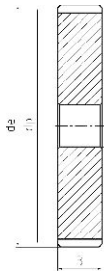
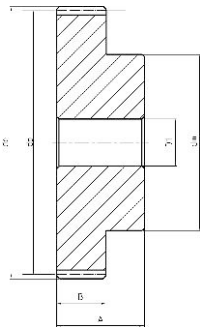
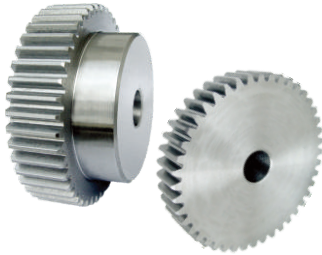




GOODWILL

Spur Gears

Pressure angle 20°



Tooth width "B"

- Module 1 =15mm
- Module 1.5 =17mm
- Module 2 =20mm
- Module 2.5 =25mm
- Module 3 =30mm
- Module 4 =40mm
- Module 5 =50mm
- Module 6 =60mm

Tooth width "A"

- Module 1 =25mm
- Module 1.5 =30mm
- Module 2 =35mm
- Module 2.5 =45mm
- Module 3 =50mm
- Module 4 =60mm
- Module 5 =75mm
- Module 6 =80mm

Material: C45

Z	Mod.1				Mod.1.5				Mod.2				Mod.2.5			
	d _e	d _p	d _m	D ₁	d _e	d _p	d _m	D ₁	d _e	d _p	d _m	D ₁	d _e	d _p	d _m	D ₁
12	14	12	9	-	21.0	18.0	14	8	28	24	18	10	35.0	30.0	22	10
13	15	13	10	-	22.5	19.5	15	8	30	26	20	10	37.5	32.5	25	10
14	16	14	11	-	24.0	21.0	17	8	32	28	22	10	40.0	35.0	28	10
15	17	15	12	-	25.5	22.5	18	8	34	30	24	10	42.5	37.5	30	10
16	18	16	13	-	27.0	24.0	19	8	36	32	25	10	45.0	40.0	32	12
17	19	17	14	-	28.5	25.5	20	8	38	34	25	10	47.5	42.5	35	12
18	20	18	15	8	30.0	27.0	20	8	40	36	25	10	50.0	45.0	35	12
19	21	19	15	8	31.5	28.5	20	8	42	38	25	10	52.5	47.5	35	12
20	22	20	16	8	33.0	30.0	25	8	44	40	30	10	55.0	50.0	40	12
21	23	21	16	8	34.5	31.5	25	10	46	42	30	12	57.5	52.5	40	14
22	24	22	16	8	36.0	33.0	25	10	48	44	30	12	60.0	55.0	45	14
23	25	23	18	8	37.5	34.5	25	10	50	46	30	12	62.5	57.5	45	14
24	26	24	20	10	39.0	36.0	25	10	52	48	35	12	65.0	60.0	45	14
25	27	25	20	10	40.5	37.5	25	10	54	50	35	12	67.5	62.5	50	14
26	28	26	20	10	42.0	39.0	30	12	56	52	40	12	70.5	65.0	50	14
27	29	27	20	10	43.5	40.5	30	12	58	54	40	12	72.5	67.5	50	14
28	30	28	20	10	45.0	42.0	30	12	60	56	40	12	75.0	70.0	50	14
29	31	29	20	10	46.5	43.5	30	12	62	58	40	14	77.5	72.5	50	14
30	32	30	20	10	48.0	45.0	30	12	64	60	40	14	80.0	75.0	55	14
31	33	31	25	10	49.5	46.5	35	12	66	62	45	14	82.5	77.5	55	16
32	34	32	25	10	51.0	48.0	35	12	68	64	45	14	85.0	80.0	55	16
33	35	33	25	10	52.5	49.5	35	12	70	66	45	14	87.5	82.5	55	16
34	36	34	25	10	54.0	51.0	35	12	72	68	45	14	90.0	85.0	55	16
35	37	35	25	10	55.5	52.5	35	12	74	70	45	14	92.5	87.5	60	16
36	38	36	25	10	57.0	54.0	35	12	76	72	45	14	95.0	90.0	60	16
37	39	37	25	10	58.5	55.5	40	12	78	74	50	14	97.5	92.5	60	16
38	40	38	25	10	60.0	57.0	40	12	80	76	50	14	100.0	95.0	60	16
39	41	39	25	10	61.5	58.5	40	12	82	78	50	14	102.5	97.5	60	16
40	42	40	25	10	63.0	60.0	40	12	84	80	50	14	105.0	100.0	70	16
41	43	41	30	10	64.5	61.5	40	12	86	82	55	16	107.5	102.5	70	16
42	44	42	30	10	66.0	63.0	50	12	88	84	55	16	110.0	105.0	70	16
