

# Cement & Quarry Industry Chains



Chaînes pour les industries du  
Béton et des carrières

Ketten für die Schuttgutindustrie



**JOHN KING**

# COMPANY HISTORY AND INFORMATION



Climax Works 1930's



Chain Assembly 1960's

John King Chains was established in Leeds, England in 1926. Their tradition was in the manufacture of mechanical handling equipment with their own foundry production of cast link chains under the "Climax Quality Brand".

John King have therefore unrivalled experience in the supply of cast link chains for the most demanding of cement and quarry conveying applications. Although cast link chains remain an important part of the King chain programme, the modern day operation has moved into other product ranges including welded steel, engineered steel and forged fork link chain (see JK brochure Forged Chains and Sprockets).

The King Company's relationship with the Cement and Quarry industry extends for nearly half a century. For many years the company manufactured high capacity mill duty elevators (see Steel Bush Elevator Chains), clinker transport and reclaimers systems, and precipitator drag conveyors. This gave them the necessary knowledge of the uniquely demanding nature of cement industry conveying applications.



**JOHN KING**



New Climax Works 2000's

## THE CLIMAX SPECIFICATION FOR CAST DRAGS

### LINK - JK/MN - Austenitic high Manganese Steel

Offering work hardening properties - the tougher the job, the more we like it!

### LINK - JK/WRI - High Alloy Heat Treated Steel

For guaranteed material and heat treatment parameters, for high impact and optimum wear performance.

### LINK - JK/HTS - High Nickel Stainless Steel (A351)

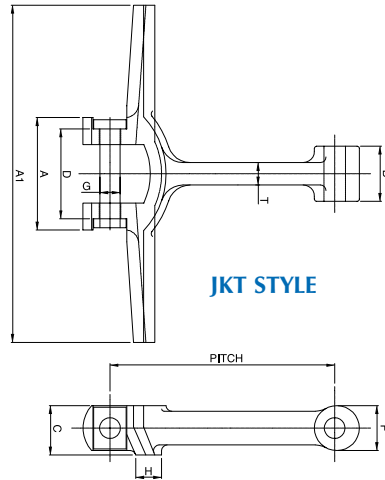
Exhibiting excellent performance at elevated operation temperatures of 1600/2000 degrees F (870/1100 degrees C).

### PINS - Forged Head from High Alloy Steel

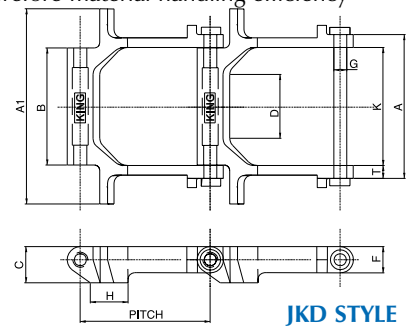
Through hardened for high strength. Surface induction hardened for optimum wear resistance.

For JK/HTS high temperature chain, pins in stainless steel AISI310 are employed.

**HARDFACING-** Critical wear surfaces on cast drags can include hard surfacing to extend service life.

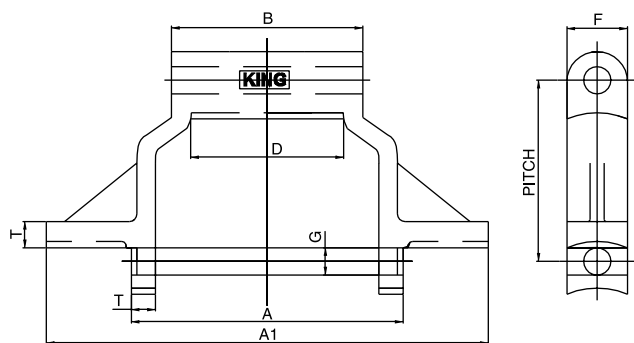


- ★ The one piece link construction obviates problems associated with welded or engineered steel construction.
- ★ Heavy cross section with oval barrel for added wear resistance.
- ★ Heavy sidebar section for increased strength and wear performance.
- ★ Plough Blade Profile - Link body and flight have a plough form to improve dredging effect and therefore material handling efficiency



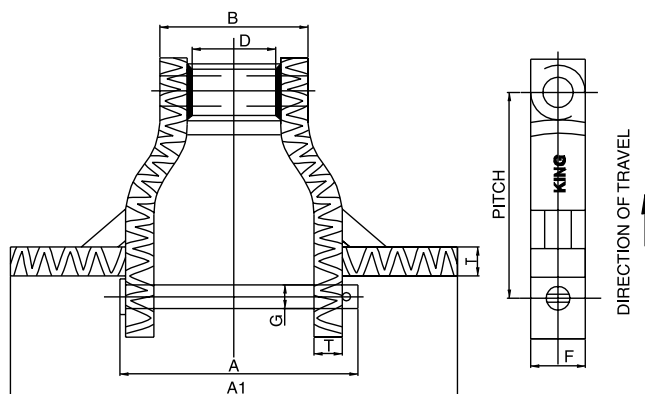
## EUROPEAN STANDARD CAST LINK DRAG CHAIN (JKD)

