CONVEYING TECHNOLOGY
DRAG CHAINS

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AUSTRALIA

THE DRAG CHAIN LEADER

About MCV

Established in 1962 by Giuseppe Vismara, MCV is an Italian manufacturer of industrial chains. MCV's product range includes forged steel and mechanical chains. MCV is ISO 9001 certified with a global presence in Europe, Asia, America, and Australia.

General information

MCV chains are suitable to transport powdered, flaky, grainy and fragmented bulk materials such as flour, cement, grains, sugar, chemicals, wood chips, food products, animal feed, etc.

ADVANTAGES

- Simple and robust construction, high operational safety
- Low space requirement
- Horizontal, vertical and inclined conveying
- Safe through slow conveyance without recirculation of material
- Preserves material integrity

INDUSTRIES

- Mining
- Cement and Bricks
- Steel
- Food and Milling
- Wood and Paper
- Energy and Recycling
- Ash
- Fertiliser

Composition of forged steel scraper chains

MCV scraper chains consist of a link, pin, retaining clip and a scraper.

CHAIN LINK

Each basic component of the chain is the forged link, which is made up of a single forged piece that is heat treated for wear resistance.

Each link has two bores: One in the head section and one in the tail section, through which a pin can be inserted.

RETAINING PIN

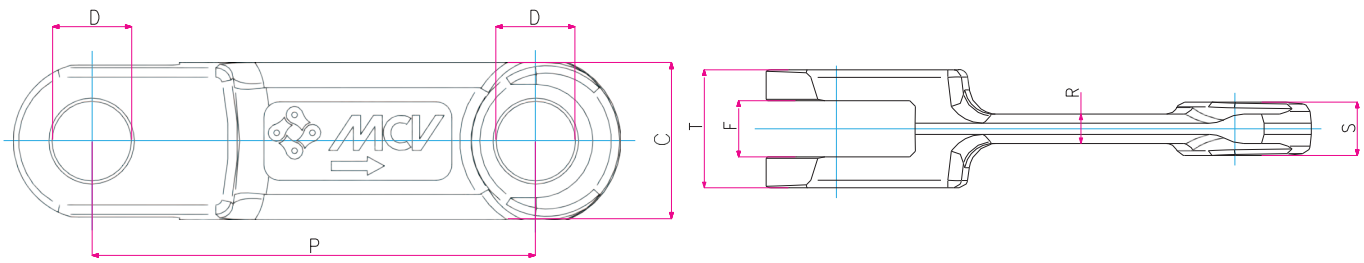
The pin is normally fixed by retaining clips.

Materials and Heat Treatments for Links

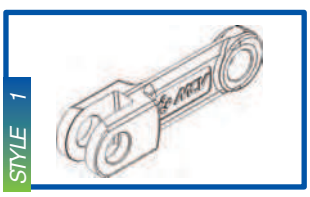
The raw materials and heat treatments for the forged drag chain links are listed below.

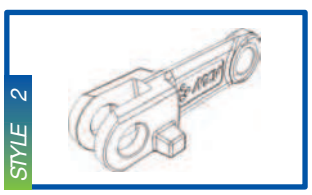
- Chain link with symbol MN: Case hardened steel *18MnCrB5 - Suited for high wearing applications*
- Chain link with symbol CN: Case hardened steel *18NiCrMo5 - Suited for mildly-corrosive environments*
- Chain link with symbol C40: Case hardened and tempered steel C45 - *Suited for working in dry environments without chemical corrosion*
- Chain link with symbol CD: Case hardened and tempered steel 42CrMo4 - *Suited for working in temperatures up to 400° C and high breaking load risks*
- Chain link with symbol S3: AISI 304- W.Nr 1.4301 *Suited for corrosive environments*
- Chain link with symbol S4: Hardened and tempered AISI 420-W.Nr 1.4028 - *Suited for environments with corrosion and oxidation*
- Chain link with symbol S5: AISI 316-W.Nr 1.4401 - *Suited for highly corrosive environments*
- Chain link with symbol S10: X10CrAl7-W.Nr 1.4713 - *Refractory steel suitable for high temperature environments*

