
Air-assisted agricultural sprayers — Data sheets —

Part 2:

Technical specifications related to components

*Pulvérisateurs agricoles à jet porté — Fiches techniques —
Partie 2: Spécifications techniques relatives aux composants*
(standards.iteh.ai)

ISO 13441-2:1997

<https://standards.iteh.ai/catalog/standards/sist/590db852-6a1b-45c2-9d00-a358ae89baa6/iso-13441-2-1997>



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 13441-2 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 6, *Equipment for crop protection*.

ISO 13441 consists of the following parts, under the general title *Air-assisted agricultural sprayers — Data sheets* :

- Part 1 : *Typical layout*
- Part 2 : *Technical specifications related to components*

Annex A forms an integral part of this part of ISO 13441.

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International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

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Air-assisted agricultural sprayers — Data sheets —

Part 2:

Technical specifications related to components

1 Scope

This part of ISO 13441 establishes the technical specifications of data sheet presentation, for the preparation of documents giving information about dimensions, materials, characteristics and design of air-assisted agricultural sprayers used for the application of crop protection products in arboriculture, viticulture and hop cultivation. Use of data sheets prepared according to this part of ISO 13441 will facilitate discussion between the manufacturers of sprayers and the manufacturers of component parts and accessories.

This part of ISO 13441 does not cover mass and dimensions of the sprayer, nor information relating to the basic machine required by the manufacturer. Such information is given in ISO 13441-1.

This part of ISO 13441 is applicable during the preparation of data sheets by manufacturers or importers of air-assisted agricultural sprayers, whether mounted, trailed or self-propelled.

The list of codes to be used for the codified descriptors is given in annex A.

2 General specifications

2.1 Manufacturer

Name and address of manufacturer/distributor/importer:

.....

.....

.....

.....

2.2 Type and year of manufacture

Type:

Mounted	Trailed (p.t.o. driven)
Self-propelled	Trailed (driven by engine)

General design of spraying and auxiliary devices (code 502):

Capacity:

Year of manufacture:

Model:

Direct indication of the year of manufacture (explanation of code):

Location of marking (code 101):

2.3 Trade-name(s)

3 Tank specifications

	Principal tank	Rinsing tank	Clean water tank
3.1 Material (code 102)	<input type="text"/>	<input type="text"/>	<input type="text"/>
3.2 Volume			
Nominal volume:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Real volume:	<input type="text"/>	<input type="text"/>	<input type="text"/>

3.3 Dimensions

	Principal tank	Rinsing tank	Clean water tank
Length:.....	<input type="text" value="mm"/>	<input type="text" value="mm"/>	<input type="text" value="mm"/>
Width:.....	<input type="text" value="mm"/>	<input type="text" value="mm"/>	<input type="text" value="mm"/>
Height (to the upper edge of filling hole):.....	<input type="text" value="mm"/>	<input type="text" value="mm"/>	<input type="text" value="mm"/>

3.4 Level indicator

Type (code 303):	<input type="text"/>	<input type="text"/>	<input type="text"/>
Indicating range:	from l to l	from l to..... l	from l to l
Graduation:.....	<input type="text" value="l"/>	<input type="text" value="l"/>	<input type="text" value="l"/>
Location (code 304):.....	<input type="text"/>	<input type="text"/>	<input type="text"/>

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3.5 Filling hole

Location (code 306):.....	<input type="text"/>	<input type="text"/>	<input type="text"/>
Diameter:	<input type="text" value="mm"/>	<input type="text" value="mm"/>	<input type="text" value="mm"/>
Filling sieve			
material (code 102):.....	<input type="text"/>	<input type="text"/>	<input type="text"/>
diameter:.....	<input type="text" value="mm"/>	<input type="text" value="mm"/>	<input type="text" value="mm"/>
depth:.....	<input type="text" value="mm"/>	<input type="text" value="mm"/>	<input type="text" value="mm"/>
filtration surface:	<input type="text" value="mm<sup>2</sup>"/>	<input type="text" value="mm<sup>2</sup>"/>	<input type="text" value="mm<sup>2</sup>"/>
mesh width:.....	<input type="text" value="mm"/>	<input type="text" value="mm"/>	<input type="text" value="mm"/>
Cap design (code 305):	<input type="text"/>	<input type="text"/>	<input type="text"/>

3.6 Agitator

Type (code 307):	<input type="text"/>	<input type="text"/>	<input type="text"/>
Design (code 308):	<input type="text"/>	<input type="text"/>	<input type="text"/>
Location (code 310):.....	<input type="text"/>	<input type="text"/>	<input type="text"/>

3.7 Drainage device

	Principal tank	Rinsing tank	Clean water tank
Type (code 312):.....	<input type="text"/>	<input type="text"/>	<input type="text"/>
Design (code 313):	<input type="text"/>	<input type="text"/>	<input type="text"/>
Location (code 314):.....	<input type="text"/>	<input type="text"/>	<input type="text"/>

3.8 Filling device for principal tank

Type (code 315):.....

