Palm Oil Mill Chain

RENOLD

Superior Chain Technology

Renold Palm Oil Mill Chain
Unique quality and safety

Leading edge technology

Renold provides practical cost effective solutions, with a commitment of value through quality. This is achieved by continuous investment in people, process technology and manufacturing.

Consistent reliability

Renold's 100 years of experience in the design and manufacture of power transmission products, to the highest specifications, with proven performance in diverse industries worldwide, underwrites the guaranteed quality and the assurance of reliability.

Package solutions

One stop for your drive systems, including roller and conveyor chain, gears, motors, couplings, variators and fabricated bases.

Service excellence and care

Renold offers a unique level of service excellence and customer care. Our experienced applications engineers will select the optimum solution with the aid of the latest computer aided design technology. Renold is the name for service, care and peace of mind.

Special solutions and innovations

Renold is recognised throughout the industry for its capability to create specific solutions to customers' unique requirements. International companies and industries from steel to food processing to escalators to textile machinery have chosen Renold to solve their problems.

Local and international availability

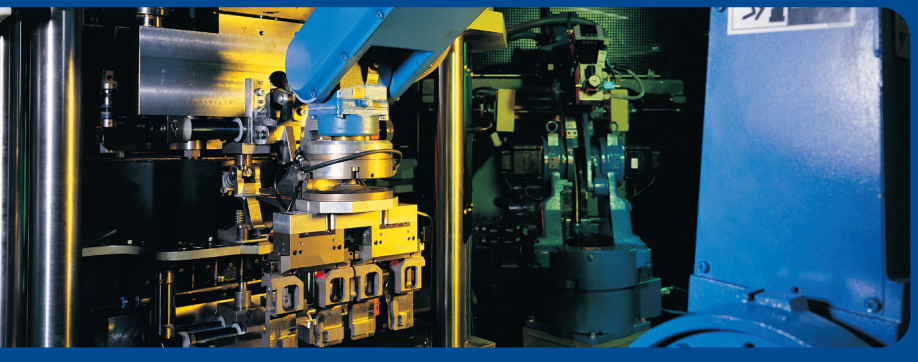
The Renold organisation stretches world-wide.

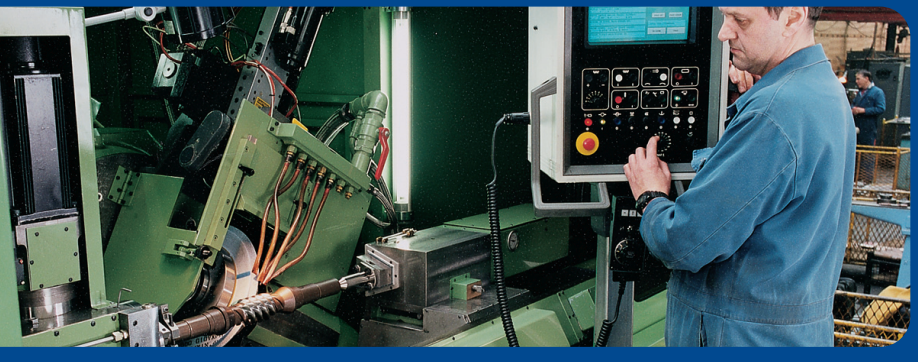
- 18 National Sales Companies
- Over 70 Overseas Distributors offering the comprehensive Renold range of power transmission products, directly or through local distributor networks

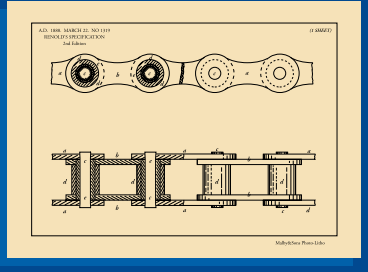
Approvals and quality assurance

The key Renold manufacturing sites have both ISO 9001:2000 or ISO 14001 certification. The roller chain manufacturing sites also have ISO 14001:2004 certification.

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







Original patent drawing 1880 for bush roller chain

Palm Oil industry
Conveyor chain

Renold - ultimate design

Following the successful launch of the Renold Premier Series, our design engineers have further developed the range of Palm Oil Chains.