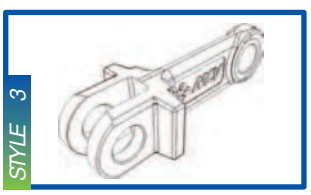
WELD-ON TECHNICAL SPECIFICATIONS

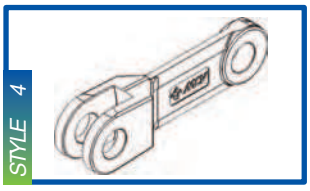


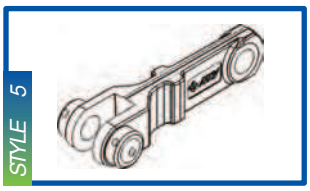
Item	Style	DIMENSIONS P	T	C	S	F	R	D	NOMINAL BREAKING FORCE MN	CN	CD
		mm	mm	mm	mm	mm	mm	mm	kN	kN	kN
7625	1	76.2	18	30	7	8	6	14	71	77	126
10160	1	101.6	24	36	8	10	6	14	110	120	210
10160/R	1	101.6	30	36	13	14	8	14	180	195	330
10170/R	7	101.8	27.4	36	12	13	6.5	14	170	200	350
12514	1	125	30	36	13	14	10	16	163	175	290
14214	1	142	30	40	13	14	9	18	180	195	330
14218	1	142	42	50	19	20	11	25	290	320	550
142180	2	142	42	50	19	20	11	25	290	320	550
142181	3	142	42	50	19	20	11	25	290	320	550
14222	1	142	54	50	25	27	16	25	370	400	655
14226	1	142	62	50	28	30	15	25	440	470	790
14228	7	142	42	49	18.8	20	11	25	290	315	550
14236	7	142	62	49	28.8	30	16	25	460	500	850
15014	1	150	42	48	16	18	12	25	227	245	405
15090	1	150	24	47	9	18	7	20	155	165	270
16018	5	160	46	46	22	24	15	22	320	342	560
16025	1	160	50	53	23	25	13	25	370	400	655
20025	1	200	60	50	25	27	18	25	380	410	670
20028	1	200	66	60	30	32	20	30	500	540	900
21650	4	216	58	72	25	28	18	35	585	630	1035
25040	1	250	70	75	32	34	18	32	735	860	1430
26040	1	260	70	75	31	33	20	32	840	900	1480
26045	1	260	78	75	35	37	20	32	930	1000	1650

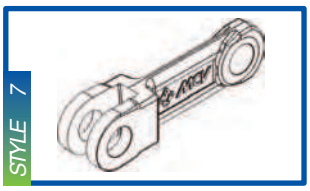












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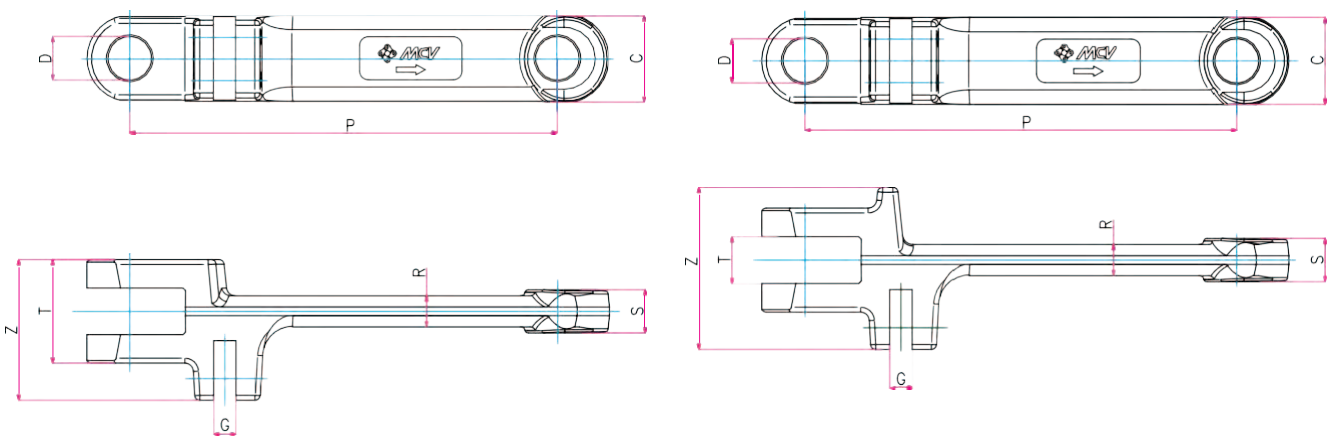
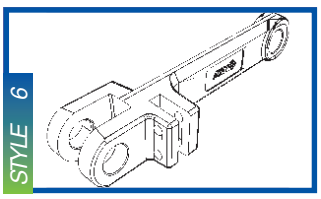
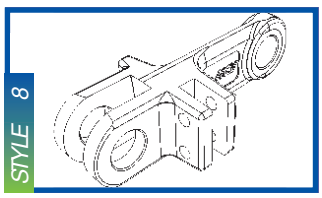
BOLT-ON TECHNICAL SPECIFICATIONS



