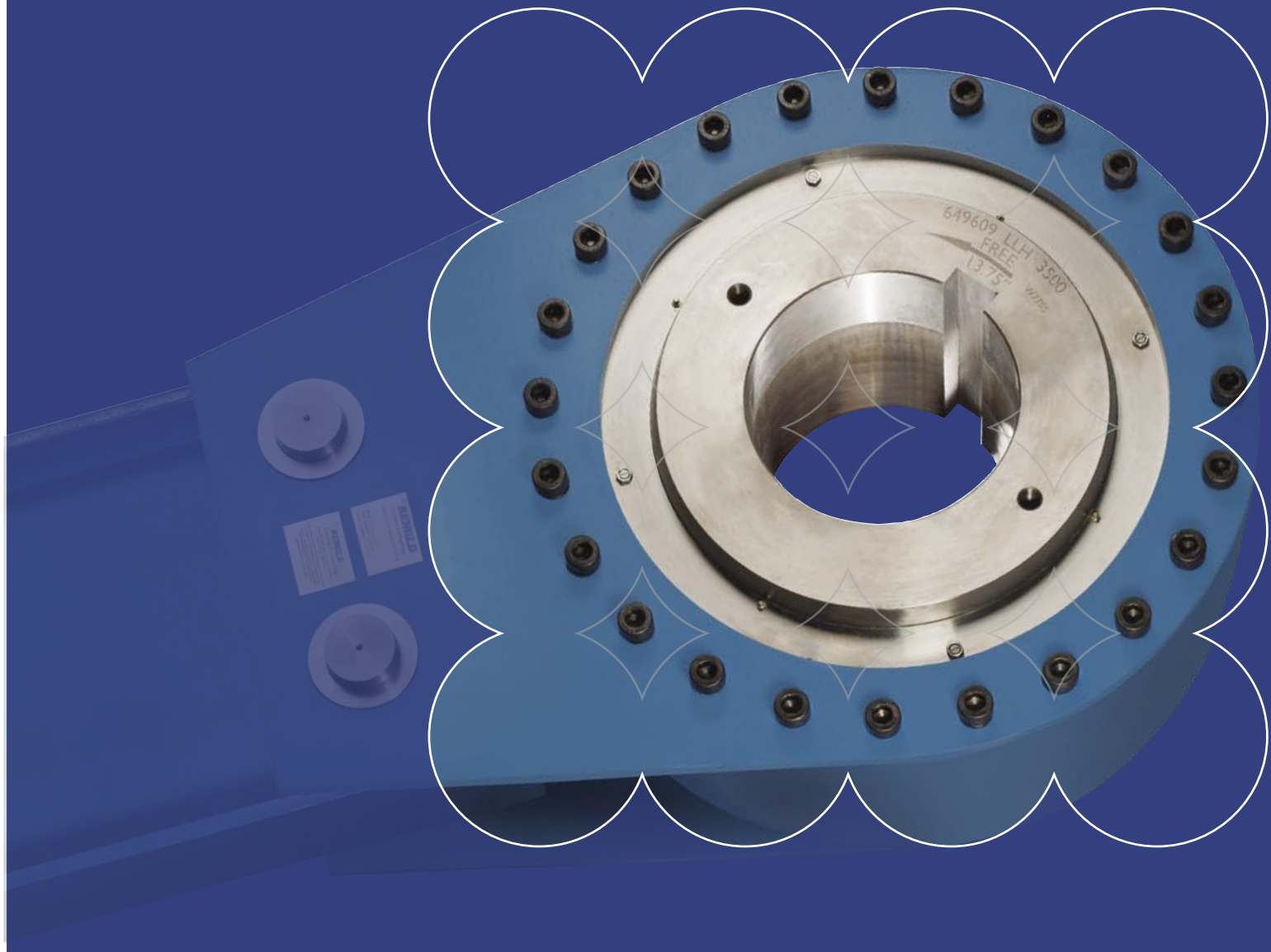
Freewheels

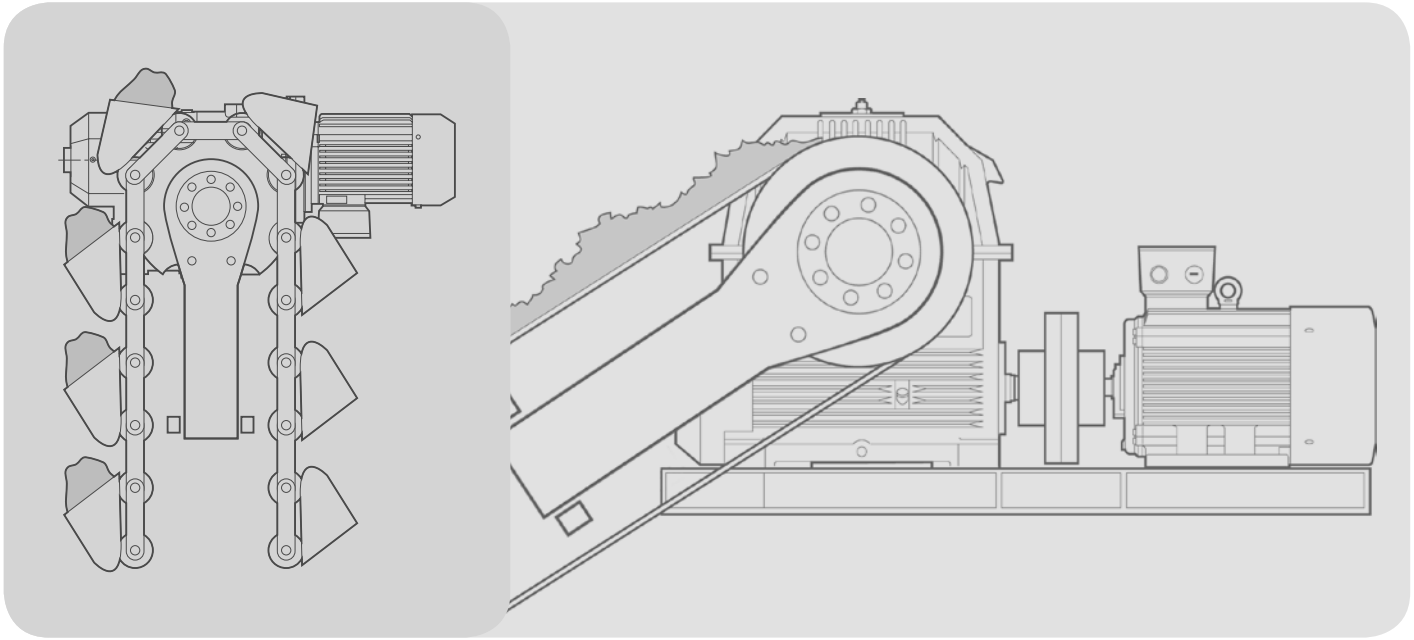
SH Series Sprag Clutch Holdbacks with Central Torque Arm



Backstopping

RENOLD
Superior Freewheel Technology

SH Series Sprag Clutch Holdbacks



Renold Sprag clutch Holdbacks with Central Torque arms are self contained units ready for mounting on the headshafts, or other suitable driving shafts, of inclined conveyors or elevators to prevent runback.

Features

- High precision sprags create instantaneous action with ZERO BACKLASH
- High quality, high precision heavy duty bearings for arduous applications
- SH clutches designed for LONGLIFE and lower overall operating cost
- Able to accommodate LARGE BORES (up to 20”) and HIGH TORQUE CAPACITY within compact design
- Dimensionally INTERCHANGEABLE one piece central torque arm design for ease of replacement against other brands
- Quick disconnect mounting pins for fast torque arm removal
- Enhanced labyrinth sealing for use in hostile environments
- Grease or oil filled options available
- Axial retaining collars available for all sizes
- Renold Sprag Clutch RE-CONDITIONING SERVICE TO NEW available on all size