CHAIN No.	AVERAGE PITCH		WIDTH A		OVER FLIGHT A1		LENGTH OF BEARING AREA B		SIDEBAR THICKNESS T		SIDEBAR HEIGHT F		OVERALL HEIGHT C		PIN DIA G		GEARING WIDTH D		H		MINIMUM ULTIMATE STRENGTH		RATED WORKING LOAD		AVERAGE NETT WEIGHT	
	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	LBS	Kg	LBS	Kg	LBS/Ft	Kgs/Mtr
JKT200/50/300	7 <sup>7</sup> / <sub>8</sub>	200	4.00	100	11 <sup>13</sup> / <sub>16</sub>	300	2.00	50	9 <sup>9</sup> / <sub>16</sub>	14	1 <sup>1</sup> / <sub>4</sub>	40	1 <sup>3</sup> / <sub>4</sub>	44	1 <sup>11</sup> / <sub>16</sub>	18	3 <sup>3</sup> / <sub>8</sub>	80	1.00	25	28000	12700	4100	1860	10.75	16.00
JKD200/220/T250	7 <sup>7</sup> / <sub>8</sub>	200	8 <sup>5</sup> / <sub>8</sub>	225	9 <sup>27</sup> / <sub>32</sub>	250	7 <sup>7</sup> / <sub>16</sub>	180	3 <sup>3</sup> / <sub>4</sub>	20	1 <sup>9</sup> / <sub>16</sub>	40	2 <sup>2</sup> / <sub>16</sub>	55	1 <sup>11</sup> / <sub>16</sub>	18	4 <sup>13</sup> / <sub>16</sub>	125	7 <sup>7</sup> / <sub>16</sub>	180	62500	28400	9300	4230	16.65	24.80
JKD200/220/T300	7 <sup>7</sup> / <sub>8</sub>	200	8 <sup>5</sup> / <sub>8</sub>	225	11 <sup>13</sup> / <sub>16</sub>	300	7 <sup>7</sup> / <sub>16</sub>	180	3 <sup>3</sup> / <sub>4</sub>	20	1 <sup>9</sup> / <sub>16</sub>	40	2 <sup>2</sup> / <sub>16</sub>	55	1 <sup>11</sup> / <sub>16</sub>	18	4 <sup>13</sup> / <sub>16</sub>	125	7 <sup>7</sup> / <sub>16</sub>	180	62500	28400	9300	4230	19.32	28.80
JKD200/220/T450	7 <sup>7</sup> / <sub>8</sub>	200	8 <sup>5</sup> / <sub>8</sub>	225	17 <sup>23</sup> / <sub>32</sub>	450	7 <sup>7</sup> / <sub>16</sub>	180	3 <sup>3</sup> / <sub>4</sub>	20	1 <sup>9</sup> / <sub>16</sub>	40	2 <sup>2</sup> / <sub>16</sub>	55	1 <sup>11</sup> / <sub>16</sub>	18	4 <sup>13</sup> / <sub>16</sub>	125	7 <sup>7</sup> / <sub>16</sub>	180	62500	28400	9300	4230	21.43	31.95
JKD200/220/T600	7 <sup>7</sup> / <sub>8</sub>	200	8 <sup>5</sup> / <sub>8</sub>	225	23 <sup>3</sup> / <sub>8</sub>	600	7 <sup>7</sup> / <sub>16</sub>	180	3 <sup>3</sup> / <sub>4</sub>	20	1 <sup>9</sup> / <sub>16</sub>	40	2 <sup>2</sup> / <sub>16</sub>	55	1 <sup>11</sup> / <sub>16</sub>	18	4 <sup>13</sup> / <sub>16</sub>	125	7 <sup>7</sup> / <sub>16</sub>	180	62500	28400	9300	4230	24.15	36.00
JKD200/285/T450	7 <sup>7</sup> / <sub>8</sub>	200	11 <sup>1</sup> / <sub>4</sub>	285	17 <sup>23</sup> / <sub>32</sub>	450	8 <sup>11</sup> / <sub>16</sub>	220	1 <sup>1</sup> / <sub>16</sub>	30	1 <sup>31</sup> / <sub>32</sub>	50	2 <sup>2</sup> / <sub>16</sub>	65	1.00	25	6 <sup>1</sup> / <sub>2</sub>	165	8 <sup>8</sup> / <sub>16</sub>	225	129500	58900	16000	7270	31.85	47.50
JKD200/285/T500	7 <sup>7</sup> / <sub>8</sub>	200	11 <sup>1</sup> / <sub>4</sub>	285	19 <sup>19</sup> / <sub>16</sub>	500	8 <sup>11</sup> / <sub>16</sub>	220	1 <sup>1</sup> / <sub>16</sub>	30	1 <sup>31</sup> / <sub>32</sub>	50	2 <sup>2</sup> / <sub>16</sub>	65	1.00	25	6 <sup>1</sup> / <sub>2</sub>	165	8 <sup>8</sup> / <sub>16</sub>	225	129500	58900	16000	7270	33.47	49.90
JKD200/285/T600	7 <sup>7</sup> / <sub>8</sub>	200	11 <sup>1</sup> / <sub>4</sub>	285	23 <sup>3</sup> / <sub>8</sub>	600	8 <sup>11</sup> / <sub>16</sub>	220	1 <sup>1</sup> / <sub>16</sub>	30	1 <sup>31</sup> / <sub>32</sub>	50	2 <sup>2</sup> / <sub>16</sub>	65	1.00	25	6 <sup>1</sup> / <sub>2</sub>	165	8 <sup>8</sup> / <sub>16</sub>	225	129500	58900	16000	7270	35.05	52.25
JKD300/460/T500	11 <sup>13</sup> / <sub>16</sub>	300	18 <sup>5</sup> / <sub>16</sub>	465	19 <sup>19</sup> / <sub>16</sub>	500	14 <sup>21</sup> / <sub>32</sub>	380	1 <sup>9</sup> / <sub>16</sub>	40	2 <sup>1</sup> / <sub>4</sub>	70	3 <sup>11</sup> / <sub>32</sub>	85	1 <sup>1</sup> / <sub>16</sub>	36	12 <sup>13</sup> / <sub>16</sub>	325	14 <sup>41</sup> / <sub>32</sub>	380	282000	128180	35700	16230	55.22	82.00
JKD300/460/T600	11 <sup>13</sup> / <sub>16</sub>	300	18 <sup>5</sup> / <sub>16</sub>	465	23 <sup>3</sup> / <sub>8</sub>	600	14 <sup>21</sup> / <sub>32</sub>	380	1 <sup>9</sup> / <sub>16</sub>	40	2 <sup>1</sup> / <sub>4</sub>	70	3 <sup>11</sup> / <sub>32</sub>	85	1 <sup>1</sup> / <sub>16</sub>	36	12 <sup>13</sup> / <sub>16</sub>	325	14 <sup>41</sup> / <sub>32</sub>	380	282000	128180	35700	16230	60.02	89.48
JKD300/460/T800	11 <sup>13</sup> / <sub>16</sub>	300	18 <sup>5</sup> / <sub>16</sub>	465	31 <sup>1</sup> / <sub>2</sub>	800	14 <sup>21</sup> / <sub>32</sub>	380	1 <sup>9</sup> / <sub>16</sub>	40	2 <sup>1</sup> / <sub>4</sub>	70	3 <sup>11</sup> / <sub>32</sub>	85	1 <sup>1</sup> / <sub>16</sub>	36	12 <sup>13</sup> / <sub>16</sub>	325	14 <sup>41</sup> / <sub>32</sub>	380	282000	128180	35700	16230	64.10	95.57
JKD400/690/T900	15 <sup>3</sup> / <sub>4</sub>	400	27 <sup>3</sup> / <sub>16</sub>	690	31 <sup>1</sup> / <sub>2</sub>	800	22 <sup>13</sup> / <sub>16</sub>	580	2 <sup>1</sup> / <sub>16</sub>	55	4 <sup>1</sup> / <sub>8</sub>	105	5 <sup>5</sup> / <sub>16</sub>	135	1 <sup>3</sup> / <sub>4</sub>	45	20 <sup>11</sup> / <sub>16</sub>	525	22 <sup>13</sup> / <sub>16</sub>	580	338700	153950	42900	19500	78.70	117.33