item	Style	DIMENSIONS P	T	Z	C	S	G	R	D	NOMINAL BREAKING FORCE MN	CN	CD
		mm	mm	mm	mm	mm	mm	mm	mm	kN	kN	kN
142182	6	142	42	70	50	19	13	11	25	290	320	550
142262	6	142	62	87	50	28	13	15	25	440	470	790
142183	8	142	42	82	50	19	13	10,5	25	290	320	550
142263	8	142	62	99	50	28	13	14,5	25	440	470	790
160252	6	160	50	82	53	23	13	13	25	370	400	655
175402	6	175	72	95	60	30	16	23	30	540	580	955
200182	8	200	46	85	40	20	13	14	20	250	265	440
200252	6	200	60	81	50	25	13	18	25	380	410	670
200402	6	200	70	95	60	30	13	20	30	540	580	955
250252	6	250	60	81	50	25	13	18	25	380	410	670
250402	6	250	70	95	60	30	13	20	30	540	580	955
250602	6	250	100	140	70	45	21	36	35	975	1050	1720





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SCRAPER SHAPES

LINK WITH FLAT SCRAPER - BT

Horizontal or slightly inclined chain conveyors 5°/10°

LINK WITH U SHAPE SQUARE SCRAPER - U

Inclined chain conveyors max 25°

LINK WITH BENT DOUBLE O SQUARE SCRAPER - OO

Inclined and vertical chain conveyors

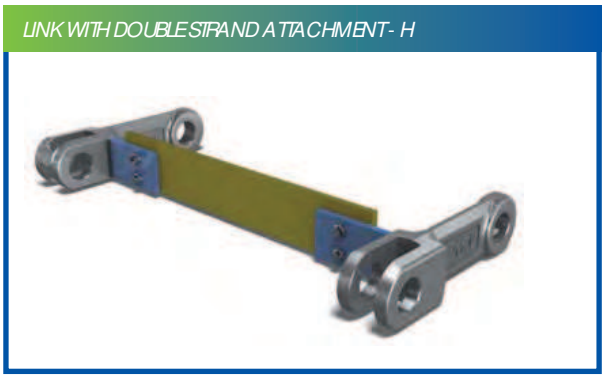
LINK WITH BENT DOUBLE SQUARE SCRAPER & FILLING SHEET - OOF

Inclined and vertical chain conveyors

LINK WITH K SHAPE FLAT SCRAPER - BTK

Horizontal and inclined chain conveyors max 30°

LINK WITH DOUBLE STRAND ATTACHMENT - H



Extractors and chain conveyors of various minerals

Other "shapes" available on request

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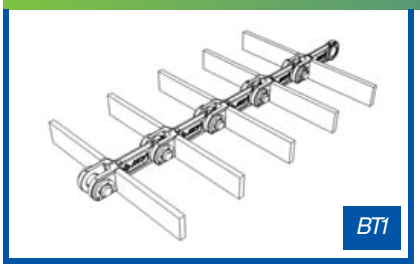
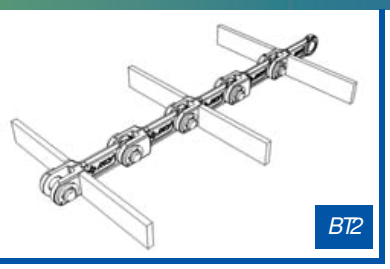
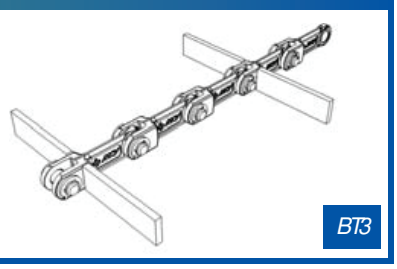
ASSEMBLY SEQUENCES

