

कन्वेयर चेन, चेन-पहिये और अटैचमेंट —
विशिष्टि
भाग 3 अटैचमेंट
(पहला पुनरीक्षण)

Conveyor Chains, Chain-Wheels and
Attachments — Specification
Part 3 Attachments
(First Revision)

ICS 53.020.30

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FOREWORD

This Indian Standard (Part 3) (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by Continuous Bulk Conveying, Elevating, Hoisting Aerial Ropeways and Related Equipment Sectional Committee had been approved by the Mechanical Engineering Division Council.

This standard (Part 3) was first published in 1976. This revision has been brought out to keep pace with the latest technological developments and the practices followed in conveyor industry and the standard has been brought into the latest style and format of Indian Standards.

The following major modifications have been incorporated in this revision of the standard:

- a) A reference clause has been added mentioning the latest version of all the referred standards;
- b) Editorial changes have been made; and
- c) Marking clause has been added.

The specification for conveyor chains, chain-wheels and attachments is in three parts. This standard (Part 3) covers the chain-wheels. Other parts in this series under the general title are as follows:

Part 1 Chain

Part 2 Chain-wheels

The composition of the Committee responsible for the formulation of this standard is given in [Annex A](#).

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

CONVEYOR CHAINS, CHAIN-WHEELS AND ATTACHMENTS — SPECIFICATION

PART 3 ATTACHMENTS

(*First Revision*)

1 SCOPE

This standard (Part 3) covers the requirements for *K* attachments and deep plate attachments for use with conveyor chains and chain-wheels.

2 REFERENCE

The standard given below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreement based on this standard are encouraged to investigate the possibility of applying the most recent edition of this standard:

<i>IS No.</i>	<i>Title</i>
IS 2062 : 2011	Hot rolled medium and high tensile structural steel — Specification (<i>seventh revision</i>)

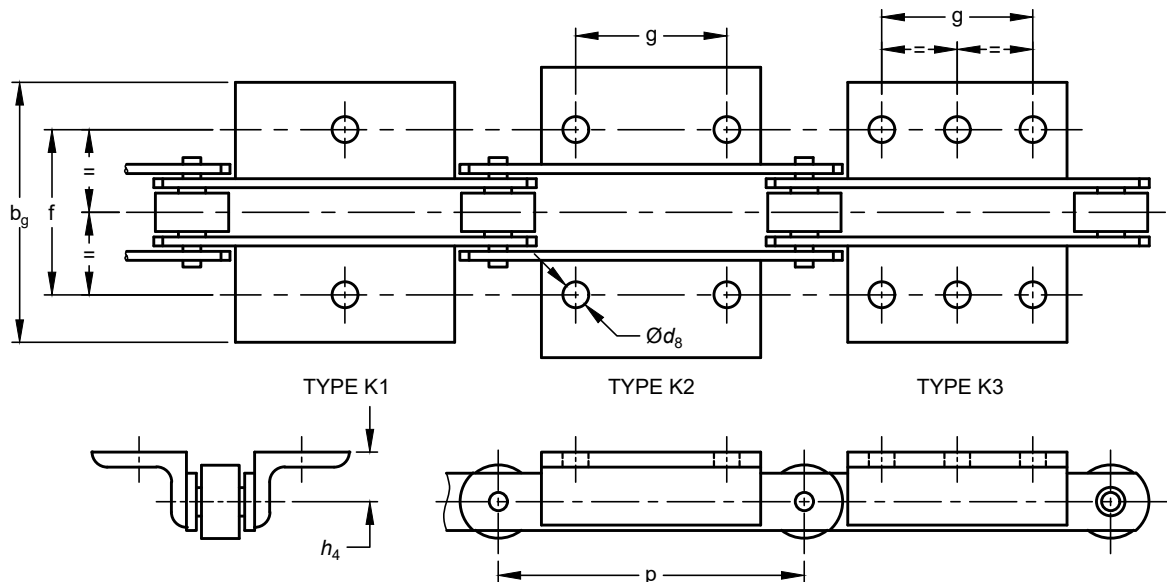
3 TYPES

The *K* attachment shall be of the following three types:

- a) *K1* Attachment — with one attachment hole centrally disposed in each plate;
- b) *K2* Attachment — with two attachment holes disposed in each plate as shown in figure in 4.1; and
- c) *K3* Attachment — as *K2* but with a third hole centrally positioned between the other two.