### AMERICAN STANDARD S TYPE CAST LINK DRAG CHAIN (JKS)

CHAIN No.	AVERAGE PITCH		WIDTH A		OVER FLIGHT A1		LENGTH OF BEARING AREA B		SIDEBAR THICKNESS T		SIDEBAR HEIGHT F		PIN DIA G		GEARING WIDTH D		MINIMUM ULTIMATE STRENGTH		RATED WORKING LOAD		AVERAGE NETT WEIGHT	
	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	LBS	Kg	LBS	Kg	LBS/Ft	Kgs/Mtr
JKS 5157	6.06	153.92	6 <sup>5</sup> / <sub>16</sub>	176.28	8.14	203.36	4 <sup>5</sup> / <sub>16</sub>	117.60	<sup>5</sup> / <sub>16</sub>	15.88	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>8</sub>	28.58	2 <sup>3</sup> / <sub>4</sub>	69.85	144600	65730	18200	8300	25.31	37.46
JKS 5121	9.00	228.60	9 <sup>1</sup> / <sub>4</sub>	247.65	10.30	254.76	6 <sup>7</sup> / <sub>16</sub>	160.27	1 <sup>1</sup> / <sub>8</sub>	28.58	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>4</sub>	31.75	3 <sup>3</sup> / <sub>8</sub>	92.09	218450	99290	27600	12550	40.47	60.70
JKS 6121	9.00	228.60	9 <sup>1</sup> / <sub>4</sub>	247.65	10.30	254.76	6 <sup>7</sup> / <sub>16</sub>	160.27	1 <sup>1</sup> / <sub>8</sub>	28.58	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>4</sub>	31.75	3 <sup>3</sup> / <sub>8</sub>	92.09	218450	99290	27600	12550	40.47	60.70
JKS 6067	9.00	228.60	8 <sup>1</sup> / <sub>2</sub>	215.90	10.26	254.66	5 <sup>7</sup> / <sub>16</sub>	141.22	1 <sup>1</sup> / <sub>8</sub>	28.58	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>4</sub>	31.75	3 <sup>3</sup> / <sub>8</sub>	92.09	178800	81270	24320	11050	29.43	44.65



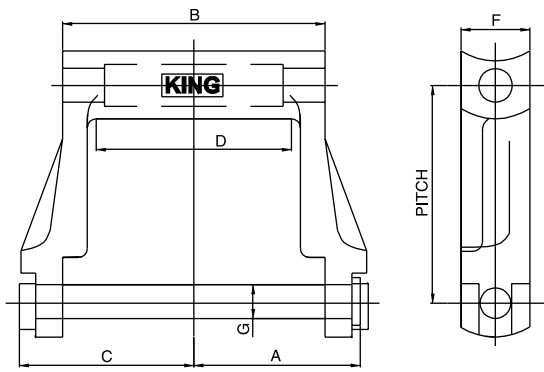
### CRUSADER - HEAVY DUTY WELDED STEEL DRAG CHAIN (WHX)

CHAIN No.	AVERAGE PITCH		WIDTH A		OVER FLIGHT A1		LENGTH OF BEARING AREA B		SIDEBAR THICKNESS T		SIDEBAR HEIGHT F		PIN DIA G		GEARING WIDTH D		MINIMUM ULTIMATE STRENGTH		RATED WORKING LOAD		AVERAGE NETT WEIGHT	
	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	LBS	Kg	LBS	Kg	LBS/Ft	Kgs/Mtr
WHX 5157	6.05	153.67	6 <sup>5</sup> / <sub>16</sub>	176.21	8.14	203.36	4 <sup>5</sup> / <sub>16</sub>	117.60	<sup>5</sup> / <sub>16</sub>	15.88	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>8</sub>	28.58	2 <sup>3</sup> / <sub>4</sub>	69.85	117000	53180	18200	8270	25.31	37.46
WHX 5121	9.00	228.60	9 <sup>1</sup> / <sub>4</sub>	247.65	10.30	254.76	6 <sup>7</sup> / <sub>16</sub>	160.27	1 <sup>1</sup> / <sub>8</sub>	28.58	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>4</sub>	31.75	3 <sup>3</sup> / <sub>8</sub>	92.09	205000	93180	27600	12550	40.47	60.70
WHX 6121	9.00	228.60	9 <sup>1</sup> / <sub>4</sub>	247.65	10.30	254.76	6 <sup>7</sup> / <sub>16</sub>	160.27	1 <sup>1</sup> / <sub>8</sub>	28.58	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>4</sub>	31.75	3 <sup>3</sup> / <sub>8</sub>	92.09	205000	93180	27600	12550	40.47	60.70
WHX 6067	9.00	228.60	8 <sup>1</sup> / <sub>2</sub>	215.90	10.26	254.66	5 <sup>7</sup> / <sub>16</sub>	139.70	<sup>3</sup> / <sub>4</sub>	19.05	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>4</sub>	31.75	3 <sup>3</sup> / <sub>8</sub>	92.09	195000	86640	24300	11045	30.43	44.65