43	45	43	30	10	67.5	64.5	50	12	90	86	55	16	112.5	107.5	70	16
44	46	44	30	10	69.0	66.0	50	12	92	88	60	16	115.0	110.0	70	16
45	47	45	30	12	70.5	67.5	50	12	94	90	60	16	117.5	112.5	70	16
46	48	46	30	12	72.0	69.0	50	14	96	92	60	16	120.0	115.0	70	16
47	49	47	30	12	73.5	70.5	50	14	98	94	70	16	122.5	117.5	80	20
48	50	48	30	12	75.0	72.0	50	14	100	96	70	16	125.0	120.0	80	20
49	51	49	30	12	76.5	73.5	50	14	102	98	70	16	127.5	122.5	80	20
50	52	50	30	12	78.0	75.0	50	14	104	100	70	16	130.0	125.0	80	20
51	53	51	40	12	79.5	76.5	60	14	106	102	70	16	132.5	127.5	80	20
52	54	52	40	12	81.0	78.0	60	14	108	104	70	16	135.0	130.0	90	20
53	55	53	40	12	82.5	79.5	60	14	110	106	70	16	137.5	132.5	90	20
54	56	54	40	12	84.0	81.0	60	14	112	108	70	16	140.0	135.0	90	20
55	57	55	40	12	85.5	82.5	60	14	114	110	70	16	142.5	137.5	90	20
56	58	56	40	12	87.0	84.0	60	16	116	112	70	16	145.0	140.0	100	20
57	59	57	40	12	88.5	85.5	60	16	118	114	70	16	147.5	142.5	100	20
58	60	58	40	12	90.0	87.0	60	16	120	116	70	16	150.0	145.0	100	20
59	61	59	40	12	91.5	88.5	60	16	122	118	70	16	152.5	147.5	100	20
60	62	60	40	12	93.0	90.0	60	16	124	120	70	16	155.0	150.0	100	20
61	63	61	50	12	94.5	91.5	70	16	126	122	80	16				
62	64	62	50	12	96.0	93.0	70	16	128	124	80	16				
63	65	63	50	12	97.5	94.5	70	16	130	126	80	16				
64	66	64	50	12	99.0	96.0	70	16	132	128	80	16				
65	67	65	50	12	100.5	97.5	70	16	134	130	80	16	167.5	162.5	-	20
66	68	66	50	12	102.0	99.0	70	16	136	132	80	16				
67	69	67	50	12	103.5	100.5	70	16	138	134	80	16				
68	70	68	50	12	105.0	102.0	70	16	140	136	80	16				
69	71	69	50	12	106.5	103.5	70	16	142	138	80	16				
70	72	70	50	12	108.0	105.0	70	16	144	140	80	16	180.0	175.0	-	20
72	74	71	-	12	111.0	108.0	-	16	148	144	-	16	185.0	180.0	-	20
75	77	75	-	12	115.5	112.5	-	16	154	150	-	20	192.5	187.5	-	20
76	78	76	-	12	117.0	114.0	-	16	156	152	-	20	195.0	190.0	-	20
80	82	80	-	12	123.0	120.0	-	16	164	160	-	20	205.0	200.0	-	25
85	87	85	-	12	130.0	127.5	-	16	174	170	-	20	217.5	212.5	-	25
90	92	90	-	12	138.0	135.0	-	16	184	180	-	20	230.0	225.0	-	25
95	97	95	-	12	145.5	142.5	-	16	194	190	-	20	242.5	237.5	-	25
100	102	100	-	12	153.0	150.0	-	16	204	200	-	20	255.0	250.0	-	25
110	112	110	-	12	168.0	165.0	-	16	224	220	-	20	280.0	275.0	-	25
114	116	114	-	12	174.0	171.0	-	16	232	228	-	20	290.0	285.0	-	25
120	122	120	-	12	183.0	180.0	-	16	244	240	-	20	305.0	300.0	-	25
127	129	127	-	12	193.5	190.5	-	16	258	254	-	20	322.5	317.5	-	25

