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Interested committees:

Title: Draft BS ISO 22142 ISO 22142 Road operation machinery. Winter maintenance equipment. Terms, definitions and classification.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT International Standard

ISO/DIS 22142

Road operation machinery — Winter maintenance equipment — Terms, definitions and classification

ICS: 01.040.43; 43.160

ISO/TC 195/SC 2

Secretariat: **DIN**

Voting begins on:
2025-05-14

Voting terminates on:
2025-08-06

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 195, *Building construction machinery and equipment*, Subcommittee SC 2, *Road operation machinery and associated equipment*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Road operation machinery — Winter maintenance equipment — Terms, definitions and classification

1 Scope

This document defines to terms, definitions and classifications of winter maintenance machines, equipment and products on traffic areas.

This document does not apply to:

- traffic areas on airports;
- offroad maintenance areas (e.g. ski pists).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1 Group 1: Snow clearing machines

3.1.1

blower tool

impeller

rotary tool for snow ejection

3.1.2

casting distance

ability of machines with rotating tools to throw snow in a certain distance measured in meter

3.1.3

castor wheels

wheels which support the snow clearing machine during operation

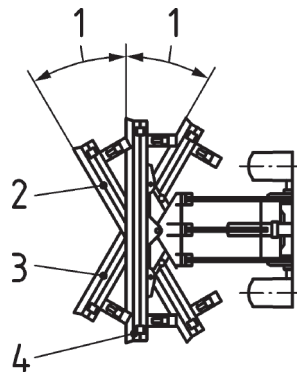
3.1.4

clearance angle

angle between the cutting-edge line of a snowplough and the front axle centerline of a vehicle in the angling position

Note 1 to entry: A snowplough displacement angle from the straight position.

Note 2 to entry: See [Figure 1](#).



Key

- 1 clearance angle
- 2 left angle position
- 3 right angle position
- 4 straight position

Figure 1 — Clearance angle

3.1.5

clearance height

snow height to be removed in one working process

3.1.6

clearance width

width cleared in a single run of a snow clearing machine

3.1.7

clearing capacity

amount of snow removed per hour

Note 1 to entry: Clearing capacity is expressed in kilogramme per hour.

3.1.8

cutter drum

cutting tool with spirals fixed to a drum for simultaneous snow ejection

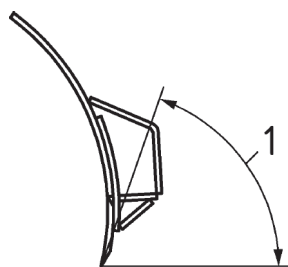
3.1.9

cutting angle

angle between the cutting edge of a plow or blade and the road surface behind the edge

Note 1 to entry: Utting angle can be greater than 90 degree when a plow or blade is tilted forward.

Note 2 to entry: See [Figure 2](#).



Key

- 1 cutting angle

Figure 2 — Cutting angle

3.1.10

device used to raise

device used to swivel the snow removal equipment to change the direction of snow removal and snow throwing

3.1.11

double scraper strip system

snowplough with two scraper strips that can be changed while working

3.1.12

down pressure

load proportion of the snow plough on the road surface in a down pressure position

3.1.13

down pressure position

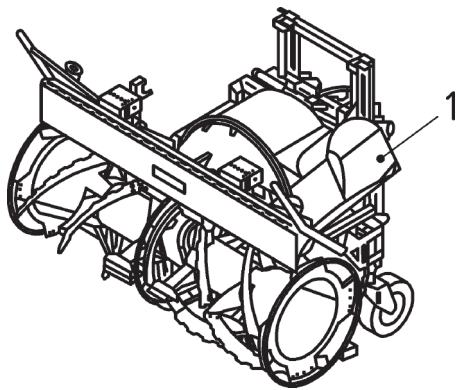
part of the vehicle weight applied to the road surface through the snow clearing machine