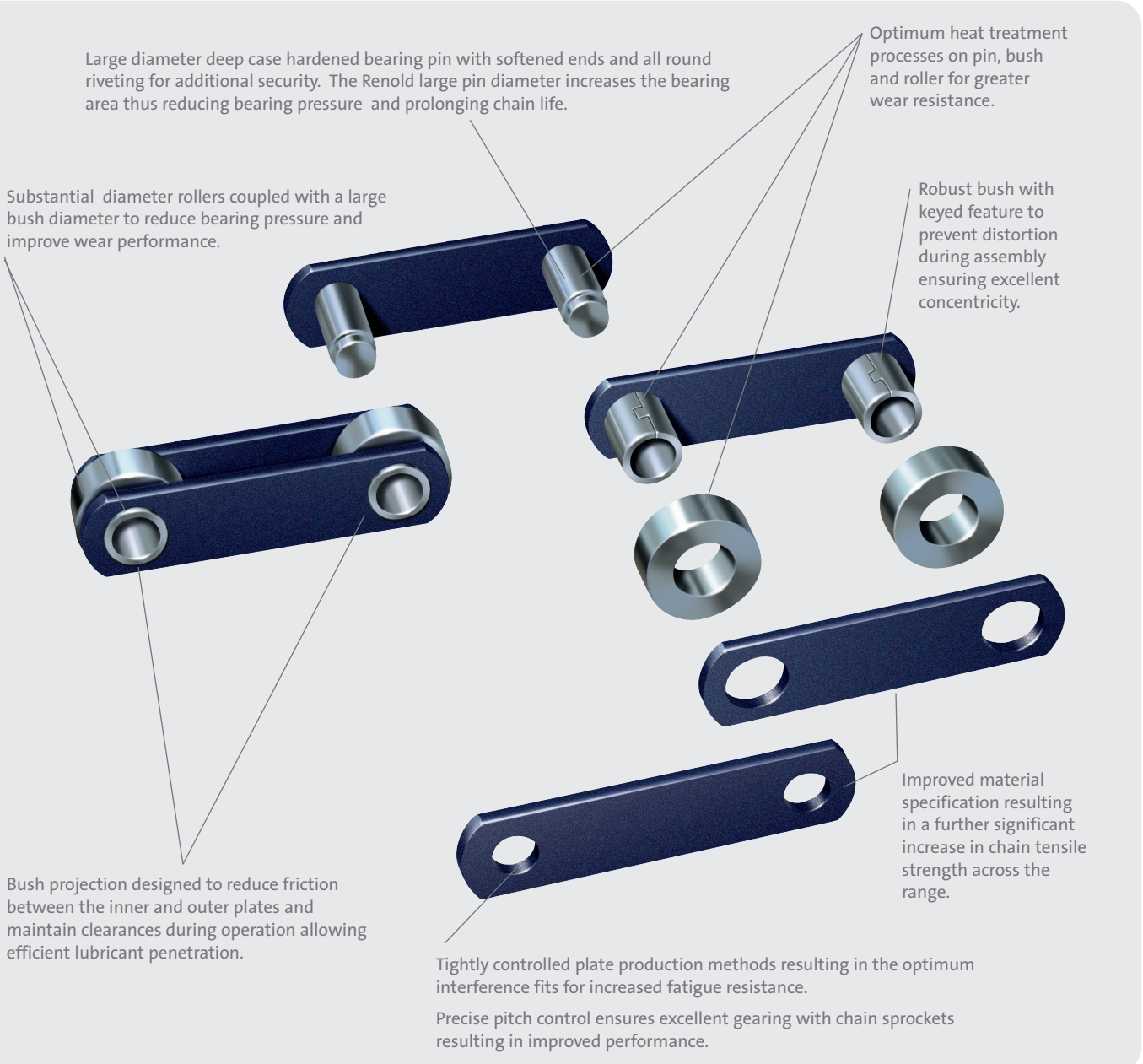
This has been achieved by paying close attention to material and heat treatment specifications on all components.

In recent years many of our competitors have attempted to achieve higher breaking loads, but it must be appreciated that it is easy to do this simply by increasing component hardness. If carried out in an uncontrolled way this results in brittle materials which can easily break when subjected to high impact loads such as might occur in a mechanical jam.

Renold has not only improved tensile strength but has ensured that the chain components remain tough and resistant to impact.

