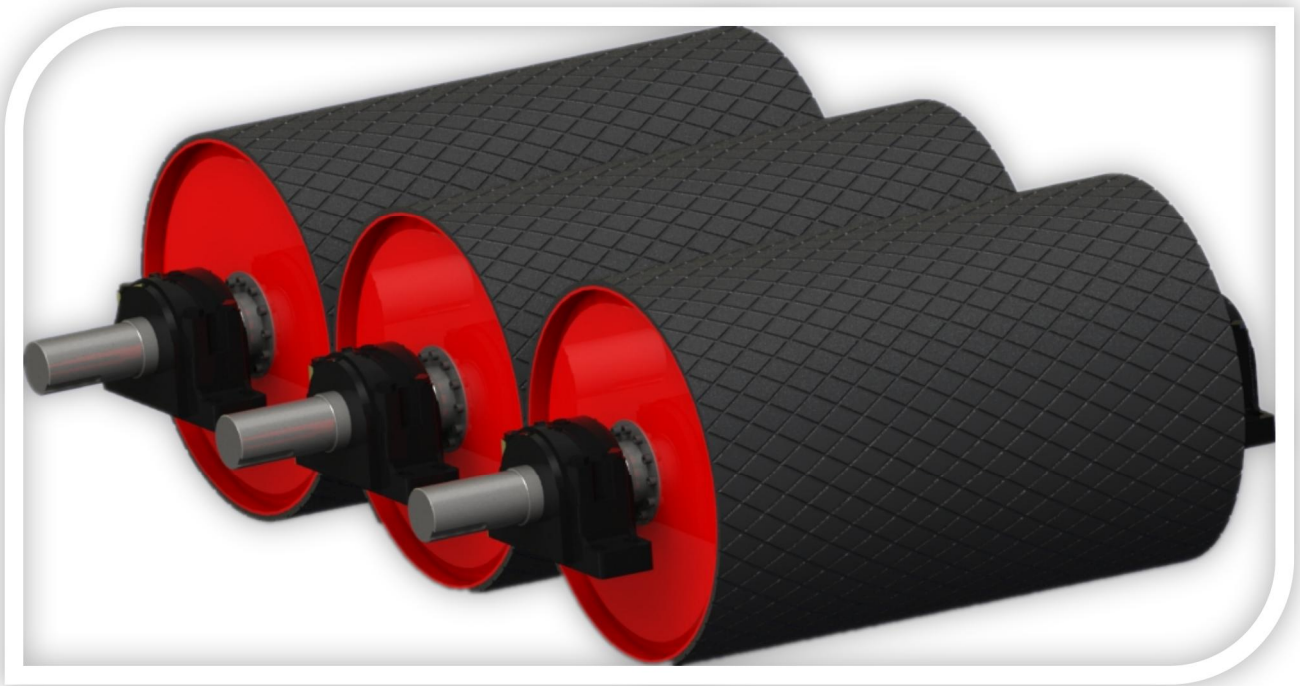


Belt Conveyor Pulleys

CONTENT

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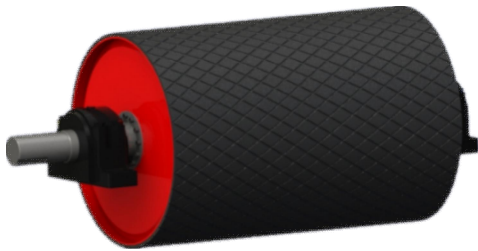
Pulley

Pulley is the one of the most important parts in belt conveyor, which has three main effects: supporting the belt turning around, transmitting the power into the belt and adjusting the belt.

As per the functions on the belt conveyor, pulley can be divided into two main categories: driving pulley and bend pulley.



1.1 Brief Introduction



Diamond Pattern Rubber Lagging Pulley

It has a good friction coefficient and can be applied on the reversible belt conveyors, thus ensuring the power transmission and the stable operation of conveyor belt.



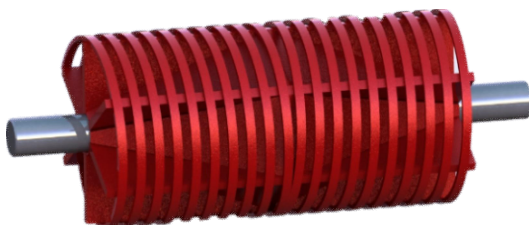
Steel Plain Pulley

It can be applied for the condition of medium or low power and temperature.



