

TB Wood's

Formsprag Clutch

Stieber Clutch

Couplings and Accessories for Cooling Tower Applications





MODEL HSB BACKSTOPPING CLUTCH

Formsprag

HSB (High Speed Backstop) clutches are used on cooling tower fan drives to prevent rotation in the opposite direction from the normal driving direction. When the fan drive is off, wind pressure from other fans or ambient breezes can apply sufficient force to rotate fan blades in the opposite direction.

FORM-FLEX® FLEXIBLE DISC COUPLING

TB Wood's

The **Form-Flex**® exclusive design reduces stress levels in our flex discs and increases misalignment capabilities to ensure longer life in cooling tower installations.

TB Wood's couplings are industry proven and used throughout the world. Form-Flex® disc type couplings attached to any of our TrueTube™ composite tubes, creates a superior designed cooling tower coupling. As an option, for applications 50HP and under, the HD4CS cooling tower coupling is an excellent high misalignment all-composite cooling tower coupling.

Our Form-Flex all metal disc type couplings allow you the option of close coupled or spacer type applications with many options for corrosion resistance. The **Dura-Flex**® coupling is a patented design with an improved shoe-to-element bond and exceptional hydrolytic resisting properties extending its working life. An industry leader in elastomeric type couplings, the **Sure-Flex**® is a no maintenance, dependable coupling not affected by abrasives, dirt or moisture.

- Close couple, spacer and floating shaft designs
- Torque capacity to 3175HP@100RPM
- Reduced maintenance time



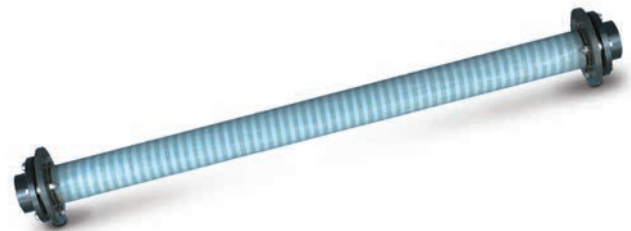
TB Wood's has been a proven leader in couplings for the cooling tower industry.



MODEL RSCI BACKSTOPPING CLUTCH

Stieber Clutch

Type RSCI is a centrifugal lift off sprag type freewheel with the inner race rotating. Only the inner race is designed for freewheeling. Primarily designed as a backstop, it can be also used as an overrunning clutch in crawl drives.

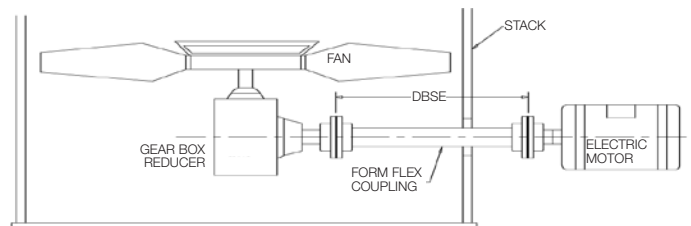


HIGH STRENGTH STAINLESS STEEL FLEX DISC

- High torsional stiffness
- No lubrication required
- No moving parts
- Zero backlash
- Wide Temperature Range

INDUCED DRAFT COOLING TOWERS

Induced draft cooling tower drive systems are usually designed with a motor, gearbox, and fan located at the top of the cooling tower. The atmosphere inside the tower is hot and humid. Placing a motor inside the tower under these conditions can quickly deteriorate its performance. Using a TB Wood's floating shaft coupling, the motor is located on the outside of the stack and away from the corrosive airflow. It spans the gap between the motor and gearbox reducer shaft through various coupling designs to meet your cooling tower application.



TRUE TUBE™

TrueTube composites are high-strength, lightweight torque tubes for long span drive shafts. These tubes are filament wound carbon or glass fiber construction which are oven-cured under precision controlled conditions for consistent quality. All TrueTube composites include our exclusive barrier layer wound into the structure of each tube providing UV protection and giving the TrueTube its unique, smooth appearance, plus protection for the working structure of the tube from damage during handling and installation.

Longer Spans

- Composite couplings span up to 6 meters.
- No high maintenance center support bearings.
- High stiffness-to-weight ratio increasing critical speed.