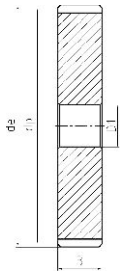
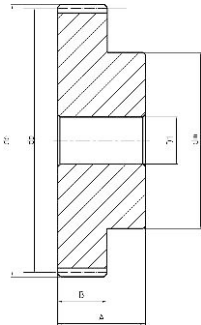
Spur Gears



GOODWILL

Spur Gears

Pressure angle 20°



Tooth width "B"

- Module 1 =15mm
- Module 1.5 =17mm
- Module 2 =20mm
- Module 2.5 =25mm
- Module 3 =30mm
- Module 4 =40mm
- Module 5 =50mm
- Module 6 =60mm

Tooth width "A"

- Module 1 =25mm
- Module 1.5 =30mm
- Module 2 =35mm
- Module 2.5 =45mm
- Module 3 =50mm
- Module 4 =60mm
- Module 5 =75mm
- Module 6 =80mm

Material: C45

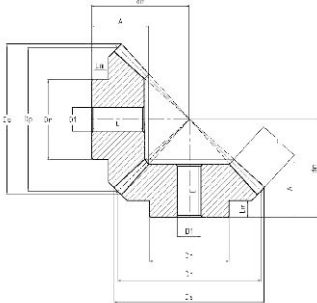
Z	Mod.3				Mod.4				Mod.5				Mod.6			
	d _e	d _p	d _m	D ₁	d _e	d _p	d _m	D ₁	d _e	d _p	d _m	D ₁	d _e	d _p	d _m	D ₁
12	42	36	27	12	56	48	35	14	70	60	45	20	84	72	54	20
13	45	39	30	12	60	52	40	14	75	65	50	20	90	78	60	20
14	48	42	33	12	64	56	45	14	80	70	55	20				
15	51	45	35	12	68	60	45	14	85	75	60	20	102	90	70	20
16	54	48	38	14	72	64	50	16	90	80	65	20	108	95	75	20
17	57	51	42	14	76	68	50	16	95	85	70	20				
18	60	54	45	14	80	72	50	16	100	90	70	20	120	108	80	20
19	63	57	45	14	84	76	60	16	105	95	70	20				
20	66	60	45	14	88	80	60	16	110	100	80	20	132	120	90	20
21	69	63	45	16	92	84	70	16	115	105	80	20				
22	72	66	50	16	96	88	70	16	120	110	80	20				
23	75	69	50	16	100	92	75	20	125	115	90	20				
24	78	72	50	16	104	96	75	20	130	120	90	20	156	144	110	25
25	81	75	60	16	108	100	75	20	135	125	90	20	162	150	110	25
26	84	78	60	16	112	104	75	20	140	130	100	20				
27	87	81	60	16	116	108	75	20	145	135	100	20				
28	90	84	60	16	120	112	75	20	150	140	100	25	180	168	-	25
29	93	87	60	16	124	116	75	20	155	145	110	25				
30	96	90	60	16	128	120	75	20	165	150	110	25	192	180	-	25
31	99	93	60	16	132	124	80	20								
32	102	96	70	16	136	128	80	20	170	160	-	25	204	192	-	25
33	105	99	70	16	140	132	80	20								
34	108	102	70	16	144	136	80	20								
35	111	105	70	16	148	140	80	20	185	175	-	25	222	210	-	25
36	114	108	70	20	152	144	80	25								
37	117	111	70	20												
38	120	114	80	20	160	152		25	200	190	-	25	240	220	-	25
39	123	117	80	20												
40	126	120	80	20	168	160		25	210	200	-	25	252	240	-	25
41	129	123	80	20												
42	132	126	80	20												
43	135	129	80	20												
44	138	132	90	20												
45	141	135	90	20	188	180	-	25	235	225	-	25				
46	144	138	90	20												
47	147	141	100	20												
48	150	144	100	20	200	192		25	250	240	-	25				
50	156	150	-	20	208	200		25	260	250	-	30				
52	162	156	-	20	216	208		25	270	260	-	30				
55	171	165	-	20	228	220		25	285	275	-	30				
57	177	171	-	20	236	228		25	295	285	-	30				
60	186	180	-	20	248	240		25	310	300	-	30				
65	201	195	-	20	268	260		25	335	325	-	30				
70	216	210	-	25	288	280		25	360	350	-	30				
72	222	216	-	25												
75	231	225	-	25	308	300	-	25	385	375	-	30				
76	234	228	-	25	312	304	-	30	390	380	-	30				
80	246	240	-	25	328	320	-	30	410	400	-	30				
85	261	255	-	25	348	340	-	30	435	425	-	30				
90	276	270	-	25	368	360	-	30	460	450	-	30				
95	291	285	-	25	388	380	-	30	485	475	-	30				
100	306	300	-	25	408	400	-	30	510	500	-	30				
110	336	320	-	25	448	440	-	30	560	550	-	30				
114	348	342	-	30	464	456	-	30	580	570	-	30				
120	366	360	-	30												
127	387	381	-	30												



