

The 'no more lube' range

RENOLD 16 B SYND



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### Renold Syno<sup>™</sup> Chain Three solutions, one aim. No more lube!

If it's an easy life you want, if lubrication causes you problems, then Renold has the answer! The Renold Syno range sets a new benchmark for chain performance with little or no lubrication. Covering both small and large pitch sizes, Renold has tailored its technology to suit your requirements with a range of three different products under the Renold Syno name.



#### Nickel-plated

### Nickel-plated

For use in hygiene-sensitive applications or situations where contamination from lubricant is to be avoided, Renold Syno Nickel Plated chain displays all the characteristics you need from a chain. With a food industry-approved lubricant within the sintered bush, this chain will in almost all instances not need relubricating. The roller coating is also suitable for use in the food industry; a unique feature on any chain. Available in boxed 10-foot lengths from 06B to 24B and ANSI 40 to ANSI 100, simplex and duplex with a standard pin diameter, this means that Renold Syno Nickel Plated chain is dimensionally interchangeable with standard roller chain and is even compatible with standard sprockets.

With the kind of excellent wear and fatigue resistance that you expect from a Renold chain, Syno Nickel Plated chain outlasts any competitor product promoted as low-lube or non-lube. Already tried and tested by major companies in the food sector and elsewhere, if you have to operate with minimal lubrication but can't compromise on performance, we can boost your productivity, cut your downtime and save you time and money.

- No lubrication normally required
- Outside of chain totally dry-to -the-touch
- Nickel-plated plates
- Food industry-approved lubricant within the sintered bush
- Unique food industry-approved roller coating
- Dimensionally interchangeable with standard chain
- ISO standard pin diameter, therefore standard attachments on outer links



### Syno PC chain

Renold has added to its impressive Syno range of chain for applications where lubrication is either difficult or impractical. The latest element is the introduction of a poly-steel chain, Renold Syno PC chain, comprising a polymer inner link and stainless steel pins and outer plates. With no metal bush or roller there is no lubricant required to facilitate metal-on -metal movement. This opens up applications where the chain could even run submerged in water if required.

This construction also means the chain is corrosion resistant, light weight and versatile. Attachments can be fitted to the outer plates if required.

- Syno PC chain
- No lubrication required
- Can operate in wet conditions, even submerged
- Lightweight construction
- Attachments can be added



### **Polymer Bush**

For more heavy-duty applications, the Renold Syno range takes on the serious business of wear and fatigue resistance through the addition of a polymer sleeve between the pin and bush. This highly durable and wear resistant polymer – specifically developed for Renold – removes metal-on-metal wear in this key area of the chain. Available in 28B – 40B and ANSI 120 to 200 and ideal for applications where it is not possible or not advisable to lubricate a chain, Renold Syno Polymer Bush chain can be considered for:

- Outdoor or wash down environments
- Car assembly plants or steel mills
- Environments where lubrication may contaminate products
- Forestry, saw mills or paper mills
- Environments where lubrication may cause contaminants to stick to the chain and possibly get into bearing areas, seizing up the chain
- Textile plants
- Mixers

With a corrosion resistant surface treatment adding to the variety of applications it can cope with, Renold Syno Polymer Bush chain is a truly versatile product.

- Sizes from 28B to 40B and from ANSI 120 to 200
- Revolutionary polymer bush
- Superior corrosion resistance surface treatment
- Ideal for outdoor environments
- Attachments available
- Polymer roller available on request

### **Renold Syno** Ideal for all these applications



#### Food

For food processing environments, cleanliness is critical; the Renold Syno range is ideal for this. Think of the ways your application could benefit.

#### Bottling

Chain used in bottling applications benefits from corrosion resistance and lubrication considerations are key.

#### Packaging

Packaging must be transported without contamination, think "Syno" and your problems are solved.

#### Paper

The printing industry goes to great lengths to ensure their output is protected from grease and dirt. Choose Renold Syno for a clean environment.

#### Textile

No stain removal required when you specify Renold Syno chain for use in textile manufacturing environments.

