RENOLD

agricultural



Agricultural chain industry

RENOLD AGRICULTURAL CHAIN

In todays' world of sophisticated agricultural and processing equipment, the name RENOLD is the guarantee of outstanding quality and reliability. Renold have been designing and manufacturing chains since 1879, in collaboration with the leading manufacturers of crop harvesting and processing equipment.

Engineering design detail and precision manufacturing techniques have earned Renold the ISO 9000 (BS 5750) quality assurance standards, resulting in a range of chains giving longer life under the most arduous conditions.

Functions - AGRICULTURAL CHAIN

Renold chains are used on:

- Combine Harvesters
- Vegetable Grading Conveyors
- Grain Elevators
- Round Balers
- · Circular Bale Unrollers
- · Back-Feed Hoppers
- Box Scrapers
- Fruit Packing Conveyors

KEY FEATURES - AGRICULTURAL CHAIN

The standard range of Renold chain meets the majority of modern agricultural requirements.

However, with continually improving farming techniques and higher crop yields, Renold also offers a range of extra strength chains which are dimensionally identical to the standard range.

Heat treatment techniques are used to greatly enhance the breaking load and these chains have been adopted as a standard by major combine harvester manufacturers.

Being dimensionally the same as the standard chain, they are more cost effective by:

- Directly replacing standard chain using existing sprockets.
- Increased load handling capability.

These same advantages can also be realised when using extra strength chains to replace both malleable iron and pressed steel detachable link pintle chains.



RENOLD CA 550 AND CA 557 CHAIN

In addition to extra strength chains, Renold also offers the CA 550 and CA 557 straight side plate chain.

This chain, which complies with the American Standard, has become common place world-wide within the agricultural industry.

Many Renold customers fit this chain because of its robust construction and ability to cope with extremely abrasive conditions.

RENOLD WORKS STANDARD CHAIN

Renold works standard chains have been developed in close liaison with machinery manufacturers to fulfil specific requirements.

The works standard range also demonstrates the Renold commitment to continual chain development for the international agricultural industry.

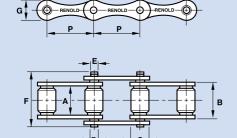
RENOLD ATTACHMENTS AND SPROCKETS

Our list of standard attachments is detailed for each chain shown in this section. Less common, made to order attachments are also available on request.

The popular standard sprockets for this range of chains are also detailed. Modifications to these standard sprockets, made to order and special sprockets are also available on request.

