INTERNATIONAL STANDARD

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION •МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Vacuum technology – Graphical symbols

Technique du vide — Symboles graphiques

First edition - 1977-07-01

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>ISO 3753:1977</u> https://standards.iteh.ai/catalog/standards/sist/2ccd1667-2f4e-438c-a7a2-7d2d1af0360f/iso-3753-1977

UDC 744.43 : 533.5

Ref. No. ISO 3753-1977 (E)

Descriptors : vacuum technology, vacuum apparatus, vacuum pumps, valves and fittings, manometers, nomenclature, graphic symbols.

3753

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3735 was developed by Technical Committee ISO/TC 10, *Technical drawings*, and was circulated to the member bodies in VIEW April 1975.

(standards.iteh.ai)

It has been approved by the member bodies of the following countries :

		<u>ISO 3753:1977</u>
Australia	hapan/standards.iteh.a	i/cataloSpaindards/sist/2ccd1667-2f4e-438c-a7a2-
Austria	México	7d2d1aSwitzerland753-1977
Belgium	Netherlands	Turkey
Brazil	New Zealand	United Kingdom
France	Norway	U.S.A.
Hungary	Poland	U.S.S.R.
India	Romania	Yugoslavia
Italy	South Africa, Rep. o	of

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Czechoslovakia Germany Sweden

© International Organization for Standardization, 1977 •

Printed in Switzerland

CONTENTS Page
1 Scope and field of application
2 Reference
3 General
4 Graphical symbols 1
4.1 Vacuum pumps
4.2 Baffles
4.3 Traps (condensers)
6 4.4 Pressure measuring apparatus
4.5 Flowlines and connections
4.6 Valves
4.7 Vacuum <u>chambers 1977</u> 12
https://standards.itch.ai/atalog/standards/sist/2ccd1667-2f4e_438c-a7a2- Annex : Example of the use of recommended symbols

iTeh This page intentionally left blankEVIEW (standards.iteh.ai)

<u>ISO 3753:1977</u> https://standards.iteh.ai/catalog/standards/sist/2ccd1667-2f4e-438c-a7a2-7d2d1af0360f/iso-3753-1977

INTERNATIONAL STANDARD

Vacuum technology – Graphical symbols

1 SCOPE AND FIELD OF APPLICATION

This International Standard provides graphical symbols for use in vacuum technology.

2 REFERENCE

ISO 3529/II, Vacuum technology – Vocabulary – Part II : Vacuum pumps and associated terms.¹⁾

3 GENERAL

For convenience on drawings, it is permitted – with the exception of valves – to change the recommended positioning of inlets and outlets to devices, provided that this does not create confusion among the basic symbols.

The relative sizes of symbols in combination shall correspond approximately to those shown in the annex.

4 GRAPHICAL SYMBOLS

4.1 Vacuum pumps

iTeh STANDARD PREVIEW (standards iteh ai)

No.	Designation	Symbol
4.1	Vacuum pump (type unspecified) ISO 3753:1977 https://standards.iteh.ai/catalog/standards/sist/2ccd1667-2f4e-438c NOTE – The arrows are optional and 2will be consisted when 97 confusion is possible with another symbol.	a7a2-
4.1.1	<i>Positive displacement pump</i> (type unspecified)	
4.1.1.1	Sliding vane rotary vacuum pump or rotary piston vacuum pump NOTE – One circle : single-stage; two circles : multistage.	

1) At present at the stage of draft.

No.	Designation	Symbol
4.1.1.1.1	Gas ballast pump NOTE – One circle : single-stage; two circles : multistage.	
4.1.1.2	Liquid ring vacuum pump NOTE — One circle : single-stage; two circles : multistage.	
4.1.1.3	Roots vacuum pump NOTE – One circle : single-stage; two circles : multistage. STANDARD PREVI (standards.iteh.ai) ISO 3753:1977	
4.1.1.4	https://standards.itch.ai/catalog/standards/sist/2ced1667+2f4c-4 Vapour jet vacuum pump 7d2d1af0360f/iso-3753-1977 NOTE – The symbol for the fluid may be inserted at x : pump oil = CH, mercury = Hg, water = H ₂ O	80-a7a2-
4.1.1.5	Vapour diffusion pump using oil or mercury vapour NOTE – The symbol for the fluid may be inserted at x : pump oil = CH, mercury = Hg	
4.1.1.6	Turbomolecular pump NOTE – The five vertical lines within the circle signify that the pump is multi- stage; the same five lines are always used irrespective of the number of stages.	

No.	Designation	Symbol
4.1.2	<i>Entrapment vacuum pump</i> (type unspecified) NOTE – The arrows are optional and will be omitted when no confusion is possible with another symbol.	
4.1.2.1	Adsorption pump, utilizing molecular sieve	
4.1.2.2	Sublimation pump NOTE – The chemical symbol for the sorbent concerned must be inserted at x. iTeh STANDARD PREVIEV (standards.iteh.ai) <u>ISO 3753:1977</u> https://standards.iteh.ai/contabas/standards/site/0acd1667.2fda_438a	×
4.1.2.2.1	Getter sublimation pump with cold walls 0360f iso-3753-1977 NOTE — The chemical symbol for the sorbent concerned must be inserted at x. The temperature of the sorbent may be indicated at the left side.	
4.1.2.3	Sputter ion pump	
4.1.2.4	Cryopump	

.

4.2 Baffles

No.	Designation	Symbol
4.2	Baffle (type unspecified)	
	NOTE – The temperature of the baffle may be inserted at x.	
4.2.1	Refrigerated baffle (refrigerated by fluid circulation)	
	NOTE — The temperature and the nature of the cooling fluid may be indicated at the left side and right side respectively.	
4.2.2	Reservoir type baffle (standards.iteh.ai)	
	ISO 3753:1977 https://standards.iteh.ai/catalog/standards/sist/2ccd1667-2f4e-4 7d2d1af0360f/iso-3753-1977	138c-a7a2-
4.2.3	Peltier type baffle	
4.2.4	Air-cooled baffle	

4.3 Traps (condensers)

No.	Designation	Symbol
4.3.1	<i>Trap or condenser</i> (type unspecified) NOTE – The temperature of the trap may be inserted at x.	X
4.3.2	Reservoir type trap	

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>ISO 3753:1977</u>

https://standards.iteh.ai/catalog/standards/sist/2ccd1667-2f4e-438c-a7a2-7d2d1af0360f/iso-3753-1977