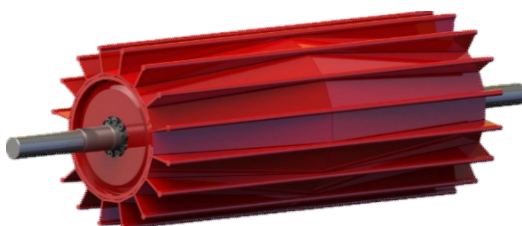
Ceramic Pulley:

It can add the friction force, improve the wearability and has an effect of impact resistance. It can prevent the belt from slippage and increase the service life. It can be applied in high humid surroundings that can cause belt slipping.



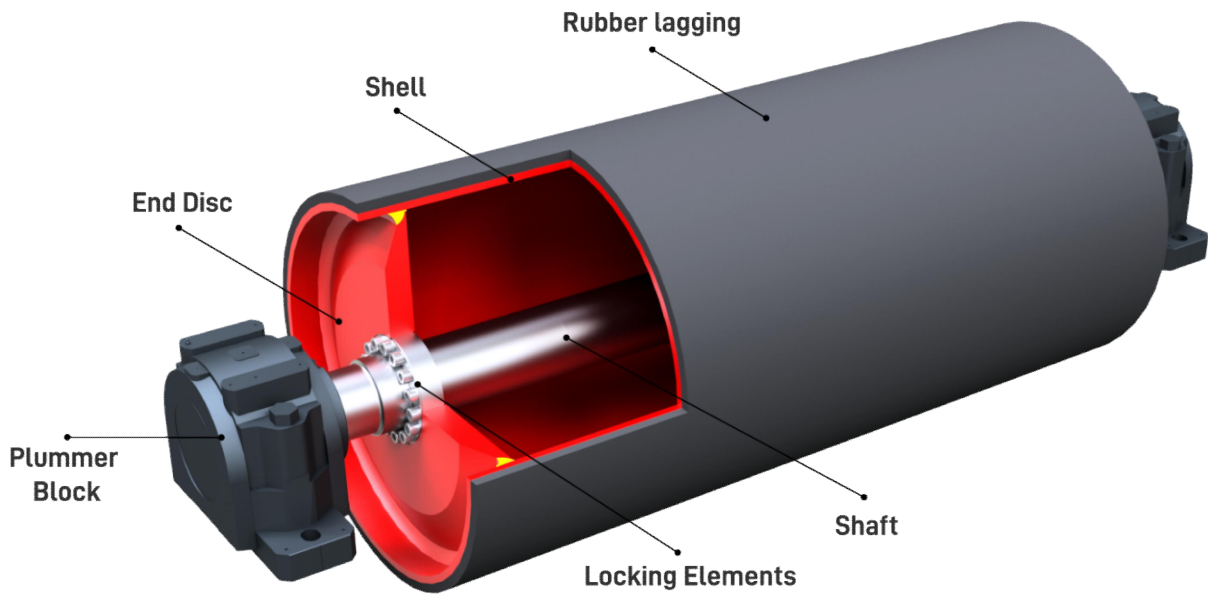
Spiral Pulley

It can remove the sticky materials and adjust the belt from misalignment. It can be applied for wet, sticky materials conveying and in some severe conditions.