GOODWILL

Bevel Gears

Type **A**
 Pressure angle **20°**
 Ratio **1:1**

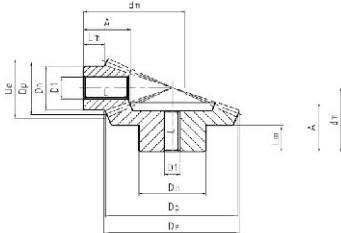


Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	L	L _m
1.5	16	26.1	24.0	18	8	18	8	23.8	17	8.9
	20	32.1	30.0	20	8	22	10	28.7	18	9.8
	22	35.1	33.0	20	8	25	10	30.2	18	9.7
	25	39.6	37.5	23	8	28	10	35.4	21	12
	30	47.1	45.0	25	10	30	12	39.7	22.5	12
2	16	34.8	32.0	20	9	25	10	28.8	17	9.3
	20	42.8	40.0	25	12	32	10	35.7	22	12
	22	46.8	44.0	25	12	36	10	37.7	22	17.7
	25	52.8	50.0	28	14	40	12	42.3	25	12.3
	30	62.8	60.0	30	16	50	12	47.8	27	12.8
2.5	16	43.5	40.0	25.5	10	32	12	37.3	22	13.3
	20	53.5	50.0	30.5	12	40	12	45.9	27	16
	22	58.5	55.0	30.5	12	45	12	48.3	27	15.9
	25	66.0	62.5	33.5	15	50	15	53.0	30	16
	30	78.5	75.0	35.5	18	55	15	59.1	32	16
3	16	52.2	48.0	30	12	40	15	44.2	26	16.2
	20	64.2	60.0	35	18	45	15	51.1	31	13.6
	22	70.2	66.0	35	18	50	15	54.0	31	13
	25	79.2	75.0	38	20	55	15	60.1	34	16
	30	94.4	90.0	40	22	60	20	68.1	36	19
3.5	16	60.9	56.0	35.5	16	45	15	50.8	31	17.2
	20	74.9	70.0	40.5	22	55	15	58.6	36	19
	22	81.9	77.0	40.5	22	60	15	62.0	36	18
	25	92.4	87.5	43.5	26	65	20	67.5	39	18
	30	109.9	105.0	45.5	30	70	20	75.4	41	17
4	16	69.6	64.0	38	18	50	15	55.6	33	16.6
	20	85.6	80.0	43	25	60	18	63.8	38	18
	22	93.6	88.0	43	25	65	18	67.7	38	18
	25	105.6	100.0	45	28	70	20	73.5	40	18
	30	125.6	120.0	48	32	80	25	83.7	43	16
4.5	16	78.3	72.0	43	20	55	18	63.0	37	18.5
	20	96.3	90.0	48	28	65	20	71.5	42	18
	22	105.3	99.0	48	28	70	20	75.8	42	18
	25	118.8	112.5	50	32	75	20	81.8	44	18
	30	141.3	135.0	53	35	90	25	93.8	47	17
5	16	87.0	80.0	45.5	22	60	20	67.8	39	17.8
	20	107.1	100.0	50.5	30	70	20	77.3	44	18.5
	22	117.1	110.0	50.5	30	80	20	82.2	44	18.5
	25	132.1	125.0	54.5	35	90	20	90.2	48	18.5
	30	157.1	150.0	56.5	38	110	30	102.4	50	18