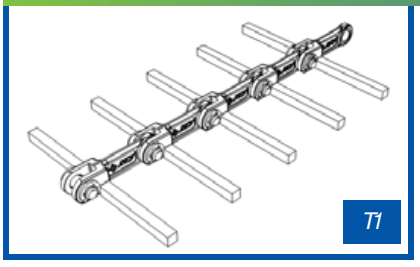
FLAT SCRAPERS

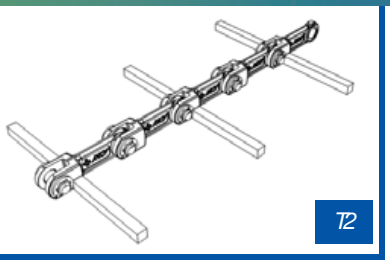

BT1

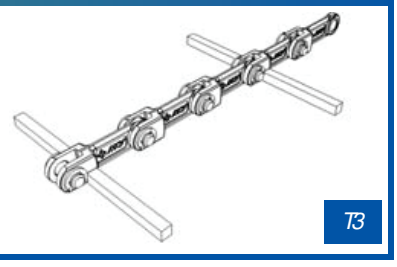

BT2


BT3

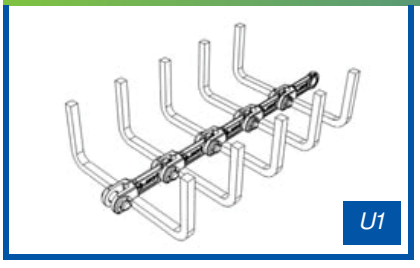
SQUARE SCRAPERS


T1

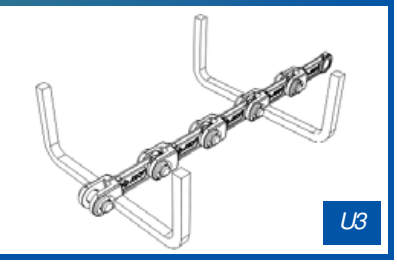

T2


T3

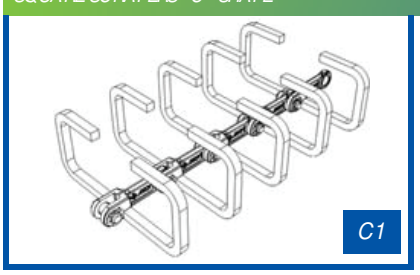
SQUARE SCRAPERS "U" SHAPE

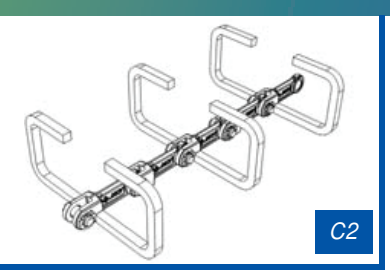

U1

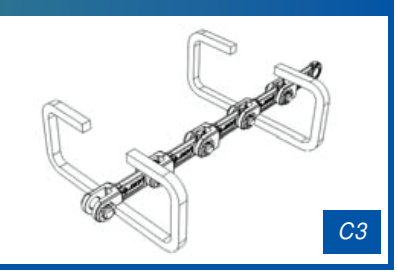

U2


U3

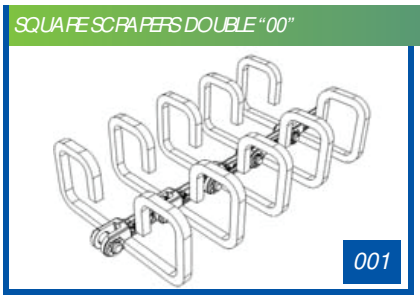
SQUARE SCRAPERS "C" SHAPE


C1


C2


C3

SQUARE SCRAPERS DOUBLE "00"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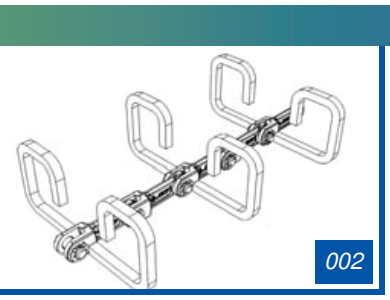
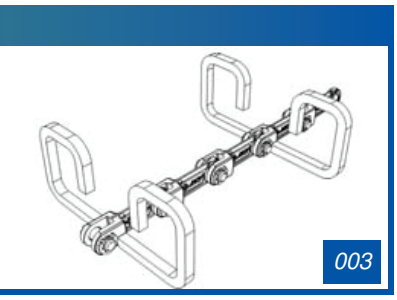