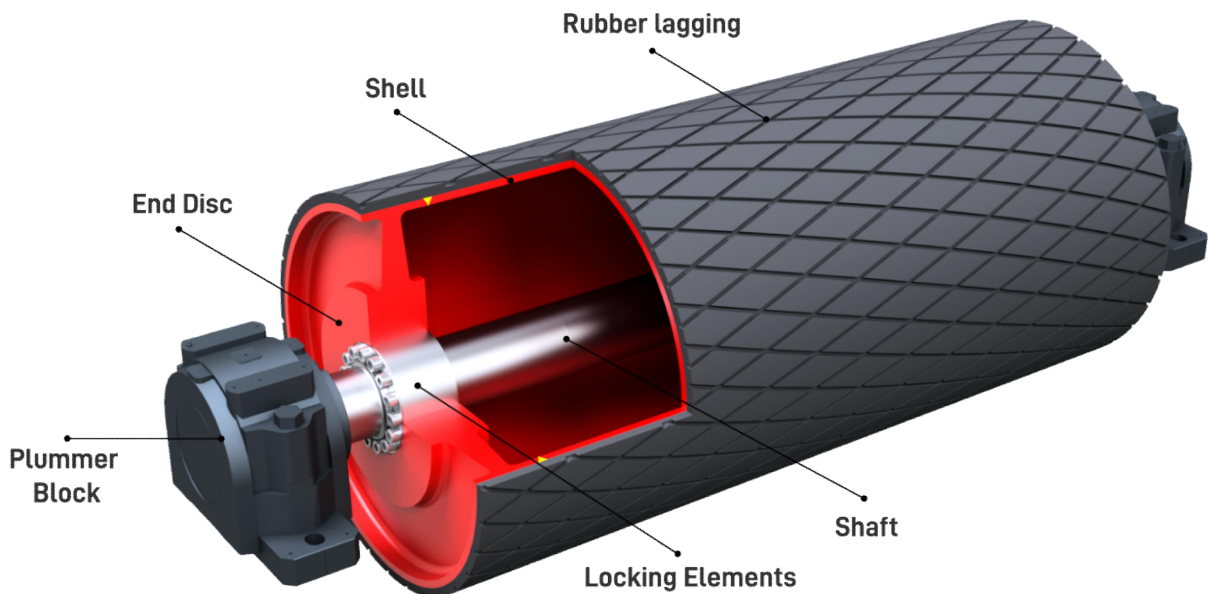


Wing pulley

In general, it is designed to be used in the dirtiest and most abrasive part of the conveyor system. Its self cleaning action is required to eliminate material build up between the pulley and the belt which can prevent the belt misalignment and belt wear.



Pulley with Locking Elements (Profiled End Discs)



Pulley with Locking Elements (T-shaped End Discs)

1.2 DRIVING PULLEY

		KN · m	KN							
800	500	4.1	40	1300	950	740	170	380	460	135
		6	50			740	170	380	460	135
	630	12	80			740	210	440	530	155
		20	100			750	250	480	570	170
	800	7	50			740	170	380	460	135
		12	80			740	210	440	530	155
		20	110			750	250	480	570	170
		32	160			800	250	520	640	200
	1000	12	80	1300		740	210	440	530	155
		20	120	750		250	480	570	170	
		32	190	1400		800	250	520	640	200
		40	240			870	300	570	700	220
		52	310	870		350	640	780	240	
		66	400	1450		895	350	720	880	270
	1250	40	270	1400		870	350	640	780	240
		66	320	1450		925	350	750	900	290
80		450	925		410	750	900	290		
120		520	925		410	840	1000	310		
1000	400	2.5	30	1500	1150	820	140	350	410	120
		3.5	45			820	140	350	410	120
	500	6.3	75			840	170	380	460	135
		6	40			840	170	380	460	135
	630	12	73			840	210	440	530	155
		12	73			840	210	440	530	155
	800	20	110			850	250	480	570	170
		27	160			900	250	520	640	200
		40	190	910		300	570	700	220	
		52	320	995		350	640	780	240	
	1000	12	80	1500		840	210	440	530	155
		20	110	850		250	480	570	170	
		27	170	900		250	520	640	200	
		40	210	910		300	570	700	220	
		52	330	995		350	640	780	240	
		66	400	1000		350	720	880	270	
	1250	52	320	1650		1000	350	720	880	270
		66	450	1025		350	750	900	290	
		80	520	1025		410	750	900	290	
		120	660	1025		410	840	1000	310	
	1400	66	450	1650		1000	350	750	900	290
		120	520	1025		410	840	1000	310	
		160	660	1025		470	940	1150	330	