Bevel Gears

Type **A**
 Pressure angle **20°**
 Ratio **1:2**

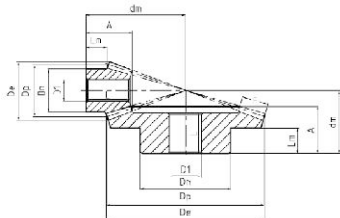


Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	L	L _m
1.5	16	26.7	24	18.5	8	21	10	34.9	17	10.3
	32	49.3	48	20	8	32	12	27.5	17.5	10
2	16	35.6	32	23	10	27	10	45.4	21	12.2
	32	65.8	64	25	10	40	12	35.2	22	10
2.5	16	44.4	40	27.5	12	34	12	56.0	25	14.4
	32	82.2	80	30	12	50	15	43.0	26.5	15
3	16	53.4	48	28	15	40	15	61.6	25	11.6
	32	98.7	96	35	15	60	15	50.4	30.5	15
3.5	16	62.3	56	33.5	18	48	15	72.3	30.5	14.4
	32	115.1	112	40	18	70	20	57.7	35	19
4	16	71.1	64	36	20	50	20	80.8	32	13.4
	32	131.6	128	45	20	80	20	65.5	39.5	23
4.5	16	80.1	72	39.5	22	60	20	90.4	35	15.4
	32	148.0	144	50	22	80	25	73.2	43.5	24
5	16	88.9	80	50	25	60	20	106.1	45	21.1
	32	164.5	160	55	25	85	25	80.6	48	27

Bevel Gears

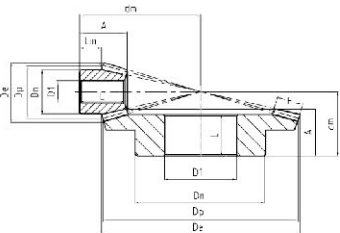
Type **A**
 Pressure angle **20°**
 Ratio **1:3**



Material: C45

M	Z	D _e	D _P	A	F	D _n	D ₁	d _m	L	L _m
1.5	16	26.9	24	22	12	20	10	46.3	21	9.7
	48	72.9	72	22	12	42	15	29.2	19	12
2	16	35.8	32	26.5	15	25	12	58.9	24	9.4
	48	97.3	96	26	15	50	15	35.9	22	13
2.5	16	44.7	40	28	18	33	14	70.4	26	9.2
	48	121.6	120	32	18	60	20	44.6	27	16
3	16	53.7	48	30	18	42	15	84.2	28	11.2
	48	145.9	144	38	18	65	20	54.1	32	19
3.5	16	62.6	56	36.5	22	48	15	98.8	34	13.4
	48	170.2	168	44	22	75	20	62.5	37	23
4	16	71.6	64	42	25	55	20	113.5	39	15.7
	48	194.5	192	50	25	85	22	71.2	42	27
4.5	16	80.6	72	53	28	60	20	133.4	50	23.4
	48	218.8	216	58	28	90	25	81.9	49	27
5	16	89.5	80	60	35	60	20	145.7	57	22.5
	48	243.1	240	65	35	100	28	90.5	55	35