002


003

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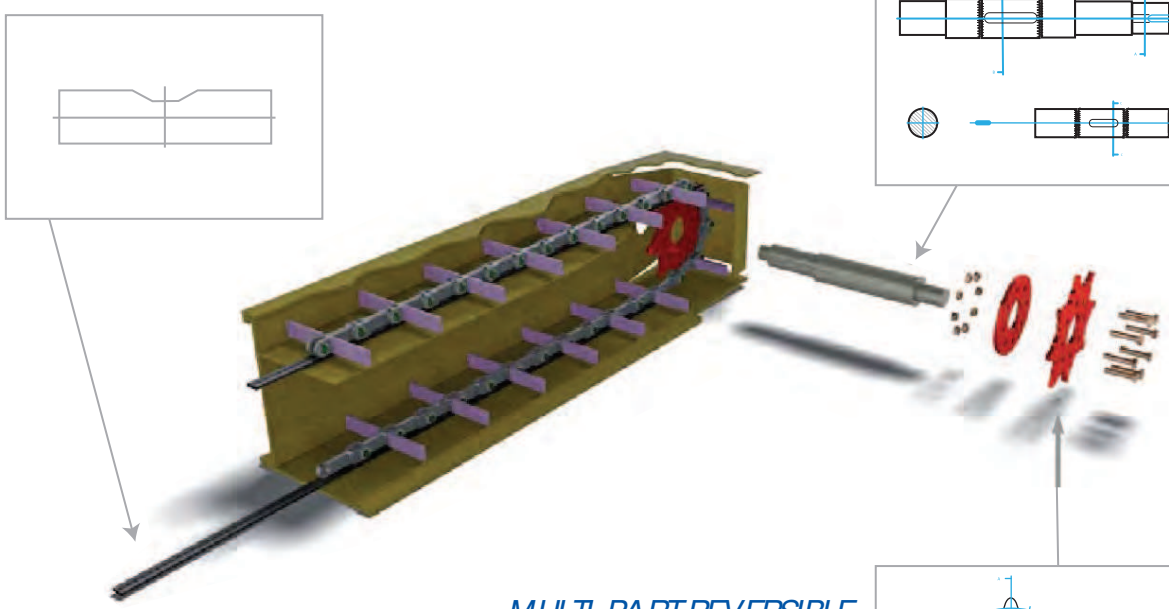
Other Sequences Available on Request

DRAG CONVEYOR ACCESSORIES

DRIVE SHAFT

MANGANESE WEAR RAIL



MULTI-PART REVERSIBLE DRIVE WHEEL

SINGLE PIECE DRIVE WHEEL

MULTI-PART STANDARD DRIVE WHEEL

RETURN IDLER WHEEL

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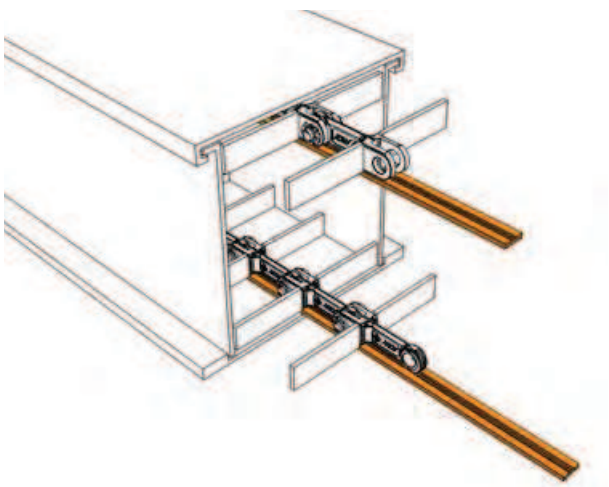
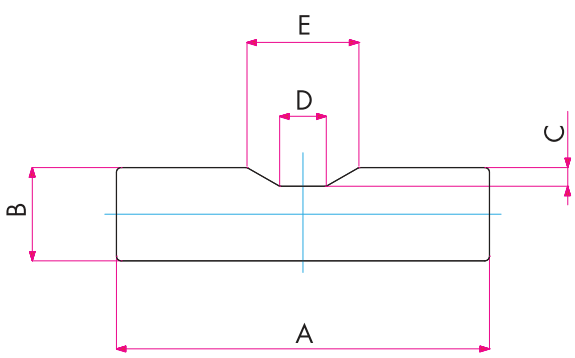
MANGANESE WEAR RAILS

