International Standard 4127/2

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

Shipbuilding — Inland vessels — Fairleads — Part 2 : Roller fairleads

Construction navale — Bateaux de navigation intérieure — Chaumards — Partie 2 : Chaumards à rouleaux

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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 4127/2 was developed by Technical Committee ISO/TC 8, *Shipbuilding*, and was circulated to the member bodies in November 1978.

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

Australia	France	Poland
Austria	India	Romania
Belgium	Ireland	Turkey
Bulgaria	Italy	United Kingdom
Chile	Japan	USSR
China	Korea, Dem. P. Rep. of	Yugoslavia
Czechoslovakia	Korea, Rep. of	

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

Germany, F.R.

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Shipbuilding — Inland vessels — Fairleads — Part 2 : Roller fairleads

1 Scope and field of application

This International Standard specifies the types, kinds, basic parameters of and technical requirements for roller fairleads for inland vessels.

2 Classification

2.1 Types

This International Standard specifies the two following types of fairleads :

Z : common roller fairlead

R : fairlead with a collapsible roller

2.2 Method of securing

This International Standard specifies two methods of securing roller fairleads :

P : for bolting (see left hand side of figures 1 and 2);

S : for welding (see right hand side of figures 1 and 2).

2.3 Nominal sizes

The nominal diameter of a roller is the nominal size of roller fairleads, in millimetres.

The nominal sizes are as follows :

Type Z : 80, 100, 150

Type R : 80, 100, 125, 150

3 Dimensions and loading

3.1 The main dimensions and loadings of a roller fairlead are given in the figures and tables 1 and 2.

3.2 The maximum loading values are given in the tables of dimensions. In compliance with the nominal sizes, the maximum diameter of steel and fibre rope is given. The basic loadings are : 75, 125, 220 kN.

4 Materials

The following materials shall be used for manufacturing the fairleads :

Body : weldable steel having a yield point of 25 × 10^4 kN/m^2 (25 kgf/mm^2).

Roller : cast steel, or malleable cast iron having a yield point of 24 × 10^4 kN/m^2 (24 kgf/mm^2).

Bolt and axle : steel having a yield point of 36 × 10^4 kN/m^2 (36 kgf/mm^2).

Bush : bronze.

5 Construction

The construction of roller fairleads and the method of welding parts shall be in accordance with the provisions of this International Standard.