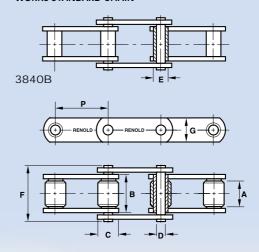
RENOLD

ISO 487 CHAIN



3000, 3840, 3840S, 3840V CA550 Has straight side plates as shown on the right

WORKS STANDARD CHAIN



Chain Technical Details Connecting Links

ISO No	STD Chain No	Extra P Strength Chain			Inside Width	Over Inner Plates	Roller Dia	Pin Dia	Bush Dia	Over Pin H	Plate leight	STD F _B Newtor	,	ght g/m	No 4	No 107	No 11	No 12	No 58
		No	Р	Р	Α	В	С	D	E	F	G	Min							
ISO	487 C	HAIN																	
S32	180488*		1.15	29.21		20.2	11.4	4.47		29.3	13.5	8000	19700	0.76	✓	✓	✓	✓	-
S42	180519*		1.375	34.93		25.4	14.3	7.01		36.9	19.8	27000	44700	1.61	/	√	/	/	-
S52 S55	180538* 180570*		1.50 1.63	38.1 41.4	22.2 22.2	28.6 28.6	15.2 17.8	5.74 5.74		40.7 40.7	17.3 17.3	18000 18000	35000 35000	1.56 1.65	/	1	1	1	-,
S45	180551*		1.63	41.4	22.2	28.6	15.2	5.74		40.7	17.3	18000	35000	1.46	1	1	1	1	1
S62	180558*	590558*	1.65	41.91		31.8	19.1	5.74		48.2	17.3	27000	35000	1.87	/	/	/	/	1
S77	180671*	590671*	2.297	58.3	22.2	31.2	18.3	8.92	12.2	47.7	26.2	45000	85300	2.57	1	/	/	/	
S88	180708*	590708*	2.609	66.27	28.6	37.5	22.9	8.92	12.2	54.6	26.2	45000	85300	3.26	✓	✓	✓	✓	-
CA55	0 184959		1.63	41.4	20.5	25.8	16.7	7.01	10.67	40.9	19.2	57000		2.08	1	1	✓	1	
WO	RKS S	TANDA	RD (СНА	IN														
	3000		1.181	30.0	19.0	25.5	15.9	8.3	-	35.0	20.5	45000		2.56	· /	/	/	/	1
-	3840		1.512	38.4	19.0	24.0	15.9	6.9	-	33.0	17.2	27000	-	1.70	1	1	/	/	1
	3840 B		1.512	38.4	19.0	24.0		6.9	10.2	33.0	17.2	27000		1.27	✓	✓	✓	✓	✓
•	-	3840 S	1.512	38.4	19.0	24.0	15.9	6.9	-	33.0	17.2		35000	1.70	√	√,	√,	/	√,
•	3840 V 184919*	•	1.512 1.63	38.4 41.4	19.0 22.2	24.5 30.0	15.9 17.8	8.3 8.89	12.2	35.0 42.9	22.0 22.4	45000 44500		1.94 2.75	/	/	1	1	<i>\</i>
	186023		1.03	38.1	12.7	19.0	11.9	5.94		29.0	17.7	37700		1.40	1	./	./	/	1
-	186063*	* -	1.646	41.8	19.9	26.0	17.1	11.2	14.0	35.8	25.0	34300	-	2.18	/	/	/	/	/
	186073*		1.646	41.8	19.9	26.0	17.1	11.2	14.0	35.8	21.5	26500	-	2.28	<i>\</i>	1	✓	✓	✓
CA55	7 180557		1.63	41.4	20.0	26.0	17.78	8.0	11.5	36.1	23.0	73400		2.6	/	/	/	/	
* ZIN	C PLATED	CHAIN	** HC	DLLOV	V BEARI		INC PLAT				XTRA ST		FB		BREAK	ING F	ORCI		