Wear rails with welded studs for ease of assembly





	Dimensions					
	A	B	C	D	E	Weight per metre
Code	mm	mm	mm	mm	mm	kg/m
GM 3010	30	10	2	5	11.5	2.32
GM 4010	40	10	2	5	12	3.01
GM 5010	50	10	2	5	12	3.82
GM 5020	50	20	2	5	12	7.72
GM 6010	60	10	2.5	6	16	4.45
GM 6012	60	12	2.5	6	16	5.5
GM 6020	60	20	3	6	16	9.15
GM 7010	70	10	3	15	25	5.02
GM 7020	70	20	3	15	25	10.6

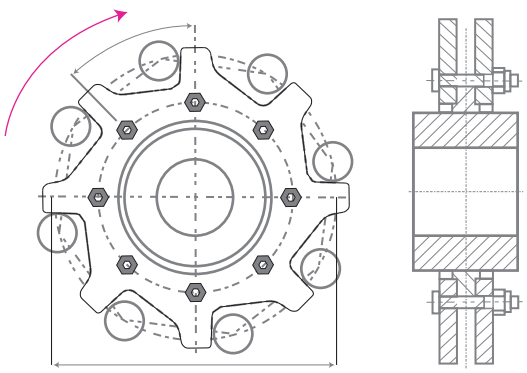
DRIVE SPROCKETS & RETURN WHEELS

Type of wheels

Drive wheels for MCV chains

MCV drive wheels/sprockets are manufactured using specialised heat treatments. This process ensures case hardening for alloys and steel.

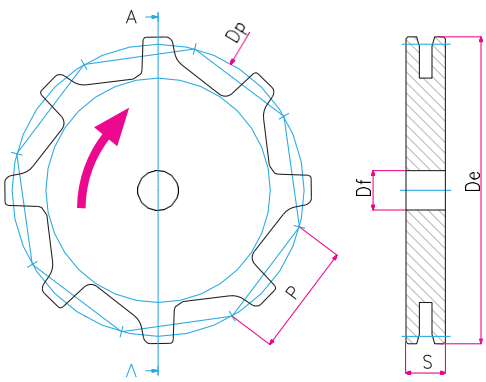
MULTI-PART DRIVE WHEEL



Properties:

- *Multi-part design - Ease of fitment*
- *Inductively hardened tooth flanks*
- *Sprocket elements can be swapped in situ/retro*
- *Calibrated engagement between chain and drive*
- *Tooth configuration from 6-14*
- *Positive friction drive*
- *No lubrication required*

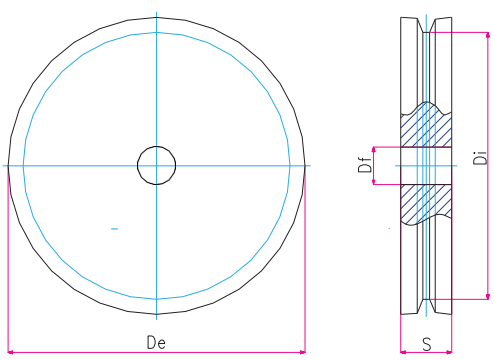
SINGLE PIECE DRIVE WHEEL



Properties:

- *Single-part design*
- *Inductively hardened contact surface*
- *Calibrated engagement between chain and drive*
- *Tooth configuration from 6-14*

IDLER WHEEL



Properties:

- *One-piece model*
- *Inductively hardened contact surface*
- *180° wrap angle*
- *Multiple PCD's*
- *Can work in reverse*

