International Standard 5774

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

Plastics hoses — Textile-reinforced thermoplastics type for compressed air — Specification

Tuyaux en plastiques — Type en thermoplastique armé de textile pour l'air comprimé — Spécifications

First edition — 1980-02-01

UDC 678.06 : 621.643.33 **Ref. No. ISO 5774-1980 (E)**

Descriptors : plastic products, hoses, pressure pipes, compressed air, specifications, dimensions, physical properties, pressure, hydrostatic pressure, tests, mechanical tests, bend tests.

Price based on 2 pages

Foreword

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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 5774 was developed by Technical Committee ISO/TC 45, *Rubber and rubber products*, and was circulated to the member bodies in March 1978.

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

Australia	France	Romania
Austria	Germany, F. R.	Sweden
Belgium	India	Thailand
Brazil	Italy	Turkey
Bulgaria	Korea, Rep. of	United Kingdom
Canada	Mexico	USA
Czechoslovakia	Netherlands	USSR
Egypt, Arab Rep. of	Poland	

No member body expressed disapproval of the document.

Printed in Switzerland

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1 Scope and field of application

This International Standard specifies requirements for two types of thermoplastics hoses with textile reinforcement for application in the temperature range – 10 °C to + 55 °C as follows :

Type A — Industrial air hoses with a maximum working pressure of 1,0 MPa (10 bar).

Type C — Air hoses for heavy duty mining and construction work with a maximum working pressure of 1,6 MPa (16 bar).

NOTE — Requirements for types B and D hoses, corresponding with ISO 2398, *Industrial rubber hose for compressed air (up to* 2,5 MPa*)*, will be added later.

2 References

ISO/R 36, *Determination of the adhesion strength of vulcanized rubbers to textile fabrics.*

ISO 176, *Plastics — Determination of loss of plasticizers — Activated carbon method.*

ISO 1402, *Rubber hose — Hydrostatic testing.*

ISO 1817, *Vulcanized rubbers — Resistance to liquids — Methods of test.*

3 Materials and construction

3.1 The hose shall be as uniform as commercially practicable in colour, opacity and other physical properties and shall consist of

— a flexible thermoplastics lining resistant to oil mist;

— a natural or synthetic textile reinforcement;

— a flexible thermoplastics cover, which may have a smooth or fluted finish as agreed between the purchaser and the supplier. The colour may be different from that of the lining.

3.2 The cover and lining shall be fully gelled and free from visible cracks, porosity, foreign inclusions or other defects which might affect serviceability.

4 Dimensions and tolerances

4.1 Bore

Bores and tolerances shall be in accordance with the nominal dimensions given in table 1.

Table 1 — Nominal bores

Dimensions in millimetres

Type A		Type C	
Nominal bore	Tolerance	Nominal bore	Tolerance
5	± 0,5		
6,3	± 0,75	—	± 0,75
8		—	
10		—	
12,5		12,5	
16		16	
20		20	
25	± 1,25	25	± 1,25
31,5		31,5	
40	± 1,50	40	± 1,50
50		50	

4.2 Length

The tolerance on cut lengths shall be in accordance with table 2.

Table 2 — Tolerance on cut lengths

Dimensions in millimetres

Length	Tolerance
up to 300	± 3
over 300 to 600	± 4,5
over 600 to 900	± 6
over 900 to 1 200	± 9
over 1 200 to 1 800	± 12
over 1 800	± 1 %