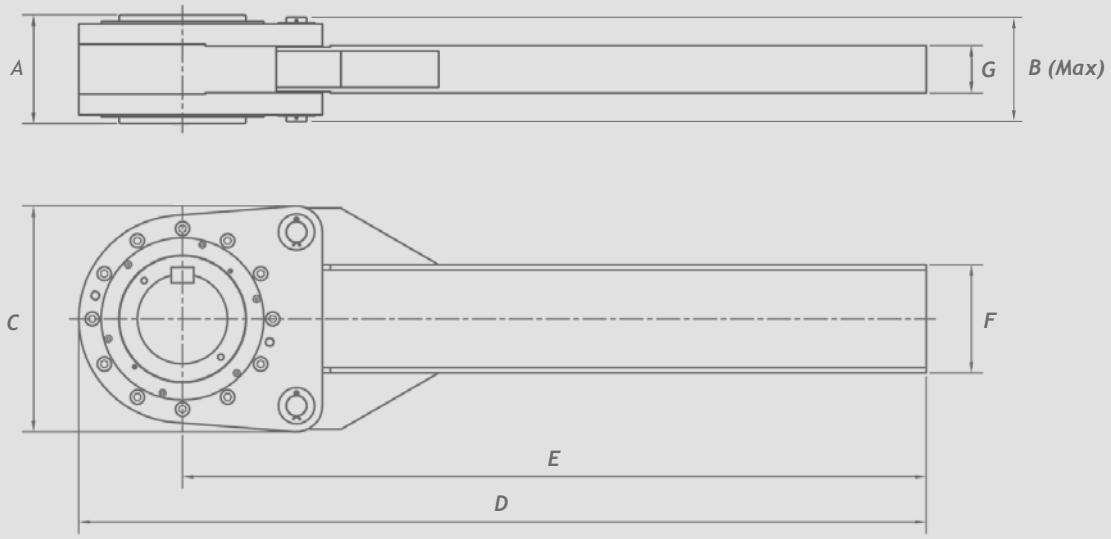
Applications

The applications shown above are an inclined belt conveyor and a vertical bucket elevator using conveyor chain. Both applications require the use of a Sprag Clutch holdback, (backstop).

If reverse rotation occurred serious safety problems would be created and possible machinery failure.

To overcome the problem of drive reversal a Renold sprag clutch holdback is fitted to the conveyor headshaft and held with a torque arm against stops fitted to the framework of the conveyor.

SH Series Sprag Clutch Holdbacks



Clutch Size	Torque Capacity Nm *lb ft*	Maximum O'running Speed rpm	Resistance After Run-in Nm *lb ft*	Bore Range		Dimensions						
				Min mm *in*	Max mm *in*	A mm *in*	B (max) mm *in*	C mm *in*	D mm *in*	E mm *in*	F mm *in*	G mm *in*
700	5420 *4000*	400	5.08 *3.75*	50 *1.875*	70 *2.937*	127 *5.000*	181 *7.125*	181 *7.125*	852 *33.562*	762 *30.000*	102 *4.000*	71 *2.800*
750	9220 *6800*	380	7.12 *5.25*	60 *2.437*	85 *3.437*	153 *6.000*	213 *8.375*	222 *8.740*	1025 *40.370*	914 *36.000*	102 *4.000*	71 *2.800*
800	15600 *11513*	300	8.47 *6.25*	70 *3.000*	110 *4.437*	153 *6.000*	219 *8.625*	254 *10.000*	1346 *53.000*	1219 *48.000*	127 *5.000*	84 *3.300*
900	24400 *18000*	250	13.56 *10.00*	90 *4.000*	130 *5.437*	162 *6.388*	235 *9.250*	305 *12.000*	1524 *60.000*	1372 *54.000*	152 *6.000*	91 *3.600*
1027	36600 *27000*	200	13.56 *10.00*	130 *4.937*	180 *7.000*	169 *6.638*	254 *10.000*	381 *15.000*	1876 *73.500*	1676 *66.000*	203 *8.000*	104 *4.100*
1051	61000 *45000*	200	16.00 *11.80*	130 *5.000*	180 *7.000*	*229* *9.000*	302 *11.875*	381 *15.000*	2019 *79.500*	1829 *72.000*	254 *10.000*	117 *4.600*
1250	88100 *65000*	170	30.00 *22.10*	190 *7.500*	230 *9.000*	254 *10.000*	305 *12.000*	480 *18.890*	2221 *87.445*	1981 *78.000*	305 *12.000*	127 *5.000*
1300	122000 *90000*	140	34.00 *25.10*	200 *8.000*	250 *10.000*	260 *10.250*	305 *12.000*	546 *21.500*	2356 *92.750*	2083 *82.000*	305 *12.000*	140 *5.500*
1375	183000 *135000*	130	47.00 *34.60*	240 *9.000*	280 *11.000*	*270* *10.625*	305 *12.000*	616 *24.250*	2453 *100.125*	2235 *88.000*	381 *15.000*	142 *5.600*
2000	271200 *200000*	100	75.00 *55.40*	280 *11.000*	340 *13.250*	*270* *10.625*	330 *13.000*	737 *29.000*	2756 *108.500*	2388 *94.000*	457 *18.000*	152 *6.000*
2400	359300 *265000*	85	105.00 *77.50*	340 *13.000*	400 *15.500*	*277* *10.900*	337 *13.250*	864 *34.000*	2972 *117.000*	2540 *100.000*	508 *20.000*	178 *7.000*
3500	508400 *375000*	80	142.00 *105.00*	360 *13.500*	500 *20.000*	318 *12.500*	432 *17.000*	965 *38.000*	3531 *139.000*	3048 *120.000*	610 24.000	185 *7.300*
5000	759300 *560000*	75	169.00 *124.00*	360 *13.500*	500 *20.000*	445 *17.500*	546 *21.500*	965 *38.000*	3531 *139.000*	3048 *120.000*	691 *27.200*	257 *10.100*