BW	D	[τ]	[δ]	A	L	L2	K	Q	P	H
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		KN · m	KN								
1000	1600	120	520	1650	1150	1025	470	940	1150	330	
		160	660	1800		1175	470	1010	1200	380	
1200	500	6.3	60	1750	1400	965	170	380	460	135	
	630	12	52			975	210	440	530	155	
		20	85	975	250	480	570	170			
	800	12	80	1750	1400	975	210	440	530	155	
		20	110			975	250	480	570	170	
		800	27	140		1850	1025	250	520	640	200
			40	180			1035	300	570	700	220
	1000	52	230	1900		1120	350	640	780	240	
		12	80	1750		975	210	440	530	155	
		20	110				250	480	570	170	
		1000	27	160		1850	1025	250	520	640	200
			40	210			1035	300	570	700	220
			52	290		1900	1120	350	640	780	240
	66		330	350				720	880	270	
	1250	80	450	1900		1150	350	750	900	290	
		52	320			1150	350	750	900	290	
		66	450	410			750	900	290		
		80	520	1900		1150	410	840	1000	310	
	120	660	470				940	1150	330		
	1400	80	520	1900		1150	410	840	1000	310	
		120	660				1150	470	940	1150	330
		160	800	2050		1300	470	1010	1200	380	
		1600	120	660		1900	1150	470	940	1150	330
	160		800	2050		1300	470	1010	1200	380	
1400	800	20	100	2050		1600	1125	250	480	570	170
		27	130				1125	250	520	640	200
		40	170				1135	300	570	700	220
		52	210	2100	1220		350	640	780	240	
		66	320		1220		350	720	880	270	
	1000	20	100	2050	1125		250	480	570	170	
		27	160		1125		250	520	640	200	
		40	210		1135		300	570	700	220	
		52	260	2100	1220		350	640	780	240	
		66	300		1220		350	720	880	270	
		80	450		1250		350	750	900	290	
	1250	52	260	2100	1250		350	750	900	290	
		66	450		1250		410	750	900	290	
		80	520		1260		410	840	1000	310	
		120	660		1260		470	940	1150	330	

BW	D	[τ]	[δ]	A	L	L2	K	Q	P	H
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		KN · m	KN									
1400	1400	80	520	2100	1600	1260	410	840	1000	310		
		120	800			1260	470	940	1150	330		
		160	1050	2250		1400	470	1010	1200	380		
	1600	120	800	2150		1285	470	940	1150	330		
		160	1050	2250		1400	470	1010	1200	380		
1600	800	20	120	2250	1800	1235	250	520	640	200		
		27	160			1245	300	570	700	220		
		40	240	2300		1330	350	640	780	240		
		52	320				350	720	880	270		
		66	450	2350		1375	350	750	900	290		
		1000	27	160		2250	1245	300	570	700	220	
	40		240	2300		1330	350	640	780	240		
	52		320				350	720	880	270		
	66		450	2350		1375	350	750	900	290		
	80		520	2350		1385	410	750	900	290		
	120		650			1385	410	840	1000	310		
	1250	66	450	2350		1375	350	750	900	290		
		80	520			1385	410	750	900	290		
		120	650			1385	410	840	1000	310		
		160	800			1385	470	940	1150	330		
	1400	80	520	1800		1385	410	840	1000	310		
		120	800			1385	470	940	1150	330		
		160	1050			2450	1500	470	1010	1200	380	
	1600	800	80	520		2350	1385	410	840	1000	310	
			120	800			1385	470	940	1150	330	
		1600	120	800		2350	1385	470	940	1150	330	
			160	1200		2450	1500	470	1010	1200	380	
	1800	800	20	160		2450	2000	1335	250	520	640	200
			27	240				1345	300	570	700	220
40			320	2500	1430	350		640	780	240		
52			450			350		720	880	270		
66			520	2550	1475	350		750	900	290		
1000		40	320	2500	1430	350		640	780	240		
		52	450			350		720	880	270		
		66	520	2550	1475	350		750	900	290		
		80	650		1485	410		750	900	290		
		120	800		1485	410		840	1000	310		
1250		66	450	2550	1485	410		750	900	290		
		80	520		1485	410		840	1000	310		
		120	650		1485	470		940	1150	330		
		1400	80		450	1485		410	840	1000	310	
1400		1400	80	450	2550	1485		470	940	1150	330	
			120	800		1485		470	940	1150	330	