Connecting Links



84919 IS A REINFORCED VERSION OF S55

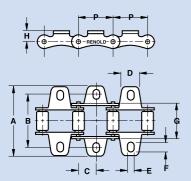




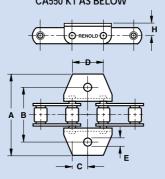


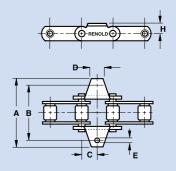


ISO 487 CHAIN



WORKS STANDARD ATTACHMENT CA550 K1 AS BELOW





Chain

Technical Details

ISO	STD	Extra	Type	JointJoint	Joint		Max	Min						
No	Chain	Strength	.) 0	No No	No	Α	В	В	С	D	Ε	F	G	Н
	No	Chain		InnerOuter	Con									
		No			Link									
					2									
ISO	487 K	ΔΤΤΔ	CHMENT											
S32	180488		One Side	01030106	0101	61.0	44.5	41.3	14.6	14.0	5.3	6.9	24.4	8.6
002	100100	070100	Both Sides	01040107	0102	61.0	44.5	41.3	14.6	14.0	5.3	6.9	24.4	8.6
S42	180519	590519	One Side	01030106	0101	74.9	57.2	50.8	17.5	17.8	8.3	11.5	31.8	14.0
			Both Sides	01040107	0102	74.9	57.2	50.8	17.5	17.8	8.3	11.5	31.8	14.0
S52	180538	590538	One Side	01030106	0101	77.5	60.3	57.2	19.1	19.0	8.3	9.9	35.1	11.4
			Both Sides	01040107	0102	77.5	60.3	57.2	19.1	19.0	8.3	9.9	35.1	11.4
S55	180570	590570	One Side	01030106	0101	74.9	57.2	50.8	20.7	20.3	8.3	11.5	35.1	11.4
			Both Sides	01040107	0102	74.9	57.2	50.8	20.7	20.3	8.3	11.5	35.1	11.4
S45	180581	590581	One Side	01030106	0101	74.9	57.2	50.8	20.7	20.3	8.3	11.5	35.1	11.4
0/0	400550		Both Sides	01040107	0102	74.9	57.2	50.8	20.7	20.3	8.3	11.5	35.1	11.4
S62	180558	590558	One Side	01030106	0101	96.0	73.0	60.3	21.0	22.0	8.3	14.7	38.1	11.4
S77	180671	590671	Both Sides One Side	01040107 01030106	0102 0101	96.0 101.6	73.0 79.4	60.3 73.0	21.0 29.2	22.0 25.4	8.3 8.3	14.7 11.5	38.1 40.1	11.4 20.8
311	100071	390071	Both Sides	01030100	0101	101.6	79.4 79.4	73.0	29.2	25.4	8.3	11.5	40.1	20.8
S88	180708	590708	One Side	01040107	0102	120.0	98.4	95.3	33.1	31.8	8.3	9.9	46.5	20.8
300	100700	370700	Both Sides	01030100	0102	120.0	98.4	95.3	33.1	31.8	8.3	9.9	46.5	20.8
			Dotti Sides	01040107	0102	120.0	70.4	70.0	00.1	31.0	0.0	7.7	40.0	20.0
CA550	184959		One Side	- 0106	0101	76.1	54.0		20.7	25.0	8.6			12.7
			Both Sides	- 0107	0102	76.1	54.0		20.7	25.0	8.6	-		12.7
WO	RKS ST	ANDA	RD K AT	TACHME	ENT									
#		K1				73.0	57.0		19.2	20.0	6.5		_	10.7
#		K2				73.0	57.0		19.2	20.0	8.5			10.7
#		K3				78.0	57.0		19.2	20.0	8.5		_	16.0
#		K9	-			81.5	57.0		19.2	40.0	10.5			16.0
#		KV1	-		-	86.0	57.0		19.2	40.0	10.5		-	14.0
*		K1	-			90.4	69.9	63.5	20.7	25.0	8.3	-		15.5

Connecting Links











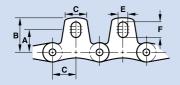


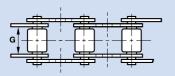
[#] AVAILABLE ON CHAINS 3840, 3840B, 3840S.
* AVAILABLE ON CHAIN 184919. DESIGNED TO ISO 487 ATTACHMENT STYLE.



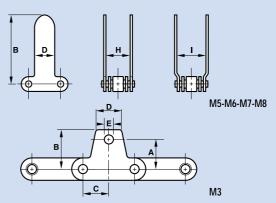


M1





WORKS STANDARD ATTACHMENT



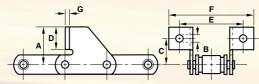
Chain

Technical Details

ISO No	STD Chain No	Extra Strength Chain No	Туре	А	В	С	D	E	F	G	Н	1	
ISO	487 M A	ATTACH	MENT										
\$32	180 488	590488	M1	17.3	26.2	14.6	14.0	5.3	6.9	15.9		-	
S42	180 519	590519	M1	17.3	34.3	17.5	17.8	8.3	11.5	19.1		-	
S52	180 538	590538	M1	22.1	31.8	19.1	19.0	8.3	9.9	22.2	-	-	
S55	180 570	590570	M1	19.8	30.2	30.2	20.3	8.3	11.5	22.2	•	-	
S45	180 581	590581	M1	19.8	30.2	30.2	20.3	8.3	11.5	22.2	•	-	
S62	180 558	590558	M1	24.6	38.6	21.0	22.1	8.3	14.7	25.4	•	-	
S77	180 671	590671	M1	36.3	50.0	29.2	25.4	8.3	11.5	22.2	•	•	
S88	180 708	590708	M1	43.6	55.6	33.1	31.8	8.3	9.9	28.6	•	-	
ISO	487 M AT	TACHME	NT										
	*	-	M3	27.5	38.0	19.2	20.0	8.5				-	
	*	-T	M5		86.0	-	24.0		-		24.4	-	
-	*		M6		103.6	-	24.0	-	-		24.4	-	
	*	•	M7		85.3	-	24.0	•		-		30.0	
	*	•	M8	•	102.9	-	24.0	•	-		-	30.0	