3.1.14

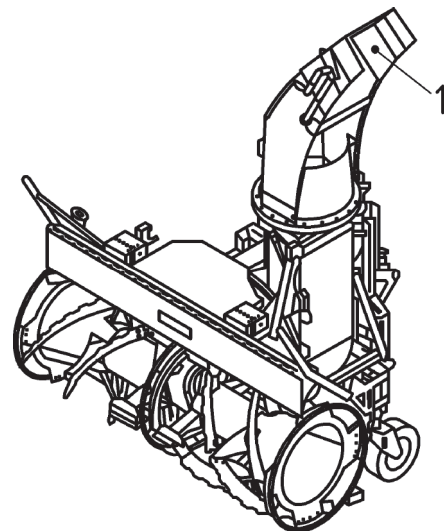
ejection device

ejection chute

equipment (channel) for rotary machines which enables a controlled ejection of snow



a) Direct ejection



b) Indirect ejection

Key

1 ejection chute

Note 1 to entry The ejection chute can be adjustable to achieve different casting distances and directions.

Note 2 to entry See also [Figure 3](#), [Figure 8](#) and [Figure 9](#).

Figure 3 — Ejection device

3.1.15

end bits

—

3.1.16

fixing device

device that equips and fixes the snow removal device to the mounting section of the main body of the snow removal machine

3.1.17

floating position

snow clearing machine glides on the road surface with its own weight

3.1.18

front-mounted snowplough

snowplough mounted to the front of a vehicle

3.1.19

lifting device

device used to raise and lower the snow removal equipment

3.1.20

one-sided snowplough

angle blade

straight blade

angle plough

straight plough

snowplough which moves snow to one side (left or right)

3.1.21

overload protection r

system allowing a snow blower or a snow cutter to contact obstacles without damaging the machine

3.1.22

override protection

system allowing a snowplough to contact obstacles without damaging the machine

3.1.23

passage width

free width

distance between the two outermost planes of a snow clearing machine parallel to the longitudinal center plane in the running position

Note 1 to entry: While running position, the blade is in upper position and in clearance angle.

3.1.24

plough section

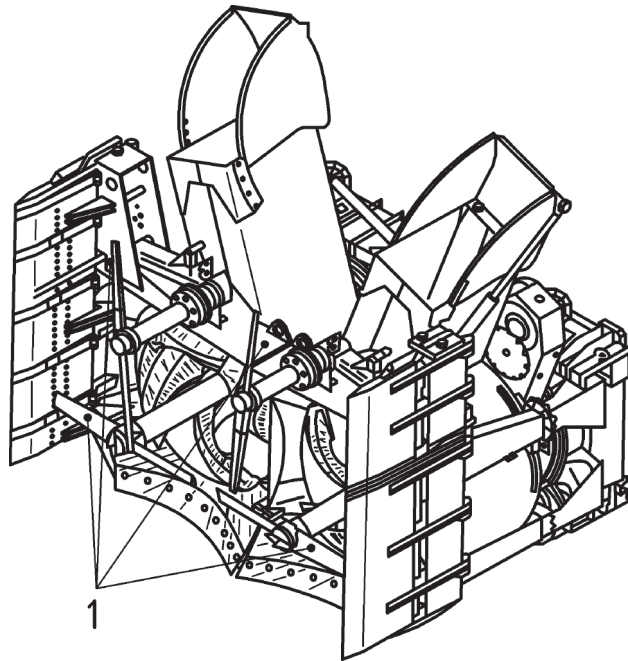
part of a snowplough which collects and removes the snow from traffic areas

3.1.25

precutter

rotating device used to further cut and convey snow

Note 1 to entry: See [Figure 4](#).



Key

1 precutter blades

Figure 4 — Precutter

3.1.26

release position

when part of the snow clearing machine weight is passed onto the vehicle

3.1.27

residual snow

amount of snow left on the road surface after snow clearance

3.1.28

rotary snowplough

unit type rotary snowplough

type of snow removal equipment with an auger mechanism at the front to collect snow and a blower and chute mechanism at the rear to release snow. It also includes unit-type rotary snowplough with a dedicated drive source

Note 1 to entry: See [Figure 9](#), [Figure 10](#) and [Figure 11](#).

3.1.29

scraping strips

scraper blades

cutting edge

wear-and-tear parts which are in contact with the surface to be cleared of snow

3.1.30

side fender

side shoes

end bits

wear-and-tear parts laterally attached on the extremities of a snow clearing machine

3.1.31

side reverse

change in the direction of snow removal of a snow clearing machine