

Spraying equipment for crop protection — Air-assisted agricultural sprayers — Data sheets —

**Part 16: Technical specifications
related to components**

ICS 65.060.40

National foreword

This British Standard reproduces verbatim ISO 13441-2:1997 and implements it as the UK national standard.

The UK participation in its preparation was entrusted to Technical Committee AGE/15, Equipment for crop protection, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ISO title page, pages ii to iv, pages 1 to 35 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

This British Standard, having been prepared under the direction of the Engineering Sector Board, was published under the authority of the Standards Board and comes into effect on 15 November 1997

© BSI 04-2000

ISBN 0 580 28811 0

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
National foreword	Inside front cover
Foreword	iii
Text of ISO 13441-2	1

INTERNATIONAL STANDARD

ISO
13441-2

First edition
1997-08-15

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



Contents

	Page
Foreword	iii
1 Scope	1
2 General specifications	1
3 Tank specifications	2
4 Pump specifications	5
5 Specifications for spraying and auxiliary devices	6
6 Specifications for liquid line(s)	10
7 Filter specifications	12
8 Specifications for control and measuring devices	15
9 Regulation systems specifications	17
10 Specifications for volumes of residuals	19
11 Specifications for other special accessories	20
Annex A (normative) Code list	21

Descriptors: Agricultural machinery, crop protection, sprayers, agricultural sprayers, components, technical data sheets.

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.

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)			

3.2 Volume

Nominal volume:			
Real volume:			

3.3 Dimensions

	Principal tank	Rinsing tank	Clean water tank
Length:.....	mm	mm	mm
Width:.....	mm	mm	mm
Height (to the upper edge of filling hole):.....	mm	mm	mm

3.4 Level indicator

Type (code 303):			
Indicating range:	from l to l	from l to..... l	from l to l
Graduation:			
Location (code 304):.....			

3.5 Filling hole

Location (code 306):			
Diameter:	mm	mm	mm
Filling sieve			
material (code 102):			
diameter:	mm	mm	mm
depth:	mm	mm	mm
filtration surface:	mm<sup>2</sup>	mm<sup>2</sup>	mm<sup>2</sup>
mesh width:	mm	mm	mm
Cap design (code 305):			

3.6 Agitator

Type (code 307):			
Design (code 308):			
Location (code 310):			

3.7 Drainage device

	Principal tank	Rinsing tank	Clean water tank
Type (code 312):			
Design (code 313):			
Location (code 314):			

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):	

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):	

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):	