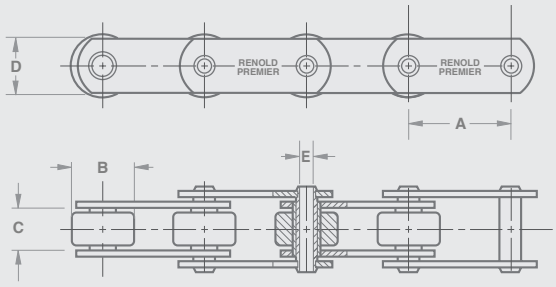
Special design features

Correct chain selection is essential for optimum performance. Renold's experienced sales, production and design staff are always available to advise on particular products and applications.

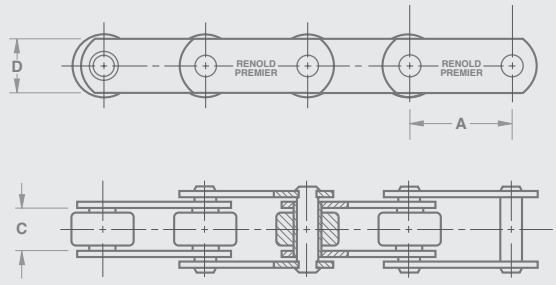


Palm Oil industry
Conveyor chain

Hollow Bearing Pins



Solid Bearing Pins



Chain No.	Pitch (inch)	Pitch (mm)	Breaking Load		Roller Dia		Inside Width		Plate Depth		Hollow Pin Bore		Pin/Bush Bearing Area		Mass kg/m
			lbf	Newtons	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	

Solid Bearing Pin - **Standard**

	A	A			B	B	C	C	D	D	E	E			
S45161	4.0	101.6	18000	80000	1.875	47.6	0.75	19.0	1.50	38.1	-	-	0.94	603	6.43
S45241	6.0	152.4	18000	80000	1.875	47.6	0.75	19.0	1.50	38.1	-	-	0.94	603	5.24
S45162	4.0	101.6	32000	142000	2.625	66.7	1.00	25.4	2.00	50.8	-	-	1.75	1128	14.22
S45242	6.0	152.4	32000	142000	2.625	66.7	1.00	25.4	2.00	50.8	-	-	1.75	1128	11.18
S45243	6.0	152.4	50000	222000	3.500	88.9	1.50	38.1	2.40	61.0	-	-	2.88	1856	24.15

Hollow Bearing Pin - **Standard**

	A	A			B	B	C	C	D	D	E	E			
S05161	4.0	101.6	15000	67000	1.875	47.6	0.75	19.0	1.50	38.1	0.52	13.2	0.94	603	5.91
S05162	4.0	101.6	26000	116000	2.625	66.7	1.00	25.4	2.00	50.8	0.79	20.1	1.75	1128	12.74
S05242	6.0	152.4	26000	116000	2.625	66.7	1.00	25.4	2.00	50.8	0.79	20.1	1.75	1128	10.91
S05243	6.0	152.4	44000	196000	3.500	88.9	1.50	38.1	2.40	61.0	0.91	23.1	2.88	1856	22.18

Solid Bearing Pin - **Premier**

	A	A			B	B	C	C	D	D	E	E			
E45161	4.0	101.6	26000	116000	1.875	47.6	0.75	19.0	1.50	38.1	-	-	0.94	603	6.43
E45241	6.0	152.4	26000	116000	1.875	47.6	0.75	19.0	1.50	38.1	-	-	0.94	603	5.24
E45162	4.0	101.6	50000	222000	2.625	66.7	1.00	25.4	2.00	50.8	-	-	1.75	1128	14.22
E45242	6.0	152.4	50000	222000	2.625	66.7	1.00	25.4	2.00	50.8	-	-	1.75	1128	11.18

Hollow Bearing Pin - **Premier**

	A	A			B	B	C	C	D	D	E	E			
E05161	4.0	101.6	17000	76000	1.875	47.6	0.75	19.0	1.50	38.1	0.52	13.2	0.94	603	5.91
E05162	4.0	101.6	36000	160000	2.625	66.7	1.00	25.4	2.00	50.8	0.79	20.1	1.75	1128	12.74
E05242	6.0	152.4	36000	160000	2.625	66.7	1.00	25.4	2.00	50.8	0.79	20.1	1.75	1128	10.91