SH Series Sprag Clutch Holdbacks Interchange Data

RENOLD	Formsprag	Falk	Morse / Emerson	Marland	Stephens Adamson	Tsubaki / Emerson
SH Central Torque Arm Holdbacks	LLH Central Torque Arm Holdbacks	NRT Backstops (Old Ref)	Morse type CB Backstops	MA Large Bore Backstops	HD Backstops	BS Backstops
SH 700	LLH 700			3MA	HD 215	BS 75 BS 85
SH 750	LLH 750	1075NRT (70NRT)	CB-7C HS	6MA	HD 315	BS 85 BS 95
SH 800	LLH 800	1085NRT (80NRT)	CB-12C HS	12MA	HD 415	BS 110 BS 135
SH 900	LLH 900	1095NRT (90NRT)	CB-19C HS	18MA	HD 600	BS 135 BS 160
SH 1027	LLH 1027	1105NRT (100NRT)	CB-30C HS	27MA	HD 700	BS 160 BS 200
SH 1051	LLH 1051	1115NRT (110NRT)	CB-38C HS CB-45C HS	45MA	HD 800	BS 200 BS 220
SH 1250	LLH 1250	1125NRT (120NRT)	CB-65C HS	63MA	HD 900	BS 220 BS 250
SH 1300	LLH 1300	1135NRT (130NRT)	CB-75C HS CB-90C HS	90MA	HD 1000	BS 270
SH1375	LLH1375	1145NRT (140NRT)	CB-110C HS	135MA	HD 1200	BS 300
SH 2000	LLH 2000	1155NRT (150NRT)	CB-150C HS	180MA	HD 1400	BS 335
SH 2400	LLH 2400	1165NRT (160NRT)	CB-217C HS	240MA		BS 350
SH 3500	LLH 3500	1175NRT (170NRT)	CB-290C HS	300MA	HD1600	BS 425
SH 5000	LLH 5000	1185NRT (180NRT)	CB-550 HS	540MA 720MA	HD 1800	BS 450

Renold are able to offer complete TORQUE ARM interchangeability to any other manufacturers models on all SH SPRAG CLUTCH HOLDBACKS.

Please use our SH SERIES SPRAG CLUTCH HOLDBACKS WITH CENTRAL TORQUE ARM - APPLICATIONS DATA SHEET, which is available to download from **www.renold.com** and send your requirements to your nearest Renold Distributor.