Type **A**
 Pressure angle **20°**
 Ratio **1:4**



Material: C45

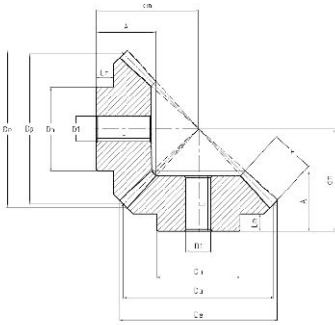
M	Z	D _e	D _P	A	F	D _n	D ₁	d _m	L	L _m
1.5	16	26.9	24	25	12	18	10	61.1	24	12.2
	64	96.7	96	25	12	60	15	33	22	13
2	16	35.9	32	24	15	25	12	73.1	23	8.5
	64	129.0	128	28	15	70	20	38.9	24	14
2.5	16	44.9	40	30.5	18	34	15	92.6	29	11.7
	64	161.2	160	35	18	80	20	48.8	30	16
3	16	53.8	48	32	20	40	15	108	30	11.1
	64	193.5	192	42	20	90	20	58.8	36	22
3.5	16	62.8	56	40	25	45	15	127.1	38	14
	64	225.7	224	50	25	100	25	69.3	43	22
4	16	71.7	64	50	30	50	20	148.2	48	18.5
	64	257.9	256	60	30	110	28	81.8	52	30
4.5	16	80.7	72	55	32	60	20	167.1	53	21.6
	64	290.1	288	65	32	120	30	89.8	57	35
5	16	89.7	80	60	35	65	20	185.1	58	23.2
	64	322.4	320	70	35	120	30	97.7	61	42



GOODWILL

Bevel Gears

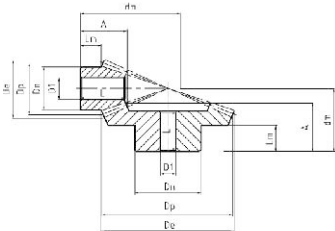
Type **B**
 Pressure angle **20°**
 Ratio **1:1**



Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	D _a	L	D _m
1	16	17.4	16.0	11.2	4	13.3	4	16	7	-	6.7
	19	20.4	19.0	11.8	4	15.3	4	18	11.5	-	6.6
	22	23.4	22.0	12.8	4.7	16.3	5	20	11.5	-	6.1
	26	27.4	26.0	13.3	5.5	20.3	5	22	14.5	-	7
	30	31.4	30.0	16.0	6.4	20.3	5	26	17.5	-	8
1.5	16	26.1	24.0	18.9	6	20.3	8	26	12	-	12.2
	19	30.6	28.5	21.3	7	20.3	8	30	14.5	-	11.6
	22	35.1	33.0	22.5	7.5	25.3	8	33	17	-	12.7
	26	41.1	39.0	23.2	8.5	28.3	8	36	22	-	12
	30	47.1	45.5	27.2	10	30.0	12	42	26	-	12.1
2	16	34.8	32.0	23.5	8	25.3	8	33	15.5	-	13.6
	19	40.8	38.0	24.2	9	25.3	8	36	19.5	-	12
	22	46.8	44.0	27.9	10	30.3	10	42	23.5	-	14
	26	54.8	52.0	31.4	12	35.3	12	48	29	-	13.7
	30	62.8	60.0	34.1	13	40.3	12	54	36	-	17
2.5	16	43.5	40.0	28.1	10	30.3	12	40	20	-	15.2
	19	51.0	47.5	27.1	11	35.3	12	42	25	-	13
	22	58.5	55.0	30.1	12	45.3	12	48	31.5	-	15.7
	26	68.5	65.0	33.2	15	45.3	15	54	36.5	-	16
	30	78.5	75.0	39.0	16	50.3	15	64	45.5	-	20
3	16	52.2	48.0	31.7	12	40.3	12	46	23	-	18.1
	19	61.2	57.0	36.0	13	40.3	14	54	30	-	17.1
	22	70.2	66.0	36.9	15	50.3	15	58	36.5	-	17.1
	26	82.2	78.0	38.4	17	50.3	15	64	45.5	-	18
	30	94.2	90.0	43.8	19	60.3	20	74	55	-	22
3.5	16	60.9	56.0	36.4	14	45.3	15	53	27.5	-	19.8
	19	71.4	66.5	36.9	15	50.3	15	58	35.3	-	18
	22	81.9	77.0	39.1	17	55.3	15	64	43.5	-	18
	26	95.9	91.0	42.2	20	60.3	20	72	52.3	-	20
	30	110.0	105.0	47.3	23	70.3	20	82	67	43	22
4	16	69.7	64.0	44.3	15	50.3	15	64	32	-	25.1
	19	81.7	76.0	44.4	18	55.3	18	68	40	-	22
	22	93.7	88.0	45.9	20	60.3	18	74	49	-	22
	26	109.7	104.0	48.0	23	70.3	20	82	65	43	22
	30	125.7	120.0	54.2	26	80.3	25	94	76	49	25
4.5	16	78.4	72.0	46.3	17.5	55.3	18	68	35.5	-	25
	19	91.8	85.5	47.3	20	60.3	20	74	44.6	-	25
	22	105.3	99.0	50.1	22	70.3	20	82	56	-	25
	26	123.3	117.0	53.2	25	75.3	20	92	68.1	45	25
	30	141.4	135.0	60.0	29	80.3	25	105	85	54	28
5	16	87.1	80.0	48.9	18	60.3	20	74	42	-	25
	19	102.1	95.0	52.2	22	60.3	20	82	50	-	25
	22	117.1	110.0	58.2	24	80.3	20	94	68	52	30
	26	137.1	130.0	62.7	29	80.3	20	105	82	57	30
	30	157.1	150.0	68.9	32	80.3	30	119	97	63	35

Type **B**
 Pressure angle **20°**
 Ratio **1:2**



Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	D _a	L	D _m
1	15	17.4	15.0	11.9	5	13.3	4	22	8	-	6.6
	30	30.6	30.0	15.1	5	20.3	5	20	-	14	9
1.5	15	26.1	22.5	21.1	9	20.3	8	35	11.5	-	12
	30	45.9	45.0	25.2	9	32.3	8	32	-	23	16
2	15	34.8	30.0	26.0	11.5	25.3	8	45	16	-	13.8
	30	61.2	60.0	29.8	11.5	40.3	12	39	-	27	18
2.5	15	43.5	37.5	31.8	15	32.3	12	55	20	-	16.2
	30	76.5	75.0	33.7	15	45.3	15	45	-	30	20
3	15	52.2	45.0	37.3	17	40.3	12	66	25	-	19.8
	30	91.8	90.0	42.1	17	55.3	15	56	-	38	25
3.5	15	60.9	52.5	46.1	20.5	45.3	15	79	28.5	-	24.7
	30	107.1	105.0	45.0	20.5	60.3	20	61	-	40	25
4	15	69.6	60.0	48.6	22.5	50.3	20	87	34	-	24.6
	30	122.3	120.0	57.3	22.5	80.3	20	76	-	52	35
4.5	15	78.3	67.5	51.4	26	60.3	20	94	37.5	-	24.7
	30	137.6	135.0	60.3	26	80.3	25	81	-	53	35
5	15	87.0	75.0	57.6	30	60.3	20	104	40	-	25.3
	30	152.9	150.0	62.5	30	80.3	25	85	-	56	35