#### Sawmills

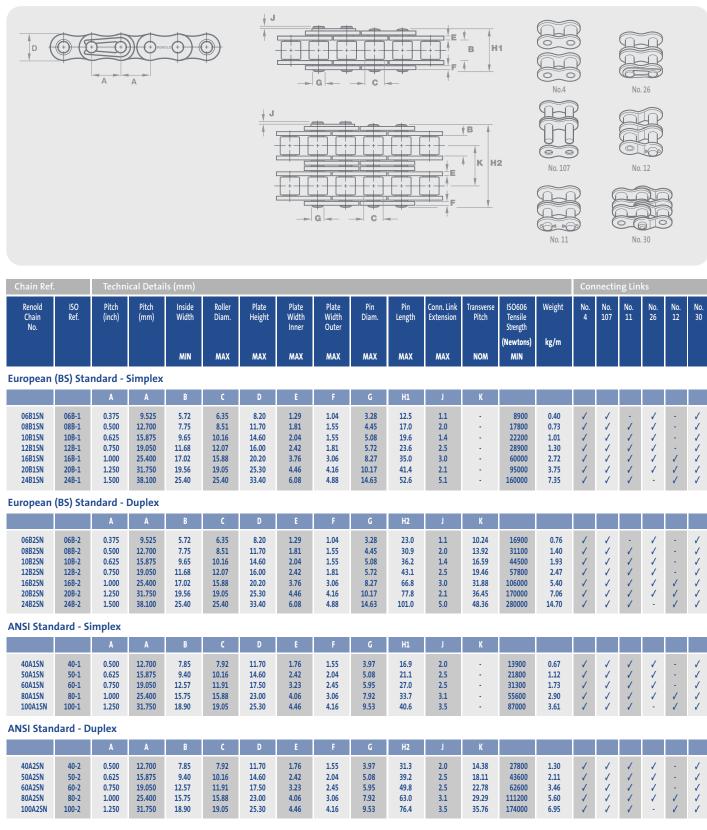
Heavy loads, dirt and grime are all to be expected in sawmills. Lubrication will attract this kind of debris causing a dramatically shortened working life. Syno Polymer Bush chain shows other chains the way!

#### **Car assembly**

Car assembly lines are an example of the need for no lubricant contamination to vehicle panels or interiors. Syno Polymer Bush chain is lubricant-free and can take the strain without the squeaking noise made by other chain brands.

### **Renold Syno® Nickel Plated**

European (BS) Standard / ISO 606 / ANSI Standard



Renold Chain products that are dimensionally in line with the ISO standard far exceed the stated ISO minimum tensile strength requirements. However Renold does not consider breaking load to be a key indicator of performance because it ignores the principal factors of wear and fatigue. In these areas, Renold products are designed to produce the best possible results and independent testing proves this. In this catalogue, where the ISO breaking load is quoted, it should be noted that we are stating that the Renold products are designed to be ISO minimum standard. Independent test results show that the minimum (many companies quote averages) breaking loads are far in excess of the ISO minimum. Where the quoted breaking load is not described as being the ISO minimum, the product has no relevant ISO standard. In this case, the breaking loads quoted are the minimum guaranteed. Triplex versions are available on request.

# Renold Syno Nickel Plated (BS) Attachments

#### BS Standard M1 attachments (outer plates only)

Chain Ref.	Technic	al Details (n	nm)						
ISO No.	Pitch (inch)	Pitch (mm)			(max)				
	A	A	E	F	d	e	f	g	w
06B-1 08B-1 10B-1 12B-1 16B-1	0.375 0.500 0.625 0.750 1.000	9.525 12.700 15.875 19.050 25.400	1.290 1.810 2.040 2.420 3.760	1.040 1.550 1.550 1.810 3.060	3.500 4.500 5.500 6.800 6.800	14.500 20.800 24.900 28.200 39.700	10.100 13.000 16.500 21.000 23.000	4.000 5.800 6.800 8.100 10.000	8.000 11.000 14.000 18.000 24.000

#### BS Standard M2 attachments (outer plates only)

Chain Ref.	Technic	al Details:	(mm)							
ISO No.	Pitch (inch)	Pitch (mm)				(max)				
	A	A	E	F	S	d	е	f	g	w
06B-1 08B-1 10B-1 12B-1 16B-1	0.375 0.500 0.625 0.750 1.000	9.525 12.700 15.875 19.050 25.400	1.290 1.810 2.040 2.420 3.760	1.040 1.550 1.550 1.810 3.060	9.500 12.700 15.800 19.000 25.400	3.500 4.500 5.500 6.800 6.800	14.500 20.800 24.900 28.200 39.700	10.100 13.000 16.500 21.000 23.000	4.000 5.800 6.800 8.100 10.000	17.600 24.400 29.900 35.400 46.200