Solid Bearing Pin - **Premier Extra**

	A	A			B	B	C	C	D	D	E	E			
X62161	4.0	101.6	30000	134000	1.875	47.6	0.75	19.0	1.50	38.1	-	-	0.94	603	6.43
X62241	6.0	152.4	30000	134000	1.875	47.6	0.75	19.0	1.50	38.1	-	-	0.94	603	5.24
X62162	4.0	101.6	60000	267000	2.625	66.7	1.00	25.4	2.00	50.8	-	-	1.75	1128	14.22
X62242	6.0	152.4	60000	267000	2.625	66.7	1.00	25.4	2.00	50.8	-	-	1.75	1128	11.18

Hollow Bearing Pin - **Premier Extra**

	A	A			B	B	C	C	D	D	E	E			
X02161	4.0	101.6	24000	107000	1.875	47.6	0.75	19.0	1.50	38.1	0.52	13.2	0.94	603	5.91
X02242	6.0	152.4	50000	222000	2.625	66.7	1.00	25.4	2.00	50.8	0.79	20.1	1.75	1128	10.91

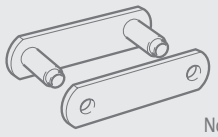
For further details of Renold's vast range of Conveyor Products please contact us now.

Palm Oil industry
Value through quality

Renold ultimate specification - Conveyor Chain

Renold Palm Oil Chain specification is based on years of design, test and application experience ensuring product reliability and consistency. In order to optimise product performance, we strictly control: materials specification, heat treatment, processes, fits, assembly, lubrication and packaging.

Chain joints available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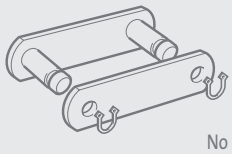
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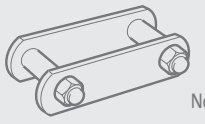
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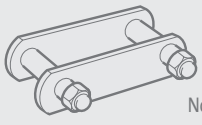
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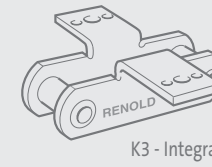
Optimum heat treatment processes on pin, bush and roller for greater wear resistance.

Robust bush with keyed feature to prevent distortion during assembly ensuring excellent concentricity.

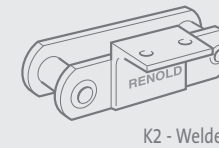
New material specification for increased strength with significant increase in chain breaking load.

Attachment types available

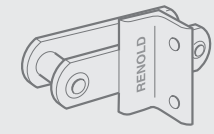
For other attachment designs please contact us



K3 - Integral



K2 - Welded



F2 - Welded

Renold ultimate specification - Transmission Chain

Renold pins are hardened and centreless ground producing almost perfectly cylindrical diameters with an extremely high surface hardness, optimising wear life.

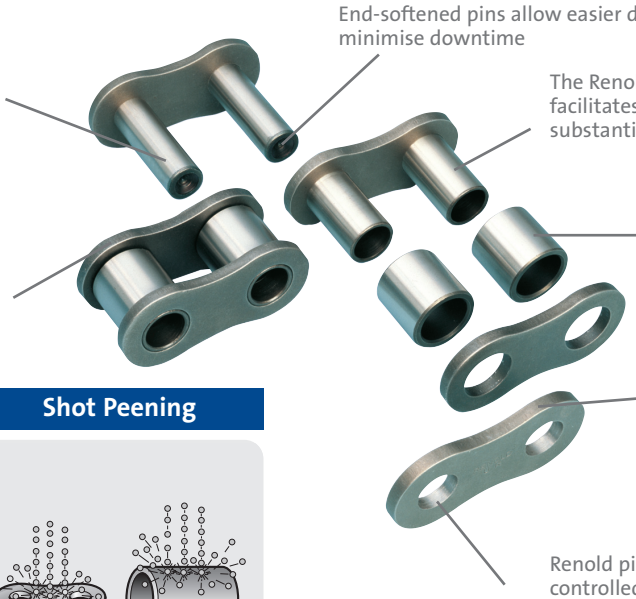
Fatigue life is substantially improved by optimising fits and controlling plate hole quality. Sprocket life is enhanced by matching the chain gearing exactly to the Renold tooth form.