6 Finish

6.1 The body shall be welded, with blunted edges and polished welds.

6.2 The rollers shall be cleaned castings, with smooth working surfaces.

6.3 The bolt and socket shall be manufactured according to national standards.

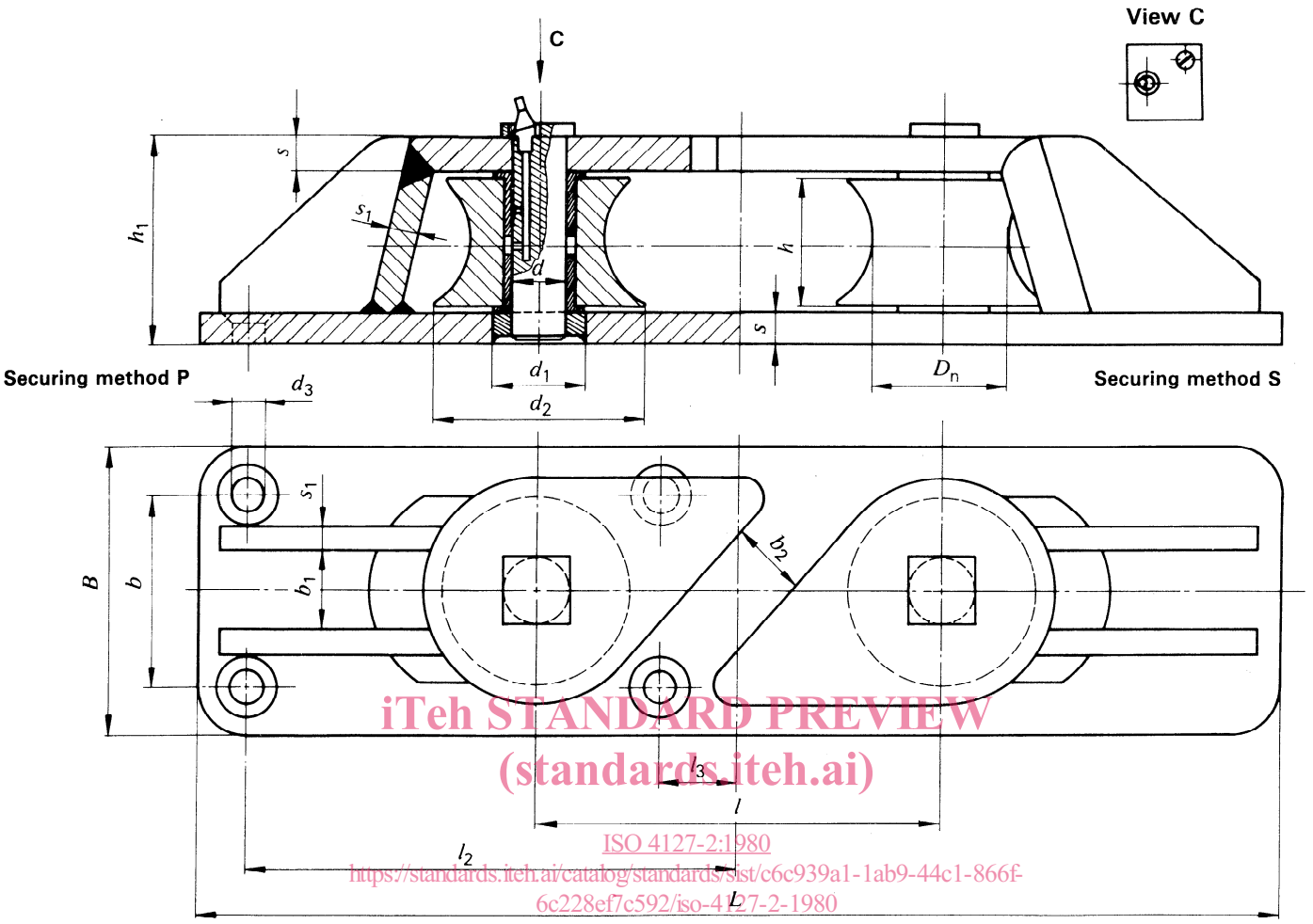

Figure 1 — Common roller fairlead (Type Z)

Table 1 — Main dimensions (Type Z)

Size	D_n	d	d_1	d_2	d_3	h	h_1	L	l	l_2	l_3
	mm										
I	80	32	60	120	18	76	126	640	240	290	48
II	100	40	70	160	22	96	154	800	300	365	60
III	150	60	100	220	28	132	216	1 200	450	560	90

(*continued*)

B	b	b_1	b_2	s	s_1	Nominal force P	Maximum rope diameter	
							steel	fibre
mm					kN		mm	
170	110	48	44	20	16	75	13	36
210	140	60	58	24	20	125	20	48
315	210	90	82	36	30	220	33	72