BW	D	[τ]	[δ]	A	L	L2	K	Q	P	H
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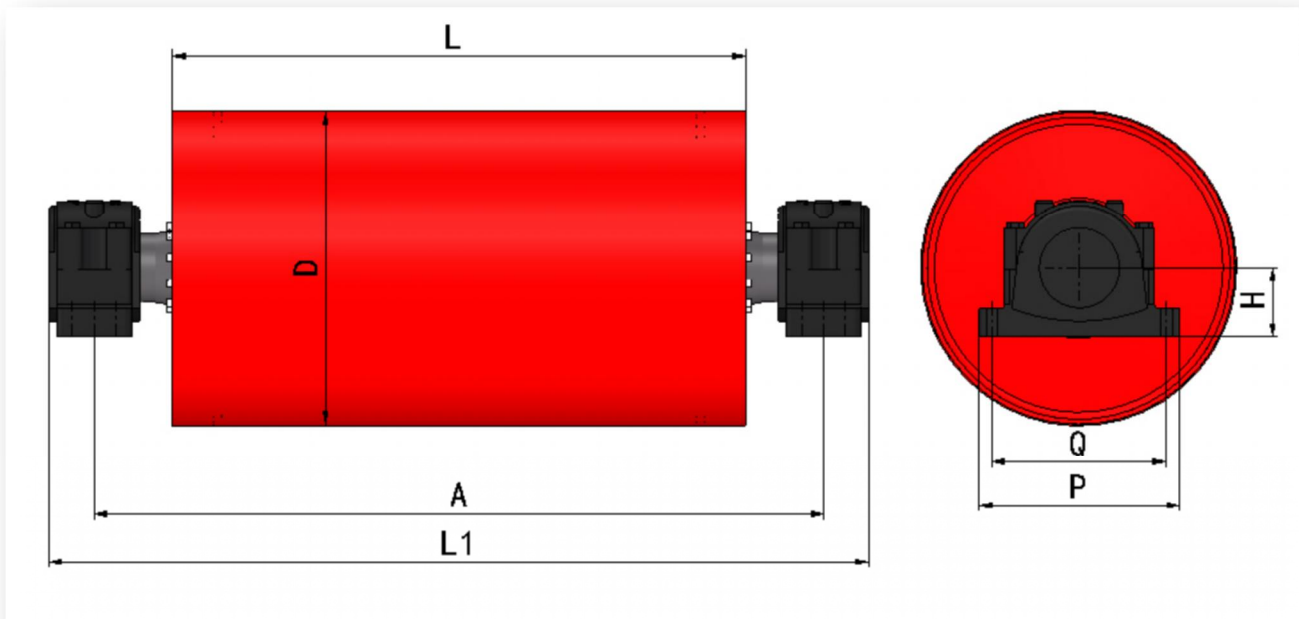
		KN · m	KN									
1800	1400	160	1050	2650	2000	1600	470	1010	1200	380		
	1600	120	800	2550		1485	470	940	1150	330		
		160	1050	2650		1600	470	1010	1200	380		
2000	800	20	160	2650	2200	1445	250	520	640	200		
		27	240			1455	300	570	700	220		
		40	320	2700		1520	350	640	780	240		
		52	450			1520	350	720	880	270		
		66	520			1575	350	750	900	290		
	1000	40	320	2700		1520	350	640	780	240		
		52	450			1520	350	720	880	270		
		66	520	2750		1575	350	750	900	290		
		80	650			1585	410	750	900	290		
		120	800			1585	410	840	1000	310		
	1250	66	450	2750		1585	410	750	900	290		
		80	520			1585	410	840	1000	310		
		120	800			1585	470	940	1150	330		
	1400	80	450	2850		1585	410	840	1000	310		
		120	800			1585	470	940	1150	330		
		160	1200			1700	470	1010	1200	380		
	1600	120	800	2750		1585	470	940	1150	330		
		160	1200	2850		1700	470	1010	1200	380		
	2200	800	27	240		2950	2500	1605	300	570	700	220
			40	320		3000		1670	350	640	780	240
			52	450		3000		1670	350	720	880	270
			66	520		3050		1725	350	750	900	290
		1000	40	320		3000		1670	350	720	880	270
			52	450		3050		1725	350	750	900	290
66			520	1735	410			750	900	290		
80			650	1735	410			840	1000	310		
120			800	1735	470			940	1150	370		
80		450	1735	410	840			1000	310			
1250		120	800	3150	1735	470		940	1150	330		
		160	1200		1850	470		1010	1200	380		
1400		80	450	3050	1735	470		940	1150	330		
		120	800	3150	1850	470		1010	1200	380		
		160	1200	3200	1885	470		1050	1240	400		
1600		120	800	3150	1850	470		1010	1200	380		
		160	1200	3200	1885	470		1050	1240	400		
2400		800	27	240	3250	2800		1755	300	570	700	220
			40	320	3300			1820	350	640	780	240
			52	450	1820			350	720	880	270	