End-softened pins allow easier disassembly and minimise downtime

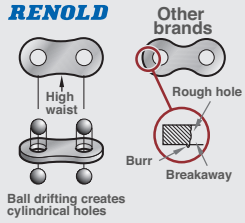
The Renold geometrically designed bush facilitates optimum fits in the plates, substantially improving resistance to fatigue.

Roller and bush life are maximised by the use of highly technological components and the careful selection and control of the heat treatment process.

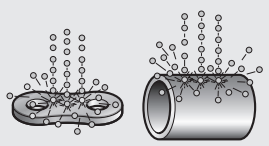
The high waisted plate shape, pioneered by Renold in 1975, ensures optimum stress distribution.



Ball Drifting

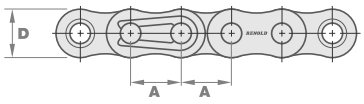


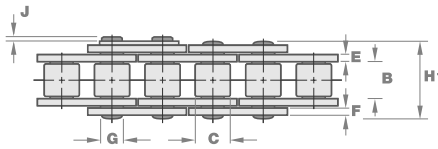
Shot Peening

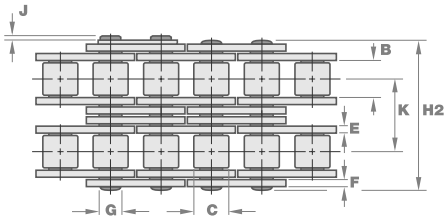


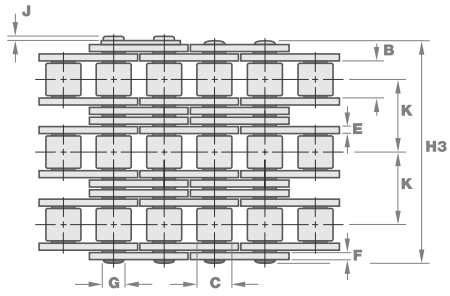
Renold pioneered ball drifting to create precisely controlled holes, which combined with other Renold process technology improves fatigue resistance and enhances wear performance.

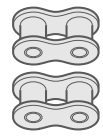
Palm Oil industry
Transmission chain







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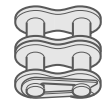
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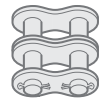
No. 107


No. 12


No. 11


No. 30

Dimensions (mm) | Connecting links

Renold Chain No	ISO No	Pitch (inch)	Pitch (mm)	Inside Width Min	Roller Diam Max	Plate Height Max	Plate Width Outer Max	Plate Width Max	Pin Diam Max	Pin Length Max	Con Link Extra Max	Trans Pitch Nom	ISO606 Tensile Strength Min	Weight kg/m	No. 4	No. 107	No. 11	No. 26	No. 12	No. 30	No. 58

BS simplex transmission chain

		A	A	B	C	D	E	F	G	H1	J	K	(N)†								
06B-1	110038	0.375	9.530	5.72	6.35	8.26	1.30	1.04	3.28	13.50	3.3	-	8900	0.39	✓	✓	-	✓	-	✓	-
08B-1	110046	0.500	12.700	7.75	8.51	11.81	1.55	1.55	4.45	17.00	3.9	-	17800	0.70	✓	✓	-	✓	-	✓	-
	111044	0.500	12.700	3.30	7.75	9.60	1.13	0.98	4.09	9.80	3.9	-	8900	0.30	✓	✓	-	✓	-	✓	-
	111046	0.500	12.700	4.88	7.75	9.60	1.13	0.98	4.09	11.40	3.9	-	8900	0.35	✓	✓	-	✓	-	✓	-
	111044	0.500	12.700	5.21	8.51	11.81	1.55	1.55	4.45	14.46	3.9	-	17800	0.70	✓	✓	-	✓	-	✓	-
10B-1	110056	0.625	15.880	9.65	10.16	14.73	1.55	1.55	5.08	19.60	4.1	-	22200	0.92	✓	✓	-	✓	-	✓	-
	110054	0.625	15.880	6.48	10.16	14.73	1.55	1.55	5.08	16.00	4.1	-	22200	0.81	✓	✓	-	✓	-	✓	-
12B-1	110066	0.750	19.050	11.68	12.07	16.13	1.80	1.80	5.72	22.70	4.6	-	28900	1.20	✓	✓	-	✓	-	✓	-
16B-1	110088	1.000	25.400	17.02	15.88	21.08	4.12	3.10	8.28	36.10	5.4	-	60000	2.80	✓	✓	-	✓	✓	-	-
20B-1	110106	1.250	31.750	19.56	19.05	26.42	4.62	3.61	10.19	43.20	6.1	-	95000	3.85	✓	✓	-	✓	✓	-	-
24B-1	110127	1.500	38.100	25.40	25.40	33.40	6.10	5.08	14.63	53.40	6.6	-	160000	7.45	✓	✓	✓	-	✓	-	-