4 DIMENSIONS

4.1 *K* Attachments



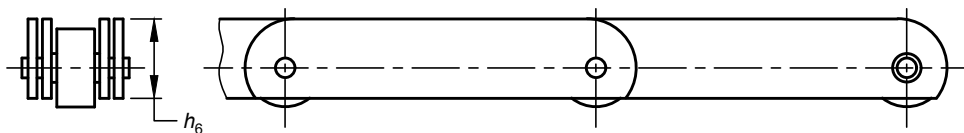
All dimensions in millimetres.

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Sl No.	Chain Number	Hole Diameter	Platform Height	Transverse Distance Between Hole Centres	Width Over Attachments b_2 (Max)	Longitudinal Distance Between Hole Centres					
						Short		Medium		Long	
						$pMin^*$	g	$pMin^*$	g	$pMin^*$	g
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
i)	M20	6.6	16	54	84	63	20	80	35	100	50
ii)	M28	9.0	20	64	100	80	25	100	40	125	65
iii)	M40	9.0	25	70	112	80	20	100	40	125	65
iv)	M56	11.0	30	88	140	100	25	125	50	160	85
v)	M80	11.0	35	96	160	125	50	160	85	200	125
vi)	M112	14.0	40	110	184	125	35	160	65	200	100
vii)	M160	14.0	45	124	200	160	50	200	85	250	145
viii)	M224	18.0	55	140	228	200	65	250	125	315	190
ix)	M315	18.0	65	160	250	200	50	250	100	315	155
x)	M450	18.0	75	180	280	250	85	315	155	400	240
xi)	M630	24.0	90	230	380	315	100	400	190	500	300
xii)	M900	30.0	110	280	480	315	65	400	155	500	240
xiii)	MC28	9.0	25	70	112	80	20	100	40	125	65
xiv)	MC56	11.0	35	88	152	125	50	160	85	200	125
xv)	MC112	14.0	45	110	192	160	50	200	85	250	145
xvi)	MC224	18.0	65	140	220	200	50	250	100	315	155

4.2 Deep Plates



All dimensions in millimetres.

*Minimum chain pitch for g .

<i>Sl No.</i>	<i>Chain Number</i>	<i>M</i>	<i>M2</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>MC</i>	<i>MC</i>	<i>MC</i>	<i>MC</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
i)	Plate Height h^6	16	20	22.5	30	32.5	40	45	60	65	80	90	120	22.5	32.5	45	65

5 MATERIAL

The attachments may be manufactured from angle type rolled steel conforming to IS 2062.

6 REQUIREMENT

6.1 K Attachment

6.1.1 The attachments are illustrated as being manufactured from rolled steel angle section fastened to the chain plates but actual construction is at the discretion of the manufacturer and may include integral chain plates bent over to form the platform, or fabricated construction.

6.1.2 The length of the attachment shall be at the discretion of the manufacturer but shall be sufficient to accommodate the attachment holes of the *K2* attachments.

6.1.3 Attachments may be fitted on one or both sides of the chain.

6.2 Deep Plates

The requirements, including the chain breaking

strength, shall be the same as those for basic chain plates.

7 PRESERVATION

When the attachments are to be used in atmospheres corrosive in nature, suitable anti-corrosive coating shall be employed.

8 MARKING

8.1 The attachment shall be marked with manufacturer's name and/or trade-mark, the type of attachment and the appropriate chain number for which the attachment is suitable.