#### BS Standard K1 attachments (outer plates only)

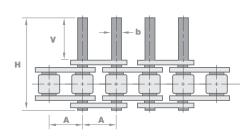
Chain Ref.	Technic	al Details:	(mm)							
ISO No.	Pitch (inch)	Pitch (mm)				(max)	(max)			
	A	A	E	F	Т	U	d	g	h	w
06B-1 08B-1 10B-1 12B-1 16B-1	0.375 0.500 0.625 0.750 1.000	9.525 12.700 15.875 19.050 25.400	1.290 1.810 2.040 2.420 3.760	1.040 1.550 1.550 1.810 3.060	19.600 25.900 32.700 39.800 50.800	28.600 42.000 49.900 54.400 85.600	3.500 4.500 5.500 6.800 6.800	4.000 5.800 6.800 8.100 10.000	6.700 8.900 10.300 13.500 15.900	8.000 11.000 14.000 18.000 24.000

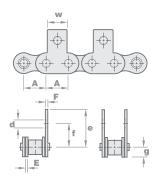
#### BS Standard K2 attachments (outer plates only)

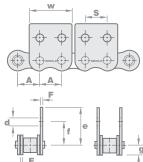
Chain Ref.	Techni	cal Details									
ISO No.	Pitch (inch)	Pitch (mm)					(max)	(max)			
	A	A	E	F	S	T	U	d	g	h	w
06B-1 08B-1 10B-1 12B-1 16B-1	0.375 0.500 0.625 0.750 1.000	9.525 12.700 15.875 19.050 25.400	1.290 1.810 2.040 2.420 3.760	1.040 1.550 1.550 1.810 3.060	9.500 12.700 15.800 19.000 25.400	19.600 25.900 32.700 39.800 50.800	28.600 42.000 49.900 54.400 85.600	3.500 4.500 5.500 6.800 6.800	4.000 5.800 6.800 8.100 10.000	6.700 8.900 10.300 13.500 15.900	17.600 24.400 29.900 35.400 46.200

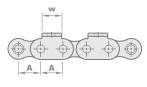
#### BS Standard Extended Bearing Pins - Type D

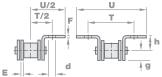
Chain Ref.	Techni	ical Detail	s (mm)		
ISO	Pitch	Pitch	Pin	Extension	Pin
No.	(inch)	(mm)	Diameter	Length Max.	Length Max.
	A	A	В	v	н
06B-1	0.375	9.525	3.280	11.300	23.000
08B-1	0.500	12.700	4.450	14.800	30.900
10B-1	0.625	15.875	5.080	17.600	36.200
12B-1	0.750	19.050	5.720	20.700	43.100
16B-1	1.000	25.400	8.270	33.300	66.800

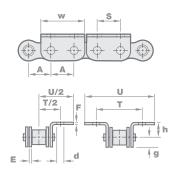












### Renold Syno Nickel Plated (ANSI) Attachments

#### ANSI Standard M1 attachments (outer plates only)

Chain Ref.	Technic	al Details (n	nm)						
ANSI No.	Pitch (inch)	Pitch (mm)			(max)				
	A	A	E	F	d	е	f	g	w
40 50 60 80	0.500 0.625 0.750 1.000	12.700 15.875 19.050 25.400	1.810 2.420 3.230 4.060	1.550 2.040 2.450 3.060	3.500 5.500 5.500 6.800	17.500 24.600 26.000 39.700	12.700 15.900 18.300 24.600	5.500 7.150 8.600 10.250	9.500 12.700 15.900 24.000

#### ANSI Standard M2 attachments (outer plates only)

Chain Ref	Techni	cal Details	(mm)							
ANSI No.	Pitch (inch)	Pitch (mm)				(max)				
	A	A	E	F	S	d	е	f	g	w
40 50 60 80	0.500 0.625 0.750 1.000	12.700 15.875 19.050 25.400	1.810 2.420 3.230 4.060	1.550 2.040 2.450 3.060	12.700 15.800 19.000 25.400	3.500 5.500 5.500 6.800	17.500 24.600 27.700 39.700	12.700 15.900 18.300 24.600	5.500 7.150 8.600 10.250	24.000 29.900 35.600 46.200