^{*} AVAILABLE ON CHAINS 3840, 3840B, 3840S, 3840V



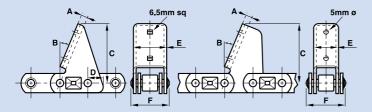


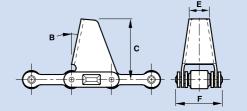
Chain

Technical Details

ISO No	STD Chain No	Extra Strength Chain No	Туре	А	В	С	D	E	F	G	
ISO 4	187 F A	TTACHN	/ENT								
S55	180570	590570	F1	30.9	6.5	20.0	21.7	58.0	90.0	2.5	
S45	180581	590581	F1	30.9	6.5	20.0	21.7	58.0	90.0	2.5	
CA550	184959	-	F1	31.0	6.5	20.0	27.0	58.0	90.0	3.0	
WOR	KS STA	NDARD	F ATTA	CHMEN	Т						
	*		K4	34.5	8.4	24.0	21.0	52.0	70.0	2.5	
* AVAII	ABLE ON (CHAINS 3840.	3840B. 38409	S. 3840V.							

CORNPICKER ATTACHMENT - 3000 MP



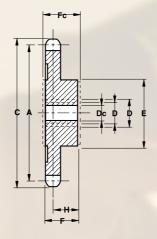


Chain

Technical Details

Chain Type	Link Type	А	В	С	D	E	F
CORN 3000MP 590558	IPICKER ATTACHMENT Inner Outer	6.5 6.5	22.5° 22.5° 12°	62.5 64.0 63.5	- 17.2 -	25.9 32.0 22.0	25.5 36.0 48.0

CORNPICKER ATTACHMENTS SIMILAR TO THOSE SHOWN ABOVE ARE AVAILABLE ON OTHER AGRICULTURAL CHAINS. PLEASE ENQUIRE FOR FULL DETAILS.



Chain

Technical Details

No.	Part No	P.C.D.	Top Dia	BORE			BOSS			Chain	Mojaht
of Tee			Dia	Stock Cast	Min. Machined	Max. Machined	Dia d	Length		from Boss Face when	Weight (Cast Bore)
		А	С	Dc	D	D	E	Cast Fc	Machined F	Machined H	kg
F	OR CHAIN N	No 180488	AND 5	90488							
9	281063*	85.39	94	-		38	64	41	38	31.0	1.13
10	281064*	94.51	103			38	70	41	38	31.0	1.36
11	281065*	103.68	113	-	-	38	70	41	38	31.0	1.47
12	281066*	112.85	122	-		38	70	41	38	31.0	1.59
14	281068*	131.27	140	-		45	76	41	38	31.0	2.15
15	281069*	140.49	149	-	-	45	76	41	38	31.0	2.38
16	281070*	149.73	159	-		45	76	41	38	31.0	2.49
18	281072	168.22	177	-		45	76	44	38	31.0	2.61
27	281078	251.61	261	19	24	50	89	51	44	32.0	4.54
30	281080	279.45	288	19	24	50	89	51	44	32.0	4.99
34	281082	316.59	325	19	24	50	89	51	44	32.0	5.44

* SMALL SOLID SPROCKETS.
OTHER SPROCKETS AVAILABLE ON REQUEST.
SPROCKETS CAN BE MODIFIED ON REQUEST. WHEN KEYWAYS ARE REQUESTED, LARGE SPROCKETS ARE FACED BOTH SIDES OF THE BOSS - SMALL SOLID SPROCKETS ARE FACED ON BOSS SIDE ONLY. SPROCKETS FOR OTHER SIZES OF CHAIN - DETAILS ON REQUEST.