**Note: WHX 5121 is dimensionally the same as WHX 6121 except it runs closed end first**

This welded steel option can be considered in place of cast S series drags and is ideal where conditions of high abrasion and heat prevail. The other important features and benefits are:

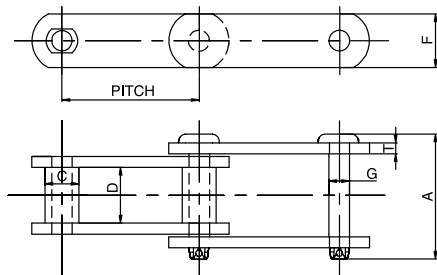
- ★ Fabricated construction with material options in flat and round section for each component allows the construction of CRUSADER to have greater consistency and integrity.
- ★ Interference fit between pin and sidebar improve chain strength and joint wear life. Pins retained thus avoiding chattering and pin/pitch hole wear.
- ★ Square edge on the wing and sidebar of the CRUSADER series creates increased efficiency in conveying. This also allows for the transport of a deeper bed of material.
- ★ Induction Hardened Pins. Affording the best of both worlds with 60 HRC hardened case and high impact resistant material in the core. The result is good resistance to shock loading and extended service life.
- ★ Hard face welding on all sliding and wear surfaces is standard. A typical weld surface of 60 HRC and with heavy weld bead gives CRUSADER excellent sliding wear resistance in cold and hot clinker applications.



## AMERICAN STANDARD SD TYPE CAST LINK DRAG CHAIN (SD)

CHAIN No.	AVERAGE PITCH		END PIN TO C/L A		HEAD PIN TO C/L C		LENGTH OF BEARING AREA B		SIDEBAR HEIGHT F		PIN DIA G		GEARING WIDTH D		MINIMUM ULTIMATE STRENGTH		RATED WORKING LOAD		AVERAGE NETT WEIGHT	
	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	LBS	Kg	LBS	Kg	LBS/Ft	Kgs/Mtr
SD 21	9.00	228.60	8 <sup>7</sup> / <sub>16</sub>	211.14	8 <sup>7</sup> / <sub>16</sub>	207.96	12 <sup>7</sup> / <sub>16</sub>	315.91	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>4</sub>	31.75	9 <sup>1</sup> / <sub>2</sub>	241.30	182300	82850	23400	10600	46.80	69.80
SD 23	9.00	228.60	6.00	152.40	6.00	152.40	8 <sup>7</sup> / <sub>16</sub>	214.31	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>4</sub>	31.75	5 <sup>1</sup> / <sub>4</sub>	146.05	172800	78550	23400	10600	41.80	62.30
SD 27	9.00	228.60	5 <sup>1</sup> / <sub>16</sub>	128.59	4 <sup>13</sup> / <sub>16</sub>	122.24	6 <sup>7</sup> / <sub>8</sub>	174.63	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>8</sub>	28.58	4 <sup>1</sup> / <sub>4</sub>	107.95	160500	72950	20100	9150	30.70	45.80
SD28	9.00	228.60	8 <sup>1</sup> / <sub>8</sub>	206.38	8.00	203.20	12 <sup>13</sup> / <sub>16</sub>	325.44	2 <sup>1</sup> / <sub>8</sub>	53.98	7 <sup>7</sup> / <sub>8</sub>	22.22	10 <sup>1</sup> / <sub>8</sub>	257.18	139400	63360	17600	8000	26.00	38.80
SD29	9.00	228.60	6 <sup>1</sup> / <sub>8</sub>	155.58	6.00	152.40	8 <sup>13</sup> / <sub>16</sub>	223.84	2 <sup>1</sup> / <sub>8</sub>	53.98	7 <sup>7</sup> / <sub>8</sub>	22.22	6 <sup>1</sup> / <sub>4</sub>	158.75	139400	63360	17600	8000	20.80	31.01

Note: The cast drags illustrated show Climax Standards. Any cast link chain in JK/WRI or JK/MN material can be manufactured to order. For JKH types see Timber brochure.