#### Renold Standard K1 attachments (outer plates only)

Chain Ref.	Technic	al Details	(mm)							
ANSI No.	Pitch (inch)	Pitch (mm)				(max)	(max)			
	A	A	E	F	T	U	d	g	h	w
40 50 60 80	0.500 0.625 0.750 1.000	12.700 15.875 19.050 25.400	1.810 2.420 3.230 4.060	1.550 2.040 2.450 3.060	26.000 32.800 39.800 52.500	36.400 50.800 59.700 84.300	3.500 5.500 5.500 6.800	5.500 7.150 8.600 10.250	7.900 10.300 11.900 15.900	9.500 12.700 15.900 24.000

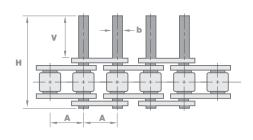
#### Renold Standard K2 attachments (outer plates only)

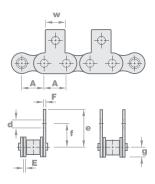
Chain Ref. Technical Details (mm
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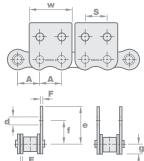
ANSI No.	Pitch (inch)	Pitch (mm)					(max)	(max)			
	A	Α	E	F	5	Т	U	d	g	h	w
40 50 60 80	0.500 0.625 0.750 1.000	12.700 15.875 19.050 25.400	1.810 2.420 3.230 4.060	1.550 2.040 2.450 3.060	12.700 15.800 19.000 25.400	26.000 32.800 39.800 52.500	36.400 50.800 59.700 84.300	3.500 5.500 5.500 6.800	5.500 7.150 8.600 10.250	7.900 10.300 11.900 15.900	24.000 29.900 35.600 46.200

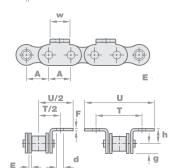
#### Renold Standard Extended Bearing Pins - Type D

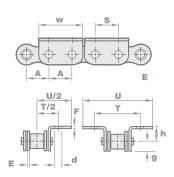
Chain Ref.	Technical Details (mm)						
ANSI	Pitch	Pitch	Pin	Extension	Pin		
No.	(inch)	(mm)	Diameter	Length Max.	Length Max.		
	A	A	В	V	Н		
40	0.500	12.700	3.970	15.200	31.300		
50	0.625	15.875	5.080	19.000	39.200		
60	0.750	19.050	5.950	24.000	49.800		
80	1.000	25.400	7.920	30.800	63.000		





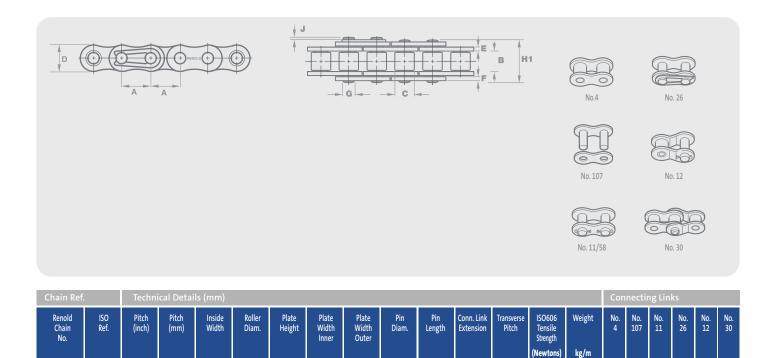






### Renold Syno<sup>®</sup> PC

European (BS) Standard / ISO 606 / ANSI Standard



European (BS) Standard - Simplex

MIN

MAX

MAX

MAX

Luiopean	(DS) 5ta	nuaru	Junpier																	
		A	Α	В	C	D	E	F	G	H1	J	K								
1215359 1215360	06B-1 08B-1	0.375 0.500	9.525 12.700	5.72 7.75	6.35 8.51	8.20 11.50	1.30 1.80	1.04 1.55	3.28 4.45	12.5 16.5	:	-	800 1600	0.22 0.38	<i>s</i>	1	~	<i>\</i> <i>\</i>	√ -	-

