INTERNATIONAL STANDARD



4337

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

Descriptors: data processing, data processing equipment, disk packs, specifications, physical properties, dimensions, magnetic properties,

Information processing — Interchangeable magnetic twelve-disk pack (100 Mbytes)

Traitement de l'information — Chargeur magnétique interchangeable à douze disques (100 mégaoctets)

First edition - 1977-10-01

UDC 681.327.63

recording tracks, interchangeability.

Ref. No. ISO 4337-1977 (E)

ISO 4337-1977 (E)

FOREWORD

ISO (the International Organization of Standardization) is a worldwide federation of national standards institutes (ISO number 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 4337 was developed by Technical Committee ISO/TC 97, Computers and information processing, and wa circulated to the member bodies in March 1976.

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

Australia Belgium

Hungary Italy

Romania

Brazil

Japan

South Africa Spain

Bulgaria

Netherlands New Zealand Switzerland Turkey

Czechoslovakia France

Philippines

United Kingdom

Germany

Poland

Yugoslavia

The member body of the following country expressed disapproval of the document on technical grounds:

U.S.A.

© International Organization for Standardization, 1977 •

CONT 1 S SECT 2 (SECT 3 (TENTS	Page
1 9	Scope and field of application	
SECT	ION ONE : GENERAL DESCRIPTION	
2 (General description	
SECT	TION TWO: MECHANICAL AND PHYSICAL CHARACTERISTICS	2
3 (General requirements	2
	Dimensional characteristics	2
5 Q	hysical characteristics	, (
SECT	TON THREE: MAGNETIC CHARACTERISTICS	-
6	Track and recording information — Data surfaces	7
7	Test conditions and equipment — Data surfaces	-
8 F	Functional temp — Data surfaces	1(
9 /	Acceptance criteria for data surface	1 1
	Gervo surface	1
	TION FOUR : PRE-INTRALIZATION	16
11	Data track pre-initializat	16
Anne	xes	
	ir cleanliness class 100	3
B M	leasurement of track width	3:
C E	CC implementation	33
D G	eneral track format	36

This page intentionally left blank

Ocher de do Trus

Information processing — Interchangeable magnetic twelve-disk pack (100 Mbytes)

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the general, physical, and magnetic characteristics and the pre-initialization for the physical interchange of 100 Mbytes magnetic twelvedisk packs, for use in electronic data processing systems.

SECTION ONE : GENERAL DESCRIPTION

2 GENERAL DESCRIPTION

2.1 General figures

A typical twelve-disk pack is represented in figures 1 to 6:

- figure 1 shows an exploded view;
- figure 2 shows a vertical cross-section;
- figure 3 shows, at an enlarged scale, the relationship between the top cover and the bottom protective disk;
- figure 4 shows a schematic cross-section of part of the disk pack;
- figure 5 shows a schematic cross-section of the spindle lock;
- figure 6 shows an enlarged view of the edge of a disk.

2.2 Main elements

The main elements of this twelve-disk pack are:

- the top cover;
- the hub;
- the spindle lock;

protective disks:

- the coording disks;
- the servourface:
- the bottom cover

Other elements shown in the drawings are for better understanding of the figures only and are not part of the standard.

2.3 Direction of rotation

The disk pack shall rotate counter-clockwise when viewed from the top.

2.4 Pack capacity

A gross information capacity of 100 million 8-bit bytes is achieved in this 12-disk pack by the use of 19 data disk surfaces. Data are recorded on 404 tracks per data surface. The track spacing gives approximately 8 tracks per millimetre, each containing a maximum of 13 030 8-bit bytes of information. The recording density varies between outer and inner tracks and reaches a maximum of 159 bpmm on the innermost track.