## KING MILL DUTY ELEVATOR CHAIN

CHAIN No.	AVERAGE PITCH		PIN LENGTH A		PIN DIA G		BUSH DIA C		GEARING WIDTH D		SIDEBAR HEIGHT F		SIDEBAR THICKNESS T		MINIMUM ULTIMATE STRENGTH		RATED WORKING LOAD		AVERAGE NETT WEIGHT	
	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	LBS	Kg	LBS	Kg	LBS/Ft	Kgs/Mtr
SS 188	2.609	66.27	2 <sup>11</sup> / <sub>16</sub>	68.26	1/2	12.7	7/8	22.22	1 <sup>1</sup> / <sub>16</sub>	26.99	1 <sup>1</sup> / <sub>8</sub>	30	3/4	6.00	25000	11364	2740	1250	3.80	5.70
SS 131	3.075	78.10	3 <sup>1</sup> / <sub>2</sub>	88.90	5/8	15.88	1 <sup>1</sup> / <sub>4</sub>	31.75	1 <sup>1</sup> / <sub>16</sub>	33.34	1 <sup>1</sup> / <sub>2</sub>	40	3/8	10.00	40000	18180	4450	2020	7.40	11.00
SS 102B	4.00	101.60	4 <sup>1</sup> / <sub>8</sub>	111.13	5/8	15.88	1	25.40	2 <sup>1</sup> / <sub>8</sub>	53.98	1 <sup>1</sup> / <sub>2</sub>	40	3/8	10.00	40000	18180	6300	2850	6.90	10.30
JKB110	6.00	152.40	4 <sup>1</sup> / <sub>8</sub>	111.13	5/8	15.88	1 <sup>1</sup> / <sub>4</sub>	31.75	2 <sup>1</sup> / <sub>8</sub>	53.98	1 <sup>1</sup> / <sub>2</sub>	40	3/8	10.00	40000	18180	6300	2850	6.30	9.40
JKB856	6.00	152.40	6.00	152.40	1.00	25.4	1 <sup>3</sup> / <sub>4</sub>	44.5	3.00	76.20	2 <sup>1</sup> / <sub>2</sub>	65	1/2	10.00	100000	45450	14000	6360	16.50	24.60
JKB857	6.00	152.40	6.00	152.40	1.00	25.4	1 <sup>3</sup> / <sub>4</sub>	44.5	3.00	76.20	3 <sup>1</sup> / <sub>4</sub>	80	1/2	10.00	130000	59090	14000	6360	21.00	31.30
JKB6150	6.05	153.67	6 <sup>1</sup> / <sub>8</sub>	168.28	1.00	25.4	1 <sup>3</sup> / <sub>4</sub>	44.5	3 <sup>3</sup> / <sub>8</sub>	85.73	2 <sup>1</sup> / <sub>2</sub>	65	1/2	10.00	100000	45450	15000	6800	16.60	24.75
JKB859	6.00	152.40	7 <sup>1</sup> / <sub>8</sub>	193.68	1 <sup>1</sup> / <sub>4</sub>	31.75	2 <sup>1</sup> / <sub>8</sub>	60.33	3 <sup>1</sup> / <sub>4</sub>	95.25	4.00	100	3/8	16.00	200000	90900	22000	10000	34.00	50.70
JKB864	7.00	177.80	7 <sup>1</sup> / <sub>8</sub>	193.68	1 <sup>1</sup> / <sub>4</sub>	31.75	2 <sup>1</sup> / <sub>8</sub>	60.33	3 <sup>1</sup> / <sub>4</sub>	95.25	4.00	100	3/8	16.00	200000	90900	22000	10000	33.00	49.20

- ★ Experience - in considering 80 years of experience in supplying heavy duty chain products for tough industrial applications you can be confident King Mill Duty elevator chains have optimum design features.
- ★ Fatigue Life - All chain parts are designed to provide maximum strength without sacrificing necessary toughness. The full round design on the heavier series eliminates stress risers in sidebar holes to maximise fatigue life. The sidebar hole size and finish are closely controlled to ensure optimum press fit and fatigue life.
- ★ Wear resistance. Pins and bushes are made from alloy steels for optimum wear life and toughness. Pins are heat treated and surface induction hardened to provide maximum wear resistance. Bushes are case carbonised with an armour casing to offer best performance.

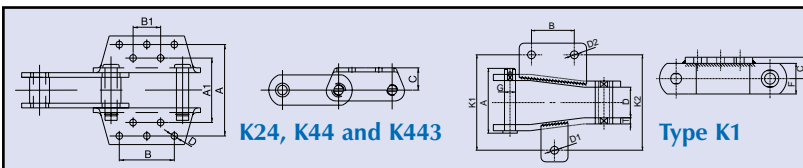
## MILL DUTY ELEVATOR CHAIN ATTACHMENT DETAIL

CHAIN No.	STYLE	No. OF HOLES	TRANSVERSE HOLE CENTRES A				LONGITUDINAL HOLE CENTRES B				PLATFORM HEIGHT C		BOLT DIAMETER D	
			A		A1		B		B1		C		D	
			IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm
SS188	K1	2			4 <sup>7</sup> / <sub>16</sub>	106.36					1 <sup>3</sup> / <sub>16</sub>	20.64	3 <sup>7</sup> / <sub>16</sub>	9.53
	K2	4	4 <sup>7</sup> / <sub>16</sub>	106.36			1 <sup>1</sup> / <sub>4</sub>	31.75			1 <sup>3</sup> / <sub>16</sub>	20.64	3 <sup>7</sup> / <sub>16</sub>	9.53
SS131	K1	2			4 <sup>7</sup> / <sub>16</sub>	104.78					1.00	25.40	1 <sup>1</sup> / <sub>2</sub>	12.70
	K2	4	4 <sup>7</sup> / <sub>16</sub>	104.78			1 <sup>1</sup> / <sub>2</sub>	38.10			1.00	25.40	1 <sup>1</sup> / <sub>2</sub>	12.70
SS102B	K2	4	5 <sup>7</sup> / <sub>16</sub>	134.94			1 <sup>3</sup> / <sub>4</sub>	44.45			1.00	25.40	3 <sup>7</sup> / <sub>16</sub>	9.53
JKB110	K2	4	5 <sup>7</sup> / <sub>16</sub>	134.94			1 <sup>3</sup> / <sub>4</sub>	44.45			1 <sup>7</sup> / <sub>8</sub>	47.63	3 <sup>7</sup> / <sub>16</sub>	9.53
JKB856	K24	4	7 <sup>1</sup> / <sub>4</sub>	184.15			2 <sup>1</sup> / <sub>2</sub>	63.50			1 <sup>7</sup> / <sub>8</sub>	47.63	5 <sup>7</sup> / <sub>16</sub>	15.88
JKB857	K44	8	12.00	304.80	7.00	177.80	4 <sup>1</sup> / <sub>2</sub>	114.30	2 <sup>3</sup> / <sub>4</sub>	69.85	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>1</sup> / <sub>2</sub>	12.70
JKB6150	K2	4	7 <sup>1</sup> / <sub>2</sub>	190.50			2 <sup>1</sup> / <sub>4</sub>	69.85			1 <sup>7</sup> / <sub>8</sub>	47.63	1 <sup>1</sup> / <sub>2</sub>	12.70
JKB859	K44	8	13.00	330.20	9.00	228.60	4 <sup>1</sup> / <sub>2</sub>	114.30	2 <sup>3</sup> / <sub>4</sub>	69.85	3.00	76.20	5 <sup>7</sup> / <sub>16</sub>	15.88
JKB864	K443	10	13.00	330.20	9.00	228.60	5 <sup>1</sup> / <sub>2</sub>	139.70	3 <sup>3</sup> / <sub>4</sub>	95.25	3.00	76.20	5 <sup>7</sup> / <sub>16</sub>	15.88