MAX

MAX

MAX

NOM

MIN

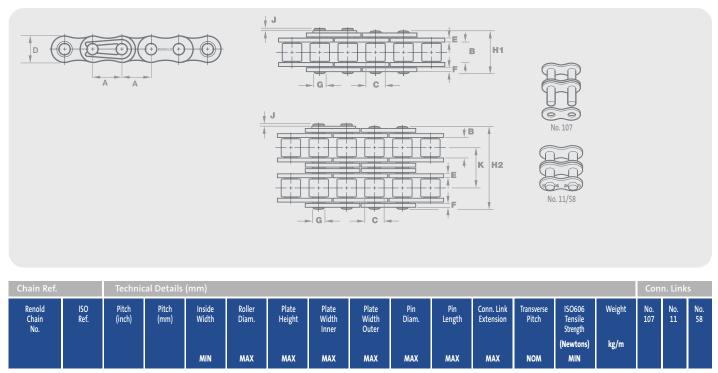
MAX

ANSI sizes available on request

Renold Chain products that are dimensionally in line with the ISO standard far exceed the stated ISO minimum tensile strength requirements. However Renold does not consider breaking load to be a key indicator of performance because it ignores the principal factors of wear and fatigue. In these areas, Renold products are designed to produce the best possible results and independent testing proves this. In this catalogue, where the ISO breaking load is quoted, it should be noted that we are stating that the Renold product conforms to the ISO minimum standard. Independent test results show that the minimum (many companies quote averages) breaking loads are far in excess of the ISO minimum. Where the quoted breaking load is not described as being the ISO minimum, the product has no relevant ISO standard. In this case, the breaking loads quoted are the minimum guaranteed. Triplex versions are available on request.

### Renold Syno® Polymer Bush

European (BS) Standard / ISO 606 / ANSI Standard



European (BS) Standard - Simplex

		A	A	В	C	D	E	F	G	H1	J	К		
28B1SP 32B1SP 40B1SP	28B-1 32B-1 40B-1	1.75 2.00 2.25	44.45 50.80 63.50	30.99 30.99 39.30	27.94 29.21 39.37	37.08 42.29 52.96	7.62 7.11 8.13	6.35 6.35 8.13	12.71 14.29 19.85	64.2 63.4 78.2	6.8 8.0 9.5		200000 250000 355000	8.: 10.: 14.:

European (BS) Standard - Duplex

		A	A	В	C	D	E	F	G	H2	J	K					
28B2SP 32B2SP	28B-2 32B-2	1.75 2.00	44.45 50.80	30.99 30.99	27.94 29.21	37.08 42.29	7.62 7.11	6.35 6.35	12.71 14.29	123.7 122.0	6.8 8.0	59.56 58.55	360000 450000	15.9 17.1	1	1	1
40B2SP	40B-2	2.25	63.50	39.30	39.37	52.96	8.13	8.13	19.85	150.5	9.5	72.29	694000	27.1	1	1	1.5

**ANSI Standard - Simplex** 

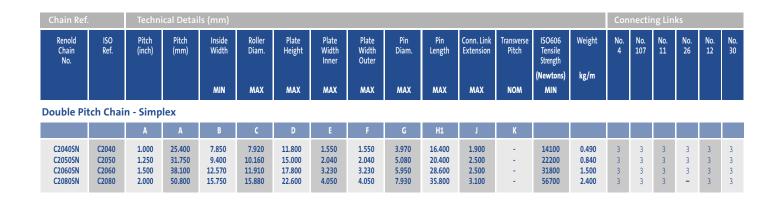
		A	A	В	C	D	E	F	G	H1	J	К					
120A1SP	120-1	1.50	38.10	25.50	22.23	36.20	4.80	4.80	11.11	49.3	5.3		125000	5.2	1	1	1
140A1SP	140-1	1.75	44.45	25.73	25.40	42.23	5.61	5.61	12.71	52.9	5.2		170000	6.8	1	1	
160A1SP	160-1	2.00	50.80	31.55	28.58	48.26	6.35	6.35	14.29	63.1	6.5		223000	8.9	1	1	1
200A1SP	200-1	2.50	63.50	38.00	39.67	60.33	8.13	8.13	19.85	76.9	9.0		347000	14.6	√	1	<b>v</b>