For your nearest Renold Distributor visit **www.renold.com**

Ordering code

SCSH 1027 CLCH CT

- *Sprag Clutch*
- *Standard Holdback*
- *Central Torque Arm*
- *Clutch*
- *Size*

Please supply the following information with the above order code:

1. *Bore and Keyway sizes*
2. *Either Oil or Grease Lubrication*

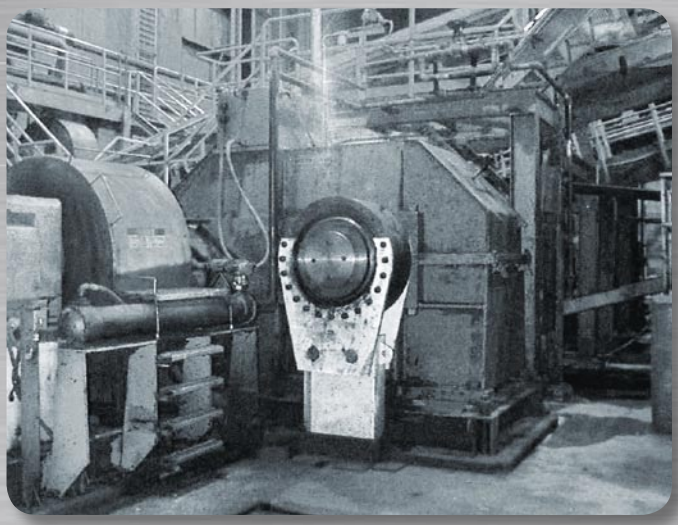
SH Series Sprag Clutch Holdbacks Typical Applications

Aggregates Industry

Renold SH Sprag Clutch Holdbacks are used in the aggregates industries Worldwide, often in conjuction with high quality RENOLD GEARBOXES, typically on inclined conveyors.

The SH Sprag Clutch Holdback is positioned on the end of the conveyor headshaft. If the drive fails or is stopped when the conveyor is loaded the SH Sprag Clutch Holdback instantaneously prevents any runback. This is due to the sprag elements of the clutch being in constant contact at all times with the inner and outer races of the clutch element of the holdback. Resultant downtime is prevented and also any potential accident risk to personel.

Renold SH Sprag Clutch Holdbacks are ideal for use in the aggregates industry being equiped with high quality seals that prevent contaminants from reaching internal parts and ensuring long unit lifetime.



Mining

Renold SH Sprag Clutch Holdbacks are fiited to inclined conveyors used to transport bulk materials in many coal or iron ore mines around the World. A typical example of a mine application is shown here. Fitted to an apron feeder drive in an iron ore mining plant in Canada the SH Sprag Clutch Holdback with Central Torque Arm prevents any runback in the drive, if the drive fails or is stopped.This is due to the sprag elements of the clutch being in constant contact at all times with the inner and outer races of the clutch element of the holdback. Resultant downtime is prevented and also any potential accident risk to personel.

The high quality components and overall robustness of the Renold SH Sprag Clutch Holdback with Central Torque Arm design is ideally suited to the heavy duty and hostile environment that apron feeders operate in ensuring long unit lifetimes.

Material Handling

Renold SH Sprag Clutch Holdbacks are fitted to many inclined conveyors and bucket elevators that transport bulk handling materials around steel works, such as coking coal and iron ore, major docks, moving bulk materials to storage and many other sites around the World.

Whenever a Renold SH Series Sprag Clutch Holdback is fitted it provides the user with complete peace of mind knowing that not only have they purchased a holdback that provides instant runback protection everytime when needed, but is also of the highest quality and the knowledge that a superb back up service is available to enhance their investment even further.

UK
Renold Clutches & Couplings
Cardiff
Tel + 44 (0) 29 20792737
Fax + 44 (0) 29 20791360
couplings@cc.renold.com

Renold Hi-Tec Couplings
Halifax
Tel + 44 (0) 1422 255000
Fax + 44 (0) 1422 320273
couplings@hi-tec.renold.com

Renold Gears
Milnrow
Tel + 44 (0) 1706 751000
Fax + 44 (0) 1706 751001
gears.sales@renold.com

USA
Renold Ajax
Westfield, New York State
Tel +1 716 326 3121
Fax + 1 716 326 8229
ainfo@renoldajax.com

WEB
www.renold.com

E-MAIL
enquiry@renold.com

For you nearest Renold dedicated specialist or distributor please visit the Renold website - www.renold.com or contact Renold UK

Whilst all reasonable care in compiling the information contained in this brochure is taken, no responsibility is accepted for printing errors. All information contained in this brochure is subject to change after the date of publication.

V01(UK)_04/12

RENOLD
Superior Freewheel Technology