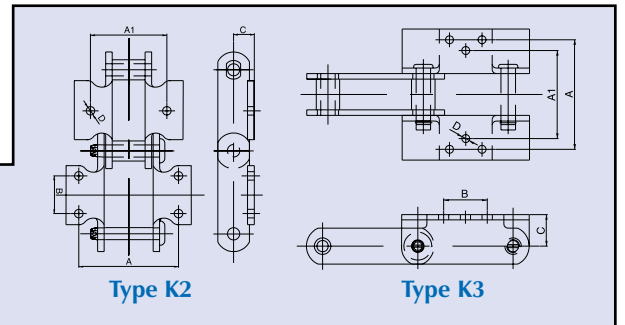
Deep Bucket Conveyor Chain

Note: Various styles of attachment available. Details available on application.



K24, K44 and K443

Type K1



Type K2

Type K3

## KING ASPHALT DRAG CHAIN

CHAIN No.	AVERAGE PITCH		PIN LENGTH A		PIN DIA G		ROLLER DIA C		GEARING WIDTH D		SIDEBAR HEIGHT F		SIDEBAR THICKNESS T		MINIMUM ULTIMATE STRENGTH		RATED WORKING LOAD		AVERAGE NETT WEIGHT	
	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	LBS	Kg	LBS	Kg	LBS/Ft	Kgs/Mtr
	JK2102	4.00	101.60	4 <sup>1</sup> / <sub>2</sub>	114.30	5 <sup>7</sup> / <sub>16</sub>	15.88	1 <sup>1</sup> / <sub>2</sub>	38.10	2 <sup>7</sup> / <sub>32</sub>	56.36	1 <sup>1</sup> / <sub>2</sub>	40.00	3 <sup>7</sup> / <sub>16</sub>	10.00	56500	25700	6500	2950	9.00
JK2268	4.038	102.57	4 <sup>1</sup> / <sub>4</sub>	107.95	3 <sup>1</sup> / <sub>4</sub>	19.05	1 <sup>3</sup> / <sub>8</sub>	41.25	2.00	50.80	2 <sup>1</sup> / <sub>4</sub>	60.00	3 <sup>7</sup> / <sub>16</sub>	10.00	100000	45450	7200	3270	11.00	16.40
JK2856	6.00	152.40	6.00	152.40	1.00	25.40	2 <sup>3</sup> / <sub>4</sub>	69.85	3.00	76.20	2 <sup>1</sup> / <sub>2</sub>	65.00	1 <sup>1</sup> / <sub>2</sub>	12.00	143000	65000	14000	6360	21.30	31.75
JK2860	6.00	152.40	6.00	152.40	1.00	25.40	2 <sup>3</sup> / <sub>4</sub>	69.85	3.00	76.20	2 <sup>1</sup> / <sub>2</sub>	65.00	1 <sup>1</sup> / <sub>2</sub>	12.00	143000	65000	14000	6360	21.30	31.75
JK2866	6.00	152.40	6.00	152.40	1.00	25.40	2 <sup>3</sup> / <sub>4</sub>	69.85	3.00	76.20	2 <sup>3</sup> / <sub>4</sub>	70.00	1 <sup>1</sup> / <sub>2</sub>	12.00	149000	67700	14000	6360	22.10	32.95
JK3940	6.00	152.40	4 <sup>1</sup> / <sub>4</sub>	107.95	3 <sup>1</sup> / <sub>4</sub>	19.05	1 <sup>3</sup> / <sub>8</sub>	41.25	2.00	50.80	2 <sup>1</sup> / <sub>4</sub>	60.00	3 <sup>7</sup> / <sub>16</sub>	10.00	90000	40900	7200	3270	7.80	11.60
JK3945	4.00	101.60	4 <sup>7</sup> / <sub>16</sub>	106.36	5 <sup>7</sup> / <sub>16</sub>	15.88	1 <sup>1</sup> / <sub>4</sub>	31.75	2.00	50.80	1 <sup>1</sup> / <sub>2</sub>	40.00	5 <sup>7</sup> / <sub>16</sub>	8.00	45000	20450	5700	2590	8.50	12.70
JK3950	4.038	102.57	4 <sup>7</sup> / <sub>16</sub>	106.36	5 <sup>7</sup> / <sub>16</sub>	15.88	1 <sup>3</sup> / <sub>8</sub>	34.93	2.00	50.80	1 <sup>1</sup> / <sub>2</sub>	40.00	5 <sup>7</sup> / <sub>16</sub>	8.00	45000	20450	5700	2590	8.95	13.35
JK3952	4.00	101.60	4 <sup>1</sup> / <sub>4</sub>	107.95	3 <sup>1</sup> / <sub>4</sub>	19.05	1 <sup>7</sup> / <sub>16</sub>	36.51	2.00	50.80	1 <sup>1</sup> / <sub>4</sub>	30.00	3 <sup>7</sup> / <sub>16</sub>	10.00	62000	28200	8200	3730	9.00	13.42
JK4604	4.604	116.94	4 <sup>7</sup> / <sub>16</sub>	106.36	5 <sup>7</sup> / <sub>16</sub>	15.88	1 <sup>3</sup> / <sub>8</sub>	34.93	2.00	50.80	1 <sup>1</sup> / <sub>2</sub>	40.00	5 <sup>7</sup> / <sub>16</sub>	8.00	45000	20450	5700	2590	8.70	13.00