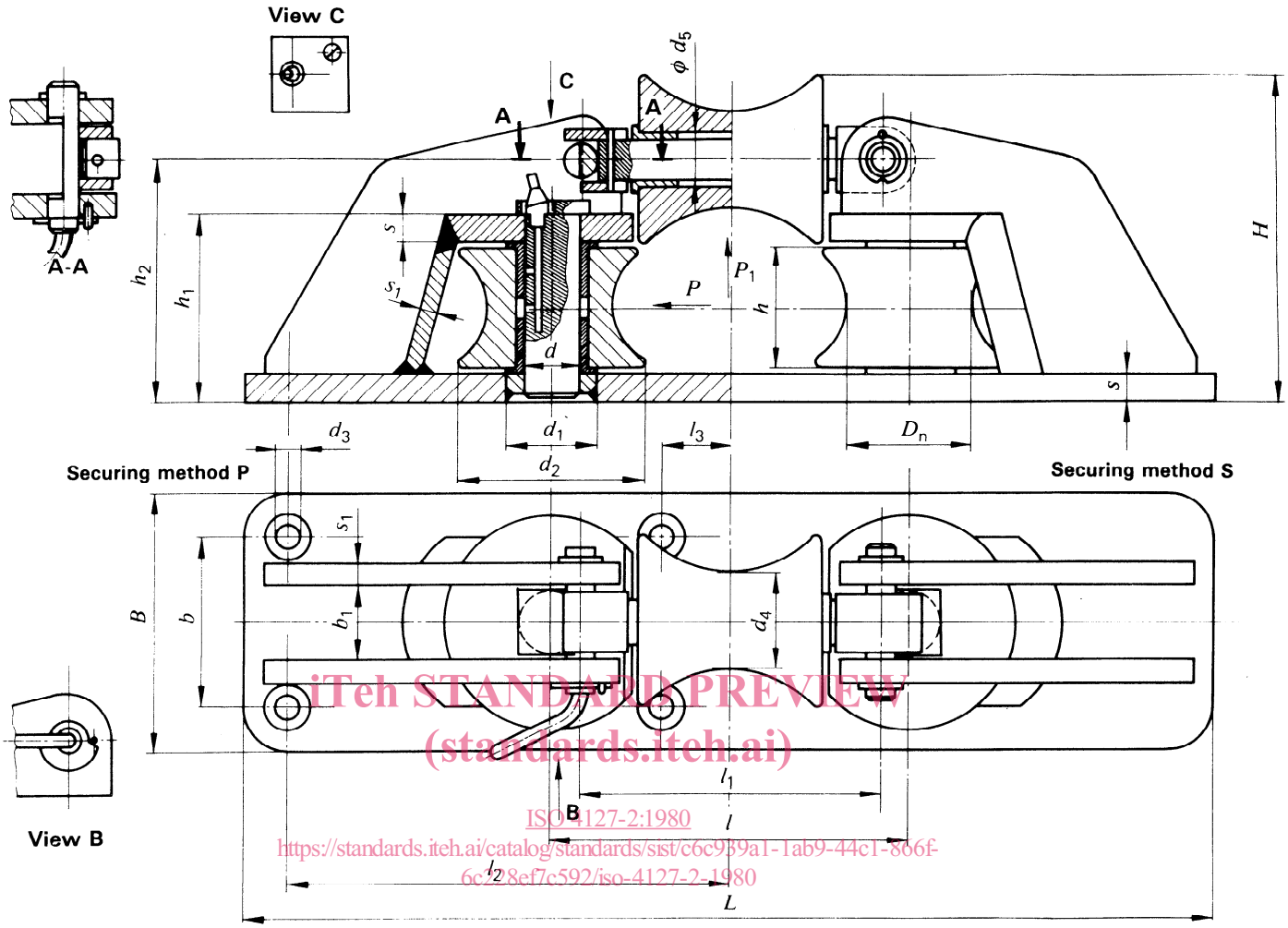

Figure 2 — Roller fairleads with a collapsible roller (Type R)

Table 2 — Main dimensions (Type R)

Size	D_n	d	d_1	d_2	d_3	d_4	d_5	H	h	h_1	h_2	L	l	l_1
	mm													
I	80	32	60	120	18	60	26	218	76	126	158	640	240	200
II	100	40	70	160	22	75	32	278	96	154	198	800	300	250
III	125	50	87	200	27	94	40	350	120	195	250	1 000	375	310
IV	150	60	100	220	28	110	48	392	132	216	282	1 200	450	375

(*continued*)

l_2	l_3	s	s_1	B	b	b_1	Nominal force		Maximum rope diameter	
							P	P_1	steel	fibre
mm							kN		mm	
290	48	20	16	170	110	48	75	15	13	36
365	60	24	20	210	140	60	125	25	20	48
455	75	30	25	262	175	75	200	31	26	64
550	90	36	30	315	210	90	220	44	33	72

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