BW	D	[τ]	[δ]	A	L	L2	K	Q	P	H
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		KN · m	KN							
2400	800	66	520	3350	2800	1875	350	750	900	290
	1000	40	320	3300		1820	350	720	880	270
		52	450	3350		1875	350	750	900	290
		66	520			1885	350	750	900	290
		80	650			1885	410	840	1000	310
		120	800			1885	470	940	1150	370
		1250	80			450	1885	410	840	1000
	120		800			1885	470	940	1150	330
	160		1200	3450		2000	470	1010	1200	380
	1400	80	450	3350		1885	470	940	1150	330
		120	800	3450		2000	470	1010	1200	380
		160	1200	3500		2035	470	1050	1240	400
		1600	120	800		3450	2000	470	1010	1200
	160		1200	3500		2035	470	1050	1240	400
	1800	120	800	3450		2000	470	1010	1200	380
		160	1200	3500		2035	470	1050	1240	400

*τ: Allowable Moment of Torque δ: Allowable Resultant Force

1.2 BEND PULLEY



mm

BW	D	[δ] KN	A	L	L1	Q	P	H			
400	200	8	750	500	830	260	320	90			
	250	8									
	315	10			860	280	340	100			
	400	16									
		24									
500	200	8	850	600	930	260	320	90			
	250	9									
	315	10									
	400	10			960	280	340	100			
		23									
		28									
500	49	965	350	410	120						
650	200	8	1000	750	1101	260	320	90			
	250	8									
	315	8			1110	280	340	100			
		16									
		26									
	400	20			1115	280	340	100			
		32									
		46									
		1139							380	460	135
		1115							350	410	120

BW	D	[δ]	A	L	L1	Q	P	H
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		KN						
650	500	59	1000	750	1139	380	460	135
	630	59			1139	380	460	135
		70	1050		1201	440	530	155
800	200	6	1250	950	1330	260	320	90
	250	6			1339	280	340	100
	315	12			1344	350	410	120
		20	1300		1411	380	460	135
	400	20			1423	440	530	155
		29			1300	1411	380	460
	500	45	1423			440	530	155
		40	1433			480	570	170
		56	1300		1411	380	460	135
	630	100			1423	440	530	155
		50			1433	480	570	170
		73	1400		1550	520	640	200
	100	1300			1423	440	530	155
	170				1433	480	570	170
	800		90		1400	1550	520	640
		126	1423			440	530	155
		170	1433			480	570	170
		250	1450		1550	520	640	200
	1000	240			1566	570	700	220
		330			1550	520	640	200
		400	1566		570	700	220	
	1250	400	1450		1644	640	780	240
		550			1644	720	880	270
		800			1734	750	900	290
			1740	750	900	290		
1000	250	6	1450	1150	1530	260	320	90
	315	11			1539	280	340	100
		18			1544	350	410	120
	400	18	1500		1544	350	410	120
		29			1611	380	460	135
	45	1623			440	530	155	
	500	35	1500		1611	380	460	135
		45			1623	440	530	155
		75			1633	480	570	170
	630	43	1600		1611	380	460	135
		64			1623	440	530	155
		87			1633	480	570	170
		168	1750		520	640	200	
	800	79	1500		1623	440	530	155