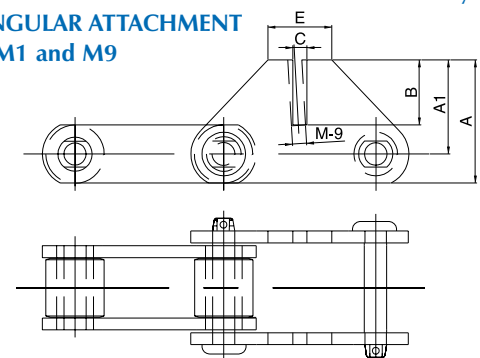
## DRAG SLAT CHAIN ATTACHMENT DETAIL

CHAIN No.	ATTACHMENT STYLE	A		A1		B		C		D (R)		E (M)	
		IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm
		JK2102	K2	5 <sup>7</sup> / <sub>16</sub>	134.94			1 <sup>1</sup> / <sub>4</sub>	44.45	1 <sup>1</sup> / <sub>8</sub>	28.58	1 <sup>1</sup> / <sub>2</sub>	12.00
	M1					2 <sup>7</sup> / <sub>8</sub>	60.33	3 <sup>7</sup> / <sub>16</sub>	14.29			4 <sup>7</sup> / <sub>64</sub>	102.00
JK2268	K2	5 <sup>1</sup> / <sub>4</sub>	133.35					2.00	50.80	1 <sup>1</sup> / <sub>2</sub>	12.00		
JK2856	K2(SP)	7 <sup>1</sup> / <sub>4</sub>	184.15					1 <sup>7</sup> / <sub>8</sub>	47.63	5 <sup>7</sup> / <sub>16</sub>	16.00		
JK2860	K24	7 <sup>1</sup> / <sub>4</sub>	184.15	4 <sup>3</sup> / <sub>4</sub>	120.65	2 <sup>1</sup> / <sub>2</sub>	63.50	1 <sup>7</sup> / <sub>8</sub>	47.63	5 <sup>7</sup> / <sub>16</sub>	16.00		
	M1	6.00	152.40	3 <sup>7</sup> / <sub>16</sub>	92.08	2 <sup>3</sup> / <sub>4</sub>	69.85	1 <sup>3</sup> / <sub>16</sub>	20.64			6 <sup>7</sup> / <sub>16</sub>	171.45
JK2866	M1	5.00	127.00	3 <sup>7</sup> / <sub>16</sub>	92.08	2 <sup>7</sup> / <sub>8</sub>	60.33	1 <sup>3</sup> / <sub>16</sub>	20.64			3 <sup>7</sup> / <sub>16</sub>	77.78
	M9	5.00	127.00			2 <sup>7</sup> / <sub>8</sub>	60.33	1 <sup>3</sup> / <sub>16</sub>	20.64			3 <sup>7</sup> / <sub>16</sub>	77.78
JK3940	K2	6 <sup>1</sup> / <sub>4</sub>	158.75			2 <sup>7</sup> / <sub>16</sub>	58.74	2.00	50.80	1 <sup>1</sup> / <sub>2</sub>	12.00		
JK3945	K2	5 <sup>7</sup> / <sub>16</sub>	139.94			1 <sup>1</sup> / <sub>4</sub>	44.45	1 <sup>3</sup> / <sub>8</sub>	34.93	1 <sup>1</sup> / <sub>2</sub>	12.00		
	K3	5 <sup>7</sup> / <sub>16</sub>	139.94	4 <sup>3</sup> / <sub>4</sub>	120.65	1 <sup>1</sup> / <sub>4</sub>	44.45	1 <sup>7</sup> / <sub>8</sub>	34.93	3 <sup>7</sup> / <sub>16</sub>	10.00		
JK3950	K3	5 <sup>7</sup> / <sub>16</sub>	139.94	4 <sup>3</sup> / <sub>4</sub>	120.65	1 <sup>7</sup> / <sub>64</sub>	39.69	1 <sup>7</sup> / <sub>8</sub>	34.93	3 <sup>7</sup> / <sub>16</sub>	10.00		
JK3952	K2	5 <sup>1</sup> / <sub>2</sub>	139.70			1 <sup>15</sup> / <sub>16</sub>	49.21	1 <sup>7</sup> / <sub>8</sub>	41.28	3 <sup>7</sup> / <sub>16</sub>	10.00		
	K3	5 <sup>1</sup> / <sub>2</sub>	139.70	4 <sup>3</sup> / <sub>4</sub>	120.65	1 <sup>1</sup> / <sub>4</sub>	44.45	1 <sup>7</sup> / <sub>8</sub>	41.28	3 <sup>7</sup> / <sub>16</sub>	10.00		
JK4604	K3	5 <sup>7</sup> / <sub>16</sub>	139.94	4 <sup>3</sup> / <sub>4</sub>	120.65	1 <sup>1</sup> / <sub>4</sub>	44.45	1 <sup>7</sup> / <sub>8</sub>	41.28	3 <sup>7</sup> / <sub>16</sub>	10.00		