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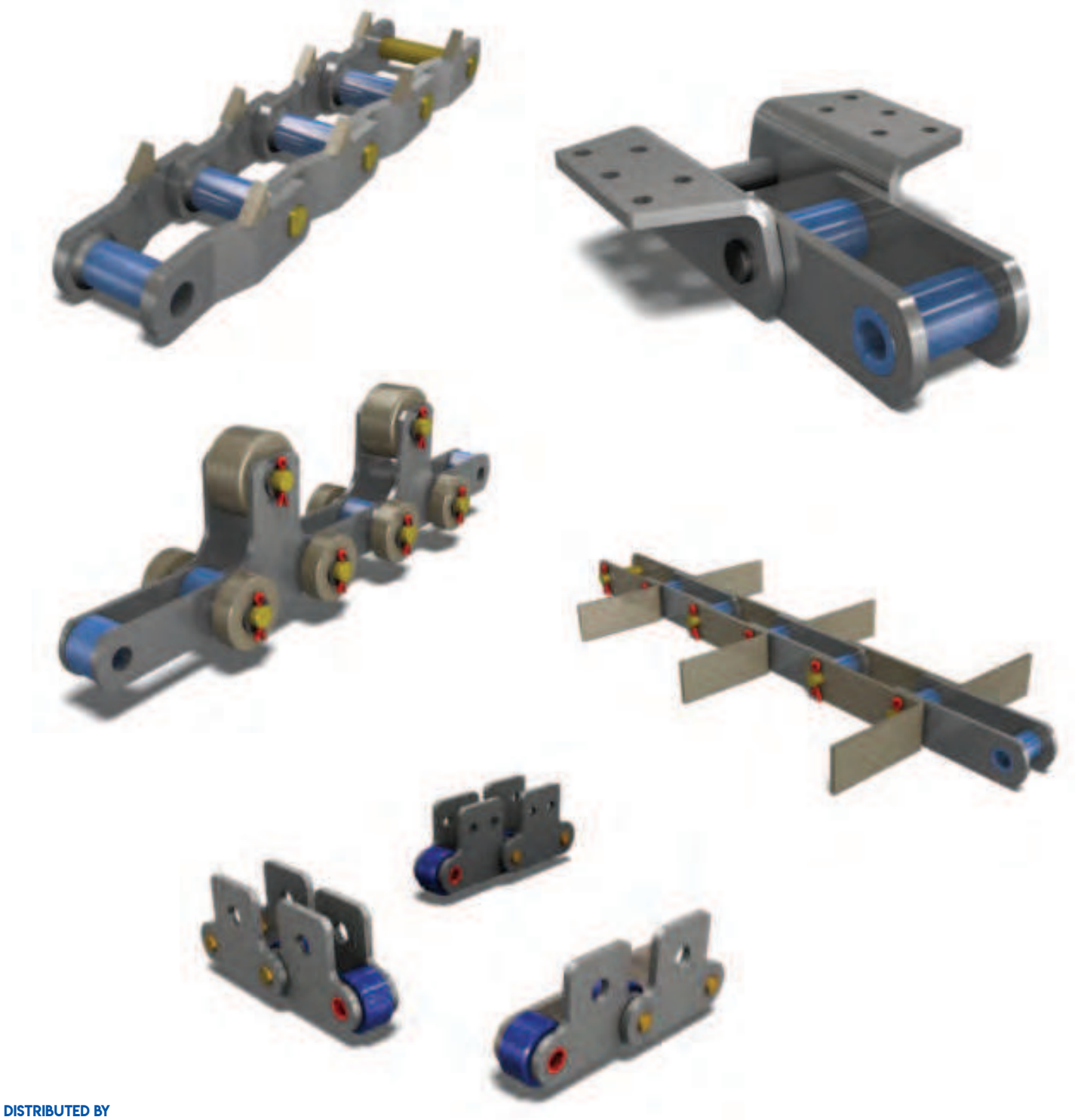
MECHANICAL CHAINS



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TECHNICAL QUESTIONNAIRE

In order for us to provide a quotation the following data is required:

Date:			
Name:			
Company:			
Address:			
Contact Details:	Tel:	Fax:	Email:
Product to be conveyed:			
Temp of Product to be conveyed:	°C		

Link Dimensions: (See Fig Link)	
Pitch: (P)	mm
Height : (H)	mm
Fork Width: (FW)	mm
Bore: (Ød)	mm