8.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

ANNEX A

(Foreword)

COMMITTEE COMPOSITION

Continuous Bulk Conveying, Elevating, Hoisting Aerial Ropeways and Related Equipment Sectional Committee, MED 06

<i>Organization</i>	<i>Representative(s)</i>
Rites Limited, Gurugram	SHRI R. K. SHARMA (<i>Chairperson</i>)
Adventure Tour Operator Association, New Delhi	SHRI AJEET BAJAJ SHRI PRADEEP MURTHY (<i>Alternate I</i>) SHRI NIRAT BHATT (<i>Alternate II</i>)
Bharat Heavy Electricals Limited, Project Engineering Management, Noida	SHRI PANKAJ KAPSIMAY SHRI VIVEK HEMROM (<i>Alternate</i>)
Conveyor and Ropeway Services Pvt Ltd, Kolkata	SHRI KAMAL KUMAR BOSE
CSIR - Central Institute of Mining and Fuel Research (CIMFR), Dhanbad	SHRI DEBASIS BASAK SHRI GIRENDRA M. PRASAD (<i>Alternate</i>)
Damodar Ropeways & Infra Limited, Kolkata	SHRI D. L. DAS
Directorate General Factory Advice Service and Labour Institutes, Mumbai	SHRI DEV KUMAR SAXENA SHRI KARUNESH SRIVASTAVA (<i>Alternate</i>)
Directorate General of Mines Safety, Dhanbad	SHRI D. B. NAYAK SHRI VIJAY YADAORAO BARAPATRE (<i>Alternate</i>)
Elecon Engineering Company Limited, Anand	SHRI NAINESH KUMAR ANILKUMAR PATEL SHRI TAXAY G. SOLANKI (<i>Alternate I</i>) SHRI SANKET A. PATEL (<i>Alternate II</i>)
Indian Association of Amusement Parks and Industries, Mumbai	SHRI PRADEEP SHARMA SHRI ANIL PADWAL (<i>Alternate</i>)
J S Mohar Construction Company Private Limited, Bardhaman	SHRI SANDIP SINGH
Lepton Projects Private Limited, Ghaziabad	SHRI SANJAY KUMAR SHRI PIYUSH RATHI (<i>Alternate</i>)
Mecon Limited, Ranchi	SHRI SATYA PRAKSH SHRI MANOJ KUMAR MAHTO (<i>Alternate</i>)
Ministry of Ports, Shipping and Waterways, New Delhi	SHRI ANIL PRUTHI SHRI RAMJI SINGH (<i>Alternate</i>)
National Highways Logistics Management Limited, New Delhi	SHRI SUNIL YADAV
National Institute of Technology, Kurukshetra	SHRI MANOJ KUMAR GUPTA SHRI VIKAS KUMAR
National Thermal Power Corporation Ltd, New Delhi	SHRI MANISH KUMAR

<i>Organization</i>	<i>Representative(s)</i>
Ropeway and Resorts Pvt Ltd, Kolkata	SHRI BIPLAB DAS SHRI SUDIPTA KRISHANA MANDAL (<i>Alternate</i>)
Tata Consulting Engineers Limited, Navi Mumbai	SHRI SHIREESH S. SWAMI
Usha Breco Limited Ghaziabad	SHRI MANOJ PANWAR SHRI SANJEEV DHARIWAL (<i>Alternate</i>)
Usha Martin Limited, Ranchi	SHRI TUSHAR MUKHERJEE SHRI SANDEEP JAISWAL (<i>Alternate</i>)
In Personal Capacity (<i>BH/V1/SF, VIP Floors Sector 81, DPS Faridabad - 121007</i>)	SHRI ASHUTOSH BHADRA
In Personal Capacity (<i>F-7B DDA MIG Flats, Hari Nagar - 110006</i>)	SHRI S. C. GANDHI
In Personal Capacity (<i>20 D, Dhakuria Station Road, Kolkata - 700031</i>)	SHRI RANJAN MUKHERJEE
BIS Directorate General	SHRI K. VENKATESWARA RAO, SCIENTIST 'F'/SENIOR DIRECTOR AND HEAD (MECHANICAL ENGINEERING) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

Member Secretary
SHRI AMAN DHANAWAT
SCIENTIST 'C'/DEPUTY DIRECTOR
(MECHANICAL ENGINEERING), BIS

Bureau of Indian Standards

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This Indian Standard has been developed from Doc No.: MED 06 (24928).

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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