Pan Conveyor Chain

TRIANGULAR ATTACHMENT Type M1 and M9



## EUROPEAN STANDARD ROLLER AND BUSH SERIES CHAIN M SERIES AS DIN 8167

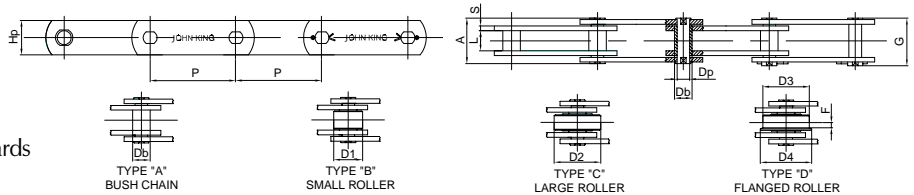
DIN No.	P	L	D1	D2	D3	D4	F	Db	Dp	Hp	S	A	G	BREAKING LOAD	
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	N	N**
M80	80, 100, 125, 160, 200	28	25	50	50	65	7	18	12	35	5	55	59	80.000	125.000
M112	80, 100, 125, 160, 200	32	30	60	60	75	7.5	21	15	40	6	64	36	112.000	175.000
M160	100, 125, 160, 200, 250	37	36	70	70	90	8.5	25	18	50	7	73	41	160.000	260.000
M224	125, 160, 200, 250, 315	43	42	85	85	105	10	30	21	60	8	84	47	224.000	340.000
M315	160, 200, 250, 315, 400, 500	48	50	100	100	125	10.5	36	25	70	10	98	106	315.000	520.000
M450	200, 250, 315, 400, 500	56	60	120	120	150	11.5	42	30	80	12	115	128	450.000	700.000

N\*\* - Denotes heat treated sidebars.

★ M Series chain offers the basis for many variations of chains in bucket pan conveyors, plate feeders and scraper reclaimer systems.

★ Outboard carrier rollers manufactured to OEM standards

★ Pans and plates manufactured to OEM standards



## KING MAXI SERIES - WORKS STANDARD CRANK LINK BUSH CHAIN

CHAIN No.	AVERAGE PITCH		PIN LENGTH A		PIN DIA G		BUSH DIA C		GEARING WIDTH D		SIDEBAR HEIGHT F		SIDEBAR THICKNESS T		MINIMUM ULTIMATE STRENGTH		AVERAGE NETT WEIGHT		TRANSVERSE CENTRES				LONGITUDINAL CENTRES		PLATFORM HEIGHT C		BOLT DIA D	
	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	LBS	Kg	LBS/Ft/Kg/Mtr	K1		K2		IN	mm	IN	mm	IN	mm	IN
MX503	3.00	76.20	3.00	76.20	5/16	14.00	1 1/32	27.80	1 1/2	38.10	1 1/2	40.00	3/16	8.00	26500	12050	6.65	9.90	4 7/16	112.70	5 3/8	136.52	2 7/8	73.03	1 1/4	30.00	3/8	10.00
MX504	4.06	103.12	4 1/2	115.00	5/8	16.00	1 1/16	33.30	2.00	50.80	2.00	50.00	3/8	10.00	46000	20100	9.35	13.94	6.00	152.40	5 13/16	147.60	2 1/2	63.50	1 1/8	35.00	1/2	12.00
MX500	6.04	153.42	4 7/16	115.00	5/8	16.00	1 1/16	33.30	2.00	50.80	2.00	50.00	3/8	10.00	50500	229500	8.25	12.30			5 1/4	133.35	2 7/8	73.03	1 1/8	35.00	1/2	12.00
MX603	3.00	76.20	3 3/8	86.00	5/16	14.00	7/8	22.50	1 1/2	38.10	1 1/2	40.00	3/16	8.00	33000	15000	6.00	8.96	4 1/2	114.30	5 7/8	138.10	1 1/4	44.45	1 1/4	30.00	3/8	10.00
MX604	4.03	102.36	4 1/2	115.00	5/8	16.00	1.00	25.40	2 1/4	57.15	2.00	50.00	3/8	10.00	55000	25000	8.70	12.97	5 11/16	144.46	5 1/4	146.05	1 1/2	38.10	1 1/4	30.00	1/2	12.00
MX600	6.04	153.40	4 7/16	109.50	1 1/16	18.00	1 1/8	28.60	2.00	50.80	2.00	50.00	3/8	10.00	50500	22950	7.60	11.35	6.00	152.40	4 7/8	123.80	2 1/4	69.85	1 1/8	35.00	1/2	12.00
MX704	4.06	103.12	4 1/2	115.00	5/8	16.00	1.00	25.40	2 1/4	57.15	2.00	50.00	3/8	10.00	55000	25000	9.78	14.58			5 11/16	144.46	1 1/2	38.10	1 3/8	30.00	1/2	12.00

\* OFFSET HOLES

★ Maximum specifications as Mill Duty Elevator Chain.

★ Offset sidebar style offers benefits. Open end must lead as this obviates any frictional wear that may take place between link and driver.

★ Maximum strength weight ratio is available with much increased ultimate strength over cast link alternative.

★ Maximum versatility with all combinations of fabricated attachments available in addition to 'K' including F, G, L, M, and S.

## CLIMAX SPROCKETS

King operate a dedicated manufacturing division where sprockets and Traction wheels are produced with the latest technology in a variety of styles including solid, split and/or segmental construction. Through their long experience King have now established fabricated construction as the preferred method of manufacture offering:-

★ More accurate tooth form

★ Consistency of material with certified carbon content for guaranteed hardening quality

★ Versatility with customer boss and construction requirements easily accommodated

King promote their Climax tooth form for Cement and Quarry applications with sprocket design incorporating a specific tooth gap angle and increased bottom line clearance to allow abrasive material to fall away and thus avoid a grinding action between chain gearing element and sprocket contact point. (contact our Engineering for any specific requirements in sprocket design).



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REG NO: FM77342



JOHN KING