

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.

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:

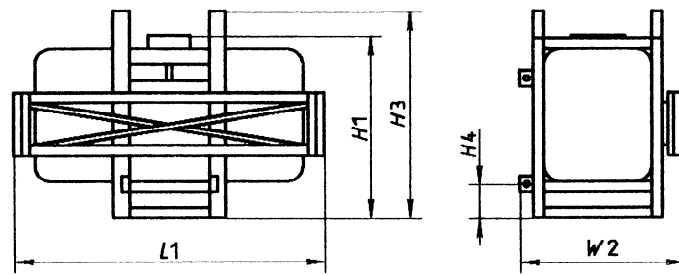
Data sheet in conformity with ISO 10627,

drawn up by:

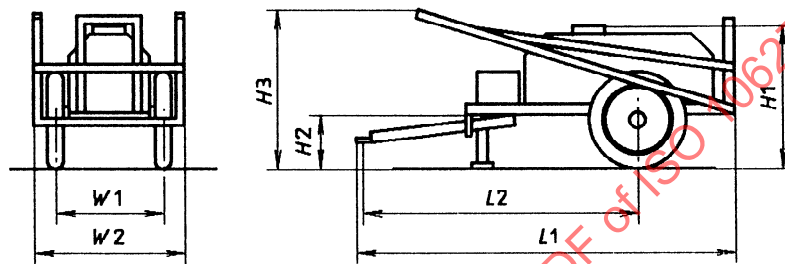
Date:

3.2 Dimensions (see figure 1)

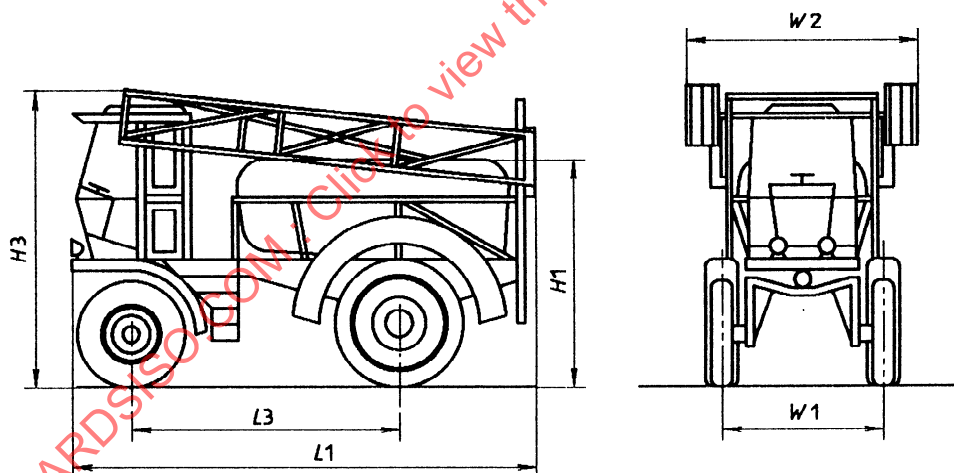
	Mounted equipment	Trailed equipment	Self-propelled equipment
Total length, L_1 :	m	m	m
Axle-coupling length, L_2 :		m	
Wheelbase, L_3 :		m	m
Wheel track, W_1			
non-variable:		m	m
minimum:		m	m
maximum:		m	m
Height to top of tank filler, H_1 :	m	m	m
Clearance (below chassis at axle), H_2 :		m	m
Transport 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
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Transmission to pump (e.g. shaft, chain, hydraulic, etc.):

Other transmission:	YES	NO
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Number of ratios:.....

Disengagement while on road:	YES	NO
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Flow rate (calculated in accordance with ISO 5682-2):.....	l/min
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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