Chain		Technical	Details								
No.	Part	P.C.D.	Тор	BORE			BOSS			01.	
of Teeth	No		Dia	Stock Cast	Min. Machined	Max. Machined	Dia	Length		Chain from Boss Face when	Weight (Cast Bore)
		А	С	Dc	D	D	E	Cast Fc	Machined F	Machined H	kg
					υ ————————————————————————————————————	υ ————————————————————————————————————	L L	r.	r	П	
	CHAIN No			90538							
9	281123*	111.40	125	-	•	48	83	54	51	41.0	2.38
10	281124*	123.39	136	-	-	50	89	54	51	41.0	2.84
11 12	281125* 281126*	135.23 147.22	148 161	•	•	50 50	89 89	54 54	51 51	41.0 41.0	3.29 3.63
13	281127*	159.21	172	-	•	50	89	54 54	51	41.0	3.03 4.08
14	281128*	171.22	184	-		60	102	54	51	41.0	4.99
15	281129*	183.26	197			60	102	54	51	41.0	5.44
16	281130	195.30	209	19	24	60	102	57	51	41.0	5.44
17	281131	207.34	220	19	24	60	102	57	51	41.0	5.67
18	281132	219.41	233	19	24	60	102	57	51	41.0	5.90
27	281138	328.19	341	24	28	65	108	64	57	41.5	9.07
30	281140	364.49	378	24	28	65	108	64	57	41.5	9.98
34	281142 l	412.93	426	24	28	70 l	121	64	57 l	41.5	13.15
F0.D	011418181	100501		00504							
	CHAIN NO			90581							
9	281093*	121.06	134	-	•	50	89	54	51	41.0	2.95
10	281094*	133.99	147	-	•	50	89	54	51	41.0	3.29
12	281096* 281099	159.97 199.14	173 212	-	- 24	50	89 102	54	51	41.0	4.08
15 18	281099	238.43	252	19 19	24 24	60	102	57 57	51 51	41.0 41.0	5.44 6.58
27	281102	256.45 356.62	370	24	28	65	102	64	57	41.5	9.98
30	281110	396.09	409	24	28	65	108	64	57	41.5	10.89
34	281112	448.72	462	24	28	70	121	70	64	48.0	14.51
	CHAIN No			90558							
9	281153*	122.53	135	-		50	89	60	57	46.0	3.29
10	281154*	135.64	149	-	•	60	102	60	57	46.0	4.31
11	281155*	148.77	162	•	•	60	102	60	57	46.0	4.99
12	281156*	161.93	175	-	•	60	102	60	57	46.0	5.44
13 14	281157* 281158*	175.13 188.34	188 201	-	•	60 65	102 108	60 60	57 57	46.0 46.0	6.12 6.58
15	281159	201.57	215	19	24	65	108	64	57	46.0	7.03
16	281160	214.83	213	19	24	65	108	64	57	46.0	7.03
17	281161	228.09	241	19	24	65	108	64	57	46.0	7.71
18	281162	241.35	254	19	24	65	108	64	57	46.0	8.16
27	281168	361.01	374	24	28	70	121	70	64	46.5	12.70
30	281170	400.94	414	24	28	70	121	70	64	46.5	14.06
34	281172	454.23	467	24	28	75 l	133	76	70	53.0	19.05

* SMALL SOLID SPROCKETS.
OTHER SPROCKETS AVAILABLE ON REQUEST.
SPROCKETS CAN BE MODIFIED ON REQUEST. WHEN KEYWAYS ARE REQUESTED, LARGE SPROCKETS ARE FACED BOTH SIDES OF THE BOSS SMALL SOLID SPROCKETS ARE FACED ON BOSS SIDE ONLY. SPROCKETS FOR OTHER SIZES OF CHAIN - DETAILS ON REQUEST.