BW	D	[δ]	A	L	L1	Q	P	H
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		KN						
1000	800	110	1500	1150	1633	480	570	170
		168	1600		1750	520	640	200
		220			1766	570	700	220
		300	1650		1894	640	780	240
	1000	130	1500		1633	480	570	170
		200	1600		1750	520	640	200
		290			1766	570	700	220
		387	1650		1894	640	780	240
	1250	429			1894	720	880	270
		400	1650		1894	720	880	270
		550			1934	750	900	290
	660	1940			750	900	290	
	1400	600			1934	750	900	290
		900			1940	840	1000	310
	1600	1200			1940	940	1150	330
	1200	250	6		1400	1780	260	320
315		11	1700	1789		280	340	100
		17		1794		350	410	120
400		17	1750	1794		350	410	120
		26		1861		380	460	135
500		38	1750	1873		440	530	155
		30		1861		380	460	135
		41		1873		440	530	155
630		70	1750	1883		480	570	170
		37		1861		380	460	135
		53		1873		440	530	155
		90		1883		480	570	170
800		150	1850	2000		520	640	200
		64	1750	1873		440	530	155
		100		1883		480	570	170
		150	1850	2000		520	640	200
		200		2016		570	700	220
		230	1900	2144		640	780	240
1000		134	1750	1883		480	570	170
		150	1850	2000		520	640	200
		200		2016		570	700	220
		351	1900	2144		640	780	240
		391		2144		720	880	270
437		2184		750		900	290	
1250		400		2184		750	900	290
		550		2190		750	900	290

BW	D	[δ]	A	L	L1	Q	P	H
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		KN						
1200	1250	800	1900	1400	2190	840	1000	310
	1400	900			2190	940	1150	330
		1600	1200		2050	2500	1010	1200
1400	315	17	1900	1600	1994	350	410	120
		17			1994	350	410	120
	400	25	1950		2061	380	460	135
		40			2073	440	530	155
	500	25	1950		2089	380	460	135
					40	2073	440	530
		66	2183		480	570	170	
	630	50	1950		2073	440	530	155
		90	2050		2183	480	570	170
		120			2200	520	640	200
	800	50	1950		2073	440	530	155
			94		2183	480	570	170
		150	2050		2200	520	640	200
					186	2216	570	700
		214	2100		2344	640	780	240
		300			2344	720	880	270
	1000	100	2050		2183	480	570	170
		150			2200	520	640	200
		236			2216	570	700	220
		331	2100		2344	640	780	240
		361			2344	720	880	270
		400			2384	750	900	290
		427			2390		900	290
		1250			400	2100	2384	750
	500		2390		750		900	290
	600		2390		840		1000	310
	900		2390		940		1150	330
	1050	2250	2700		1010	1200	380	
	1400	600	2100		2390	840	1000	310
		900			2390	940	1150	330
		1050	2250		2700	1010	1200	380
	1200	2700			1010	1200	380	
	1600	1600	2250		2726	1050	1240	400
1600	400	25	1800	2261	380	460	135	
		40		2273	440	530	155	
		80		2383	480	570	170	
	500	40		2273	440	530	155	

BW	D	[δ]	A	L	L1	Q	P	H
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		KN						
1600	500	80	2250	1800	2383	480	570	170
		160			2400	520	640	200
	630	40	2150		2273	440	530	155
		80	2250		2383	480	570	170
		160			2400	520	640	200
	800	240	2300		2466	570	700	220
		40	2150		2273	440	530	155
		80	2250		2383	480	570	170
		120			2400	520	640	200
		160			2416	570	700	220
		240	2300		2544	640	780	240
		320			2544	720	880	270
	450	2350	2634		750	900	290	
	1000	160	2250		2416	570	700	220
		240	2300		2544	640	780	240
		320			2544	720	880	270
		450	2350		2634	750	900	290
		520			2640	750	900	290
		800			2640	840	1000	310
	1250	450	2450		2640	750	900	290
		520			2640	840	1000	310
		800			2640	940	1150	330
		1200			2900	1010	1200	380
	1400	520	2350		2640	840	1000	310
		800			2640	940	1150	330
		1200			2900	1010	1200	380
	1600	800	2350		2640	940	1150	330
		1200	2450		2900	1010	1200	380
1600		2926		1050	1240	400		
1800	400	25	2350	2000	2461	380	460	135
		40			2473	440	530	155
		80			2583	480	570	170
	500	40	2350		2473	440	530	155
		80	2450		2583	480	570	170
		160			2600	520	640	200
	630	40	2350		2473	440	530	155
		80	2450		2583	480	570	170
		160			2600	520	640	200
		240			2616	570	700	220
		320	2500		2744	640	780	240
	800	80	2450		2583	480	570	170