Design (code 316):

Location (code 317):.....

Volumetric flow rate with water: l/min

Shut-off valve:..... YES NO

location:

Crop protection product induction unit:..... YES NO

design (code 318):.....

location (code 319):.....

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3.9 Dosing devices for crop protection products

Type (code 320):.....

Design (code 321):

Location (code 319):.....

Measuring range:.....

Measuring accuracy:.....

4 Pump specifications

4.1 Main pump

Manufacturer:

Design (code 402):

Trade-name:

Model:

Location (code 403):

Drive (code 404):

Connection:

Nominal pressure: MPa

Nominal speed: r/min

Volumetric flow rate
 non-pressurised: l/min

at nominal pressure: l/min

Pressure pulsation damper: YES NO

design (code 407):

material (code 102):

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4.2 Other pumps

Function (code 405):

Manufacturer:

Design (code 402):

Designation:

Location (code 403):

Drive (code 404):

Connection:

Nominal pressure:..... MPa

Nominal speed:..... r/min

Volumetric flow rate

 non-pressurised:..... l/min

 at nominal pressure:..... l/min

Pressure pulsation damper:..... YES NO

 design (code 407):.....

 material (code 102):.....

5 Specifications for spraying and auxiliary devices

Operating principle (code 501):.....

General design (code 502):.....

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5.1 Spraying device

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Number of independent sectors:.....

Total number of nozzles:.....

Nozzle tips

 trade-name:.....

 model:.....

 design (code 711):.....

 manufacturer:.....

 number:.....

 location (code 714):.....

 optimum spraying pressure:..... MPa

 spraying pressure range:..... from..... MPa to MPa

 speed of recommended rotation (centrifugal nozzles):..... r/min

Nozzle body

designation:

design (code 715):.....

movement (code 716):.....

regulation of spraying angle:.....

material (code 102):.....

swivel nut thread:

Anti-drip device

designation:

design (code 720):.....

material (code 102):.....

opening pressure: MPa

closing pressure: MPa

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Individual shut-off device

design (code 721):.....

function:

control (code 103):.....

Inter-nozzle supply line

design:

material (code 102):.....

inside diameter: mm

outside diameter: mm

maximum operating pressure (indicated by marking):..... MPa

5.2 Air assistance device

5.2.1 Main fan(s)

Design (code 503):

Inside diameter at rotor position: mm

Blade material (code 102):.....

Adjustment of blade attack angle:..... YES NO

Number of positions:.....

Inside deflectors before rotor: YES NO

Inside deflectors after rotor: YES NO

Fan drive mechanism (code 504):.....

Centrifugal clutch: YES NO

Gear box in transmission: YES NO

Multiplication ratios:

Neutral point: YES NO

Total air throughput (maximum):..... m³/h

Adjustment of flow rate in proportion to feed speed: YES NO

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5.2.2 Air flow direction deflectors

Design (code 505):

Material:

Movement (code 506):.....

Folding away for transport (code 508):.....

5.2.3 Additional fan(s)

Number:

Design (code 507):

Blade material (code 102):.....

Drive mechanism:.....

Total air throughput (maximum): m³/h

Adjustment of operating height:..... YES NO

Folding away for transport (code 508):.....

5.2.4 Air lines for each nozzle

Total number of lines:

Direction adjustment:..... YES NO

5.2.5 Recuperation or reflection panels

Design (code 509):

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6 Specifications for liquid line(s) [ISO 13441-2:1997](https://standards.iteh.ai/catalog/standards/sist/590db852-6a1b-45c2-9d00-a358ae89baa6/iso-13441-2-1997)

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6.1 Suction lines

Number:.....

Material (code 102):.....

Design (code 801):

Inside diameter: mm

Length(s): m

Maximum operating pressure (indicated by marking):..... MPa

6.2 Pressure lines

6.2.1 From pump to central

Number:.....

Material (code 102):.....

Design (code 801):

Inside diameter:

Length(s):

Marked pressure:

6.2.2 Pressurised line(s) to spraying devices

Number:

Material (code 102):

Design (code 801):

Inside diameter(s):

Length(s):

Marked pressure:

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6.2.3 Agitator line(s)

Number:

Material (code 102):

Design (code 801):

Inside diameter(s):

Length(s):

Marked pressure:

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6.3 Return flow lines

Number:

Material (code 102):

Design (code 801):

Inside diameter(s):

Length(s):

Marked pressure:

6.4 Other lines

Number:

Location:

Material (code 102):

Design (code 801):

Inside diameter(s): mm

Length(s): m

7 Filter specifications

7.1 Filling filter

Material (code 102):

Inside diameter: mm

Length: mm

Filtering surface: mm²

Mesh width: mm

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7.2 Filter on the suction line

Number:

Design (code 803):

Location (code 804):

Filter element

material (code 102):

inside diameter: mm

length: mm

filtering surface: mm²

mesh width: mm