RENOLD

ALSO AVAILABLE FROM RENOLD

PM SERIES

PM Series is a helical/worm geared motor unit available in seven unit sizes up to 90kW capacity. A wide range of mounting and shaft options are available.

The standard unit has ratios from 8:1 to 307:1 and when combined with RP Series Helical gear, offers ratios of up to 20,000:1.



PINFLEX COUPLING

A robust general purpose pin/buffer coupling providing reliable, fail-safe transmission of torque and misalignment capability.

- · Steel half bodies, strong yet compact
- Polyurethane buffers, reliable/flexible and temperature resistant
- Torsionally flexible and shock-absorbing, extending machine life



SM SERIES

The SM Series speed reducers are available as single reduction units with 5:1 ratios and as double reduction units with ratios of 13:1, 20:1, 25:1.
Ten sizes are available up to 160kW capacity. Parallel and taper output shaft mounting are offered as standard.



TW SERIES

The TW Series range of 10" to 28" centres, heavy-duty worm units is available in single and double reduction types, ratios from 5:1 up to 4900:1, with input powers from 16 to 506kW.



Hydrastart

The Hydrastart fluid coupling gives soft start speed and torque control on high inertia load applications. Standard fill and delay fill types are available, extending the acceleration time and further reducing the start up torque.



SPRAG CLUTCH

Sprag clutches are the solution for back stopping, indexing and over running applications.

The no backlash design gives positive connection between driver and driven components.

Torque capacities of over 800,000Nm are available, with bare sizes of 500mm.



SPROCKETS



Renold sprockets are the ideal solution for smooth chain operation. A range of standard and bespoke sprockets can be supplied on request.

Renold also supply a range of chain tensioners, including the unique, innovative, Roll-Ring® self adjusting chain tensioner.
 Roll-Ring® is used extensively in smaller pitch chain drives, and is available for both BS and ANSI standards.

Unique quality and safety

RENOLD

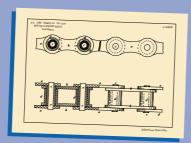
'In a class of its own'

Renold, the inventor of Bush Roller Chain has led the world in chain technology for more than a century.



Only products designed and supplied to our specification carry the MARK OF EXCELLENCE, 'RENOLD'. You can be sure that when you choose such a product, Renold Service, Quality, Value for Money and LONG LIFE PERFORMANCE are guaranteed.

Original patent drawing 1880



A UNIQUE SERVICE

Renold, the premier chain company is dedicated to providing national and global customers with products to the ultimate of specification and design, manufactured to exceed the highest international standards.

Investment in manufacturing and process technology, combined with an international sales and distribution network, places Renold's commitment to the development of chain products and customer service at the forefront of the industry. Renold's 16 national sales companies and over 70 country distributors around the world have direct access to extensive Renold design, test and manufacturing facilities, enabling the chain required to be promptly specified and produced. Renold, the power transmission specialists, provide a worldwide customer orientated product service.

CONSISTENCY

Only materials that meet the Renold exacting specifications are used for the manufacture of our chain components.

Continual investment in new technology demonstrates Renold's commitment to innovation. State of the art automatic assembly, ensures consistent quality of all Renold components.



Stringent process controls are in place at every stage of production.
Every chain is proof loaded, resulting in minimum initial wear, greater fatigue resistance and improved wear performance.



Corrosion protection and long life are achieved by automatically pre-lubricating every chain with a specially formulated grease.
Chain lubrication is one of the most important factors in achieving a long and trouble free service life.
Renold can advise the correct method to suit your needs.



QUALITY

Our commitment to quality ensures that Renold Transmission and Conveyor Chain conforms to and surpasses the highest international standards of manufacture and design, including approval by the American Petroleum Institute.

All of our manufacturing systems conform to ISO9001.

Renold employees are fully trained to ensure all products meet the unique Renold specification.



We also manufacture to the specifications required by API, BAe, CAA, LONDON UNDERGROUND, ROLLS-ROYCE and JAGUAR.



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