#### **ANSI Standard - Duplex**

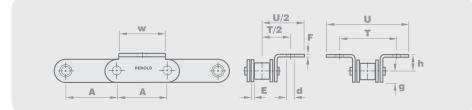
		A	A	В	c	D	E	F	G	H2	J	К				
120A2SP 140A2SP 160A2SP 200A2SP	120-2 140-2 160-2 200-2	1.50 1.75 2.00 2.50	38.10 44.45 50.80 63.50	25.23 25.23 31.55 37.85	22.23 25.40 28.58 39.67	36.20 42.23 48.26 60.33	4.80 5.61 6.35 8.13	4.80 5.61 6.35 8.13	11.11 12.71 14.29 19.85	94.7 101.8 121.6 148.5	5.3 5.2 6.5 9.0	45.44 48.87 58.55 71.55	250000 340000 446000 694000	10.3 13.9 17.6 28.9	1 1 1 1	

Renold Chain products that are dimensionally in line with the ISO standard far exceed the stated ISO minimum tensile strength requirements. However Renold does not consider breaking load to be a key indicator of performance because it ignores the principal factors of wear and fatigue. In these areas, Renold products are designed to produce the best possible results and independent testing proves this. In this catalogue, where the ISO breaking load is quoted, it should be noted that we are stating that the Renold product conforms to the ISO minimum standard. Independent test results show that the minimum (many companies quote averages) breaking loads are of the ISO minimum. Where the quoted breaking load is not described as being the ISO minimum, the product has no relevant ISO standard. In this case, the breaking loads quoted are the minimum guaranteed.

### Renold Syno Double Pitch Chain

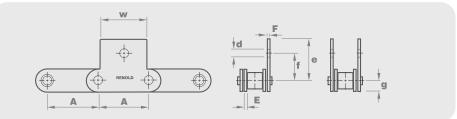


# Renold Syno ANSI Attachments



#### **ANSI Double Pitch K1 attachments**

Chain Ref.	Techni	Technical Details (mm)												
		A	A	E	F	T	U	d	g	h	w			
113040 113050 113560 113480	C2040 C2050 C2060 C2080	1.000 1.250 1.500 2.000	25.400 31.750 38.100 50.800	1.550 2.040 3.230 4.050	1.550 2.040 3.230 4.050	25.400 31.800 42.800 55.600	40.600 48.900 61.600 80.000	3.500 5.500 5.500 6.800	5.750 7.400 8.800 10.300	9.100 11.100 14.700 19.100	23.800 25.400 28.600 40.000			



#### ANSI Double Pitch M1 attachments

Chain Ref.	Technica	Technical Details (mm)											
		Α	Α	E	F	d	е	f	g	w			
113040 113050 113560 113480	C2040 C2050 C2060 C2080	1.000 1.250 1.500 2.000	25.400 31.750 38.100 50.800	1.550 2.040 3.230 4.050	1.550 2.040 3.230 4.050	3.500 5.500 5.500 6.800	20.900 24.900 30.200 40.000	11.100 14.300 19.000 22.200	5.750 7.400 8.800 10.300	23.800 25.400 28.600 40.000			

# The best range of standard and solution products available anywhere





- High performance
- Superior wear life
- Outstanding fatigue resistance



# Sovereign<sup>™</sup>

- Abrasion resistance chain
- Ideal for dusty, gritty applications
- Reduced pin wear
- Extended life



# Syno<sup>™</sup>

- Maintenance free
- Self-lubricating chain
- Food industry-approved lubricant



### **Stainless Steel**

- Corrosion resistant
- Designed for acidic/alkaline conditions
- Ideal for wet environments
- Food processing applications



### RENOLD

- Best premium chain
- Leading performance
- Solid bush / solid roller / end softened pin



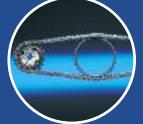
### Hydro-Service

- Superior corrosion resistant coating
- Alternative choice to stainless steel chain
- Will not chip or peel
- Hexavalent chrome-free



### RENOLD A&S

- All purpose chain
- Affordable reliability
- Wide waist plate / wedge rivet



# Roll-Ring<sup>™</sup>

- Revolutionary chain tensioner
- Installed in seconds and self adjusting
- Maintenance free
- Also acts as noise damper



### RENOLD SD

- Economy chain
- Dependable performance for a standard duty chain
- Split bush / solid roller / wedge rivet



# Smartlink<sup>™</sup>

- Load monitoring technology
- Technical reports & data logging