Lighter Weight

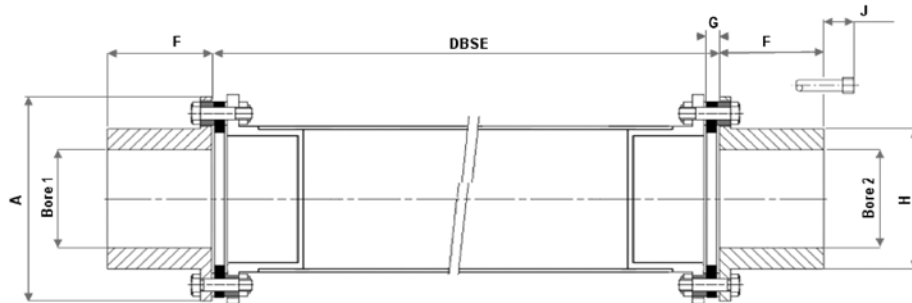
- TrueTube™ drive shafts weigh up to 80% less than comparable steel driveshafts.

Design Flexibility

- May be custom designed to meet your requirements for torsional stiffness, critical speed or torque capacity.
- Can tune torsional or lateral critical speeds out of a machine system.

Quick Selection Guide for Cooling Tower Applications

1800 RPM		Coupling Model	1500 RPM	
DBSE	Max HP		Max KW	DBSE
70"	30	A520-CS2G	19	1956mm
	50	A525-CS2G	31	
83"	30	A520-CS2R	19	2108mm
	50	A525-CS2R	31	
102"	100	A530-CS3R	62	2845mm
116"	100	A530-CS3B	w62	3226mm
118"	150	A535-CS4R	93	3277mm
	250	A540-CS4R	155	
134"	150	A535-CS4B	93	3708mm
	250	A540-CS4B	155	
142"	150	A535-CS6R	93	3937mm
	400	B558-CS6R	248	
160"	150	A535-CS6B	93	4445mm
	400	B558-CS6B	248	
165"	400	B558-CS6X	248	4597mm
175"	150	A535-CS8R	93	4851mm
	400	B558-CS8R	248	
190"	150	A535-CS8B	93	5258mm
	400	B558-CS8B	248	
206"	400	B558-CS10R	248	5690mm
210"	400	B558-CS10B	248	5842mm
227"	400	B558-CS12B	248	5994mm



Formflex Coupling for Cooling Tower Applications

Coupling Model	Max DBSE mm at			KW/100 RPM	Max Bore mm		Dimensions mm					Max Rated Torque kNm	Peak Torque kNm
	1000 rpm	1500 rpm	1800 rpm		Std Hub	Large Hub	A	F	G	H	J		
A520-CS2G	2082	1946	1778	2.6	42	55	103.63	33.53	8.64	60.96	58.42	0.25	0.47
A520-CS2R	2108	2108	2108	2.6	42	55	103.63	33.53	8.64	60.96	58.42	0.25	0.47
A525-CS2G	2082	1946	1778	4.5	50	65	125.73	41.15	11.43	71.12	58.42	0.43	0.86
A525-CS2R	2108	2108	2108	4.5	50	65	125.73	41.15	11.43	71.12	58.42	0.43	0.86
A530-CS3R	3251	2836	2590	8.21	65	75	143	47.75	11.94	83.82	82.55	0.78	1.57
A530-CS3B	3251	3226	2946	8.21	65	75	143	47.75	11.94	83.82	82.55	0.78	1.57
A535-CS4R	3683	3281	2997	13.43	75	100	168.4	57.15	13.97	105.41	107.95	1.28	2.56
A535-CS4B	3683	3683	3403	13.43	75	100	168.4	57.15	13.97	105.41	107.95	1.28	2.56
A535-CS6R	4495	3949	3606	13.43	75	100	168.4	57.15	13.97	105.41	107.95	1.28	2.56
A535-CS6B	4495	4450	4064	13.43	75	100	168.4	57.15	13.97	105.41	107.95	1.28	2.56
A535-CS8R	4978	4851	4445	13.43	75	100	168.4	57.15	13.97	105.41	107.95	1.28	2.56
A535-CS8B	4876	4876	4826	13.43	75	100	168.4	57.15	13.97	105.41	107.95	1.28	2.56
A540-CS4R	3683	3281	2997	21.63	85	110	193.8	63.5	15.24	118.11	107.95	2.06	4.13
A540-CS4B	3683	3683	3403	21.63	85	110	193.8	63.5	15.24	118.11	107.95	2.06	4.13
B558-CS6R	4495	3949	3606	40.26	100	N/A	228.6	69.85	14.22	137.92	160.02	3.84	7.68
B558-CS6B	4495	4450	4064	40.26	100	N/A	28.6	69.85	14.22	137.92	160.02	3.84	7.68
B558-CS6X	4495	4495	4191	40.26	100	N/A	28.6	69.85	14.22	137.92	160.02	3.84	7.68
B558-CS8R	4978	4851	4445	40.26	100	N/A	28.6	69.85	14.22	137.92	211.07	3.84	7.68
B558-CS8B	4876	4876	4826	40.26	100	N/A	28.6	69.85	14.22	137.92	211.07	3.84	7.68
B558-CS10R	5892	5729	5232	40.26	100	N/A	28.6	69.85	14.22	137.92	261.87	3.84	7.68
B558-CS10B	5892	5840	5334	40.26	100	N/A	28.6	69.85	14.22	137.92	261.87	3.84	7.68