BW	D	[δ]	A	L	L1	Q	P	H
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		KN						
1800	800	160	2450	2000	2616	570	700	220
		240	2500		2744	640	780	240
		320			2788	720	880	270
		450	2550		2840	750	900	290
	1000	160	2450		2616	570	700	220
		240	2500		2744	640	780	240
		450	2550		2834	750	900	290
		520			2840	750	900	290
		800			2840	840	1000	310
		520			2840	750	900	290
	1250	800			2840	940	1150	330
		1200	2650		3100	1010	1200	380
		800	2550		2840	940	1150	330
	1400	1200	2650		3100	1010	1200	380
		1600			3126	1050	1240	400
		800	2550		2840	940	1150	330
	1600	1200	2650		3100	1010	1200	380
		1600			3126	1050	1240	400
	2000	400	25		2550	2661	380	460
40			2673	440		530	155	
80			2783	480		570	170	
500		40	2550	2673	440	530	155	
		80	2650	2783	480	570	170	
		160		2800	520	640	200	
630		40	2550	2673	440	530	155	
		80	2650	2800	520	640	200	
		160		2816	570	700	220	
		240	2700	2944	640	780	240	
800		80	2650	2783	480	570	170	
		160		2816	570	700	220	
		240	2700	2944	640	780	240	
		320		2944	720	880	270	
		550		3040	750	900	290	
1000		160	2650	2816	570	700	220	
		240	2700	2944	640	780	240	
		320		2944	720	880	270	
		450	2750	3034	750	900	290	
		520		3040	750	900	290	
	650	3040		840	1000	310		
1250	520		3040	750	900	290		
	800			940	1150	330		

BW	D	[δ]	A	L	L1	Q	P	H
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		KN								
2000	1250	1200	2850	2200	3300	1010	1200	380		
		800	2750		3040	940	1150	330		
	1400	1200	2850		3300	1010	1200	380		
		1600			3326	1050	1240	400		
	1600	800			3300	1010	1200	380		
		1200			3326	1050	1240	400		
		1600			3334	1090	1280	420		
2200	500	40		2850	2500	2973	440	530	155	
		80		2950		3083	480	570	170	
		120	3100			520	640	200		
	630	40	2850	2973		440	530	155		
		80	2950	3100		520	640	200		
		160		3116		570	700	220		
		240	3000	3244		640	780	240		
	800	90	2950	3083		480	570	170		
		150		3116		570	700	220		
		240	3000	3244		640	780	240		
		320		3244		720	880	270		
		450	3050	3334		750	900	290		
		600		3340		750	900	290		
	1000	180	2950	3116		570	700	220		
		240	3000	3244		640	780	240		
		320		3244		720	880	270		
		450	3050	3334		750	900	290		
		600		3340		750	900	290		
		800		3340		940	1150	330		
		1200		3150		3600	1010	1200	380	
	1250	400	3050	3334		750	900	290		
		800		3340		940	1150	330		
		1200	3150	3600		1010	1200	380		
		1500				1050	1240	400		
	1400	800	3150			1010	1200	380		
		1200				1050	1240	400		
		1500		1090		1280	420			
	1600	800	3150	3600		960	1150	370		
		1200				1050	1240	400		
		1500				1090	1280	420		
	2400	500	40	3150		2800	3273	440	530	155
			80	3250			3383	480	570	170
			160				3400	520	640	200
240			3416		570		700	220		

BW	D	[δ]	A	L	L1	Q	P	H
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		KN						
2400	630	80	3250	2800	3383	480	570	170
		160			3416	570	700	220
		240	3300		3544	640	780	240
		320			3544	720	880	270
	800	150	3250		3416	570	700	220
		240	3300		3544	640	780	240
		320			3544	720	880	270
		450	3350		3634	750	900	290
		600			3640	750	900	290
	1000	240	3300		3544	640	780	240
		450	3350		3634	750	990	290
		600			3640	750	900	290
		800			3640	840	1000	310
		1000			3640	940	1150	330
		1200	3450		3900	1010	1200	380
	1250	800	3350		3640	940	1150	330
		1200	3450		3900	1010	1200	380
		1500			3926	1050	1240	400
	1400	800	3450		3900	1010	1200	380
		1200			3926	1050	1240	400
		1500			3934	1090	1280	420
	1600	800			3900	1010	1200	380
		1200			3926	1050	1240	400
		1500			3934	1090	1280	420
	1800	1200			3926	1050	1240	400
		1500			3934	1090	1280	420

*τ: Allowable Moment of Torque δ: Allowable Resultant Force