Bars Material (Please Tick)	
Mild Steel:	☐
Bisalloy:	☐ Grade
Stainless Steel:	☐ Grade
Other:	☐ (Please Specify)

Single Stranded

Bar Type (See Figs T-BT-U-O- OO)
Please Tick

☐ **T** ☐ **BT** ☐ **U** ☐ **C** ☐ **O**

Bar Dimensions	
Width: (W)	mm
Thickness: (T)	mm
Height: (H)	mm
Gap*: (G)	mm
Turndown*: (D)	mm

** if applicable*

Number Of Bars (Please Tick)	
Bar on each Link:	☐
Bar on every 2nd Link:	☐
Bar on every 3rd Link:	☐

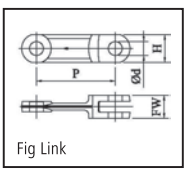


Fig Link

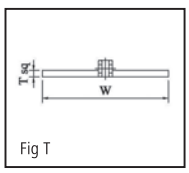


Fig T

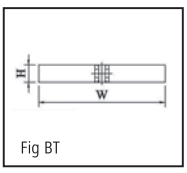


Fig BT

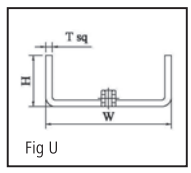


Fig U

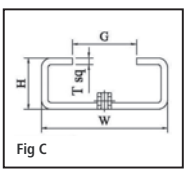


Fig C

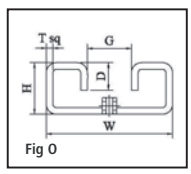
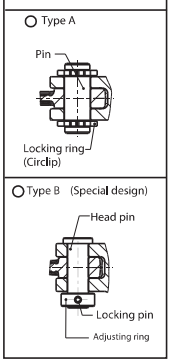


Fig O

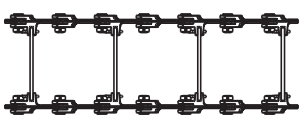
Different types of the connection



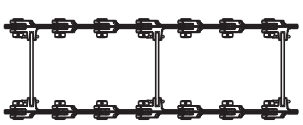
Double Stranded

○ Attachment at every link

○ Attachment at every 2nd. link



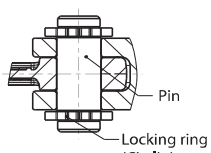
○ Attachment at every 3rd. link



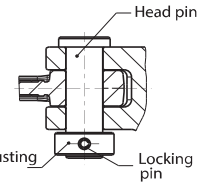
○ Attachment at every ___ link

Different types of the connection

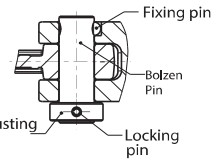
○ Type A

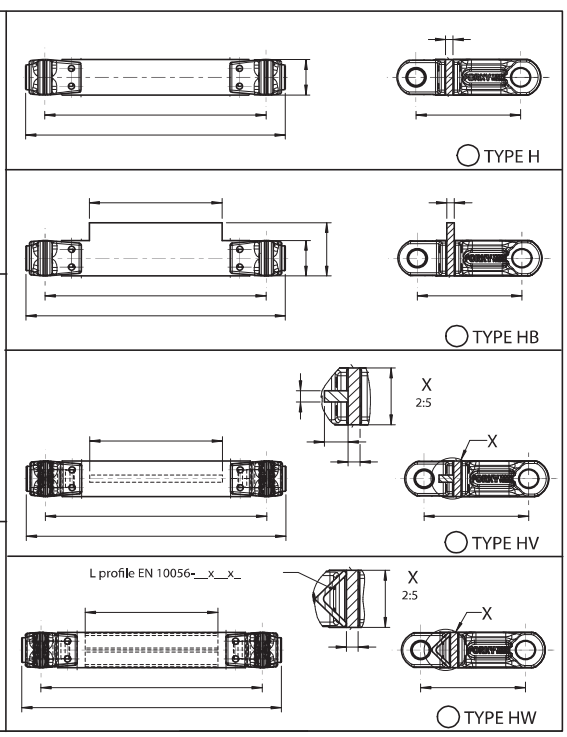


○ Type B (Special design)



○ Type C (Special design)





Other sequences on request

Length of Chain Required:	m

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