump inlet ..... YES NO

Type:.....

Location:.....

Wire diameter: ..... mm

Material of filter element:.....

3.10.3 At pump discharge ..... YES NO

Type:.....

Location:.....

Wire diameter: ..... mm

Material of filter element:.....

3.10.4 At nozzles ..... YES NO

Type:.....

Location:.....

Wire diameter: ..... mm

Material of filter element:.....

3.11 Stirrer

Type:.....

Location:.....

Can stirring be disengaged ?..... YES NO

Is stirring adjustable ? ..... YES NO

3.12 Control

At constant pressure:..... YES NO

With gauged return:..... YES NO

If yes, describe system:

With flow proportional to forward speed: ..... YES NO

If yes, describe system:

Other control system (describe):

3.13 Distribution

General valve: ..... YES NO

Valve for boom sections: ..... YES NO

Pressure gauge: ..... YES NO

Remote control: ..... YES NO

If yes, describe:

Remote control power source: .....

Are hoses taken into tractor/self-propelled sprayer cab ? ..... YES NO

3.14 Boom

Location: ..... Front Rear

Working width: ..... m

Number of sections: .....

Total mass of boom (without liquid): ..... kg

Chassis boom link: ..... Rigid Suspended

If suspended, describe principle:

Height adjustment

minimum: ..... Mechanical | Hydraulic

maximum: ..... Mechanical | Hydraulic

Winch safety device: ..... YES | NO

Attitude correction: ..... YES | NO

If yes, specify:

Boom folding: ..... Manual | Hydraulic

Folding: ..... to side | to rear

Maximum mass of boom section to be handled: ..... kg

If manual folding, are booms secured in closed position for transport ? ..... YES | NO

When folded topside, does the boom restrict access to and from driving position ? ..... YES | NO

Boom height indicator fitted: ..... YES | NO

3.15 Nozzles

Interval between nozzles on boom: ..... mm

Standard nozzles

make: .....

type: .....

Quick release/bayonet fitting: ..... YES | NO

Anti-drip device:..... YES NO

If yes, describe:

Device for isolation or selection of nozzles:..... YES NO

If yes, describe:

3.16 Instruction manual and parts list

Instruction manual provided: ..... YES NO

Parts list provided:..... YES NO

Instructions on safe use of sprayer: ..... YES NO