BS duplex transmission chain

		A	A	B	C	D	E	F	G	H2	J	K	(N)†								
06B-2	114038	0.375	9.530	5.72	6.35	8.26	1.30	1.04	3.28	23.80	3.3	10.24	16900	0.74	✓	✓	-	✓	-	✓	-
08B-2	114046	0.500	12.700	7.75	8.51	11.81	1.55	1.55	4.45	31.00	3.9	13.92	31100	1.38	✓	✓	-	✓	-	✓	-
10B-2	114056	0.625	15.880	9.65	10.16	14.73	1.55	1.55	5.08	36.20	4.1	16.59	44500	1.80	✓	✓	-	✓	-	✓	-
12B-2	114066	0.750	19.050	11.68	12.07	16.13	1.80	1.80	5.72	42.20	4.6	19.46	57800	2.40	✓	✓	-	✓	-	✓	-
16B-2	114088	1.000	25.400	17.02	15.88	21.08	4.12	3.10	8.28	68.00	5.4	31.88	106000	5.50	✓	✓	-	✓	✓	-	-
20B-2	114106	1.250	31.750	19.56	19.05	26.42	4.62	3.61	10.19	79.70	6.1	36.45	170000	7.80	✓	✓	-	✓	✓	-	-
24B-2	114127	1.500	38.100	25.40	25.40	33.40	6.10	5.08	14.63	101.80	6.6	48.36	280000	14.80	✓	✓	✓	-	✓	-	-

ANSI simplex transmission chain

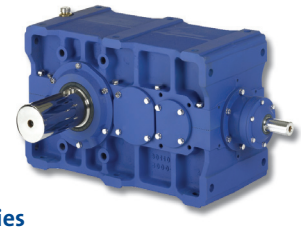
		A	A	B	C	D	E	F	G	H1	J	K	(N)†								
35-1	129033*	0.375	9.530	4.68	5.08	9.05	1.30	1.30	3.59	15.50	3.3	-	7900	0.33	✓	✓	-	✓	✓	✓	-
40-1	119043	0.500	12.700	7.85	7.92	12.07	1.55	1.55	3.98	17.80	3.9	-	13900	0.63	✓	✓	✓	✓	✓	✓	-
41	119040	0.500	12.700	6.35	7.77	9.91	1.30	1.30	3.59	14.50	2.0	-	6700	0.42	✓	✓	✓	✓	✓	✓	-
50-1	119053	0.625	15.880	9.40	10.16	15.09	2.03	2.03	5.07	21.80	4.1	-	21800	1.05	✓	✓	✓	✓	✓	✓	-
60-1	119063	0.750	19.050	12.57	11.91	18.10	2.39	2.39	5.96	26.90	4.6	-	31300	1.55	✓	✓	✓	✓	✓	✓	-
80-1	119083	1.000	25.400	15.75	15.88	24.13	3.25	3.25	7.93	33.50	5.4	-	55600	2.80	✓	✓	✓	-	✓	-	✓
100-1	119103	1.250	31.750	18.90	19.05	30.17	4.06	4.06	9.54	41.10	6.1	-	87000	4.20	✓	✓	✓	-	✓	-	✓
120-1	119123	1.500	38.100	25.23	22.23	36.20	4.80	4.80	11.11	50.80	6.6	-	125000	5.70	✓	✓	✓	-	✓	-	✓