Electromagnetic Clutches and Brakes

Warner Electric

Electromagnetic Clutches and Brakes

New Hartford, CT - USA
1-800-825-6544

For application assistance:
1-800-825-9050

Saint Barthélemy d'Anjou, France
+33 (0)2 41 21 24 24

Precision Electric Coils and Electromagnetic Clutches and Brakes

Columbia City, IN - USA
1-260-244-6183

Matrix International

Electromagnetic Clutches and Brakes, Pressure Operated Clutches and Brakes

Brechin, Scotland
+44 (0) 1356 602000

New Hartford, CT - USA
1-800-825-6544

Inertia Dynamics

Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes

New Hartford, CT - USA
1-800-800-6445

Linear Products

Warner Linear

Linear Actuators

Belvidere, IL - USA
1-800-825-6544

For application assistance:
1-800-825-9050

Saint Barthélemy d'Anjou, France
+33 (0)2 41 21 24 24

Couplings

Ameridrives Couplings

Mill Spindles, Ameriflex, Ameridisc

Erie, PA - USA
1-814-480-5000

Gear Couplings

San Marcos, TX - USA
1-800-458-0887

Bibby Turboflex

Disc, Gear, Grid Couplings, Overload Clutches

Dewsbury, England
+44 (0) 1924 460801

Boksburg, South Africa
+27(0) 11 918 4270

TB Wood's

Elastomeric Couplings

Chambersburg, PA - USA
1-888-829-6637 – Press #5

For application assistance:
1-888-829-6637 – Press #7

General Purpose Disc Couplings

San Marcos, TX - USA
1-888-449-9439

Ameridrives Power Transmission

Universal Joints, Drive Shafts, Mill Gear Couplings

Green Bay, WI - USA
1-920-593-2444

Huco Dynatork

Precision Couplings and Air Motors

Hertford, England
+44 (0) 1992 501900

Chambersburg, PA - USA
1-888-829-6637

Lamiflex Couplings

Flexible Couplings, Bearing Isolators, and Coupling Guards

São Paulo, SP - Brasil
+55 (11) 5679-6533

Guardian Couplings

Flywheel, Jaw, Shear, Gear, Grid, Disc and Engine Couplings

Michigan City, IN - USA
1-219-874-5248

Heavy Duty Clutches and Brakes

Wichita Clutch

Pneumatic Clutches and Brakes

Wichita Falls, TX - USA
1-800-964-3262

Bedford, England
+44 (0) 1234 350311

Twiflex Limited

Caliper Brakes and Thrusters

Twickenham, England
+44 (0) 20 8894 1161

Industrial Clutch

Pneumatic and Oil Immersed Clutches and Brakes

Waukesha, WI - USA
1-262-547-3357

Svendborg Brakes

Industrial Brakes and Brake Systems

Vejstrup, Denmark
+45 63 255 255

Gearing

Boston Gear

Enclosed and Open Gearing, Electrical and Mechanical P.T. Components

Charlotte, NC - USA
1-800-825-6544

For application assistance:
1-800-816-5608

Bauer Gear Motor

Geared Motors

Esslingen, Germany
+49 (711) 3518-0

Somerset, NJ - USA
1-732-469-8770

Nuttall Gear and Delroyd Worm Gear

Worm Gear and Helical Speed Reducers

Niagara Falls, NY - USA
1-716-298-4100

Overrunning Clutches

Formsprag Clutch

Overrunning Clutches and Holdbacks

Warren, MI - USA
1-800-348-0881 – Press #1

For application assistance:
1-800-348-0881 – Press #2

Marland Clutch

Roller Ramp and Sprag Type Overrunning Clutches and Backstops

South Beloit, IL - USA
1-800-216-3515

Stieber Clutch

Overrunning Clutches and Holdbacks

Heidelberg, Germany
+49 (0) 6221-30470

Belted Drives and Sheaves

TB Wood's

Belted Drives

Chambersburg, PA - USA
1-888-829-6637 – Press #5

For application assistance:
1-888-829-6637 – Press #7

Engineered Bearing Assemblies

Kilian Manufacturing

Engineered Bearing Assemblies

Syracuse, NY - USA
1-315-432-0700

For information concerning our sales offices in Asia Pacific check our website www.altramotion.com.cn



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