ANSI duplex transmission chain

		A	A	B	C	D	E	F	G	H2	J	K	(N)†								
35-2	125033*	0.375	9.530	4.68	5.08	9.05	1.30	1.30	3.59	25.65	3.3	10.13	15800	0.65	✓	✓	-	✓	✓	✓	-
40-2	115043	0.500	12.700	7.85	7.92	12.07	1.55	1.55	3.98	32.20	3.9	14.38	27800	1.20	✓	✓	✓	✓	✓	✓	-
50-2	115053	0.625	15.880	9.40	10.16	15.09	2.03	2.03	5.07	39.90	4.1	18.11	43600	2.10	✓	✓	✓	✓	✓	✓	-
60-2	115063	0.750	19.050	12.57	11.91	18.10	2.39	2.39	5.96	49.80	4.6	22.78	62600	3.05	✓	✓	✓	✓	✓	✓	-
80-2	115083	1.000	25.400	15.75	15.88	24.13	3.25	3.25	7.93	62.70	5.4	29.29	111200	5.50	✓	✓	✓	-	✓	-	✓
100-2	115103	1.250	31.750	18.90	19.05	30.17	4.06	4.06	9.54	77.00	6.1	35.76	174000	8.40	✓	✓	✓	-	✓	-	✓
120-2	115123	1.500	38.100	25.23	22.23	36.20	4.80	4.80	11.11	96.30	6.6	45.44	250000	11.00	✓	✓	✓	-	✓	-	✓

Palm Oil industry

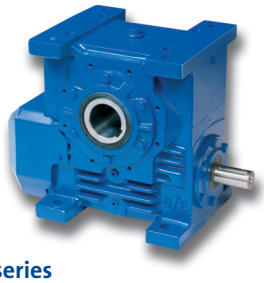
Gears, clutches and couplings



HC series

State of the art heavy duty helical and bevel/helical units using case hardened and ground gears throughout, 14 sizes to 1000KW (1340HP).

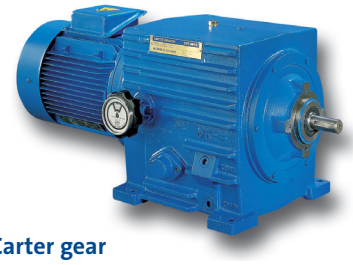
- Motorised and speed reducer types for all applications
- Wide ratio range gives speeds to match the design demand
- Variable mounting options allows design flexibility



WM series

WM Series is available with imperial 4" - 9" centres and metric 100mm - 200mm centres, with ratios of 5:1 to 70:1 as a single reduction unit and 75:1 to 4900:1 as a double reduction. Foot, flange and shaft mounted types available.

- Heavy duty version for demanding applications
- Unique Holroyd tooth form for high efficiency and product life
- Integral sprag clutch holdback for safe running



Carter gear

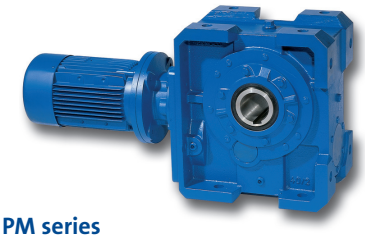
Hydrostatic variable speed drive units up to 37KW.

- Proven reliability in hazardous environments
- Electronic pneumatic and manual controls allowing design flexibility
- 27:1 stepless speed range with high speed holding accuracies
- Accurate speed holding

TW series

Rugged gear unit for arduous application 10" to 28" (nominal 254mm to 710mm) centre distance available as single and double reduction units with power supply to 1361KW (1824HP).

- Variety of unit types enables flexibility in design mounting
- Unique Holroyd tooth form provides high efficiency and long product life
- Foot, flange and shaft mounted versions for all mounting options
- Heavy duty design suitable for high torque applications



PM series

This series of gear units is available as a single worm unit - type PW, helical/worm unit - type PH and a helical/bevel/helical unit - type PB.

The range offers the ultimate in versatility and durability with a modern compact design allowing direct mounting of standard IEC and NEMA motors.

Torque capacities range up to 12,000NM with gear ratios from 5:1 to 333:1 and if combined with other Renold Gear products, ratios of up to 23000:1 can be achieved.

- Motorised and speed reducer types for all applications
- Variable mounting options allows design flexibility
- Robust construction suitable for heavy duty applications
- Optional protection for hostile environments
- Long life synthetic lubricated

Hydrastart

Fluid soft start couplings available in many sizes and types up to 700KW (950HP) capacity.

- Flexible couplings and vee pulley designs as standard for design flexibility
- Soft start allowing the motor to accelerate unloaded
- Reduces motor size and drive package cost
- Delay fill version – extending acceleration time and further reducing start-up torque

Pinflex

A robust general prupose 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

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 800,000 Nm are available with bore sizes of 500mm.

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