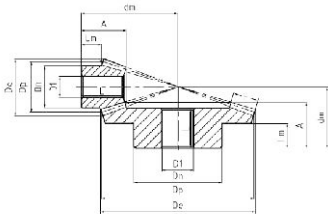


GOODWILL

Bevel Gears

Bevel Gears

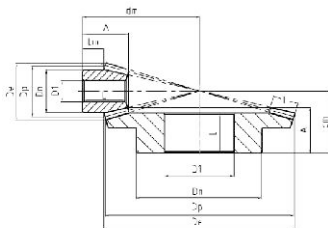
Type **B**
 Pressure angle **20°**
 Ratio **1:3**



Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	D _a	L	D _m
1	15	17.7	15.0	16.6	7.1	13.3	4	32	8	-	9.3
	45	45.3	45.0	17.1	7.1	25.3	8	22	-	15	10
1.5	15	26.5	22.5	22.6	10.5	19.3	8	46	14	-	11.7
	45	68.1	67.5	29.6	10.5	45.3	14	37	-	27	20
2	15	35.4	30.0	28.9	14	25.3	8	60	18	-	14.2
	45	90.8	90.0	32.1	14	45.3	15	42	-	29	20
2.5	15	44.2	37.5	34.6	18	32.3	12	73	22.5	-	15.9
	45	113.4	112.5	39.7	18	60.3	20	52	-	36	25
3	15	53	45.0	41.3	21	40.3	15	88	28.5	-	19.7
	45	136.1	135.0	47.2	21	60.3	20	62	-	42.5	30
3.5	15	61.9	52.5	49.6	23.5	45.3	15	105	33.5	-	25.1
	45	158.8	157.5	54.4	23.5	80.3	20	72	-	49	35
4	15	70.7	60.0	54.3	27.5	50.3	20	117	38	-	25.4
	45	181.5	180.0	57.0	27.5	80.3	22	77	-	51	35
4.5	15	79.5	67.5	55.2	28.5	55.3	20	128	44	-	24.8
	45	204.2	202.5	63.9	28.5	90.3	25	87	-	57	40
5	15	88.4	75	65.3	33	60.3	20	145	47	-	30
	45	226.9	225.0	66.7	33	90.3	28	92	-	59	40

Type **B**
 Pressure angle **20°**
 Ratio **1:4**



Material: C45

M	Z	D _e	D _p	A	F	D _n	D ₁	d _m	D _a	L	D _m
1	15	17.8	15.0	17.2	9.3	13.3	4	38	8	-	7.7
	60	60.3	60.0	17.1	9.3	30.3	8	22	-	15	10
1.5	15	26.7	22.5	23.0	11	20.3	8	57	15	-	11.7
	60	90.4	90.0	34	11	50.3	15	42	-	31	25
2	15	35.6	30.0	31	16	25.3	8	75	20	-	14.2
	60	120.6	120.0	37.6	16	60.3	16	48	-	34	25
2.5	15	44.5	37.5	38.1	19	32.3	14	94	25	-	18.4
	60	150.7	150.0	44.8	19	60.3	20	58	-	40	30
3	15	53.3	45.0	48.1	23	40.3	15	115	30	-	24.5
	60	180.8	180.0	53.2	23	80.3	20	69	-	48	35
3.5	15	62.2	52.5	52.1	26	45.3	15	131	36	-	25.1
	60	211.0	210.0	60.4	26	90.3	25	79	-	54	40
4	15	71.1	60.0	55.1	30	50.3	20	145	37.5	-	23.8
	60	241.1	240.0	60.8	30	90.3	28	82	-	53	40
4.5	15	79.9	67.5	59.1	34	60.3	20	160	45.2	-	24.1
	60	271.2	270.0	68.2	34	100.3	30	92	-	61	40
5	15	88.8	75.0	68.1	38	70.3	20	180	50.1	-	29.4
	60	301.3	300.0	73.5	38	110.3	30	100	-	66	40



GOODWILL

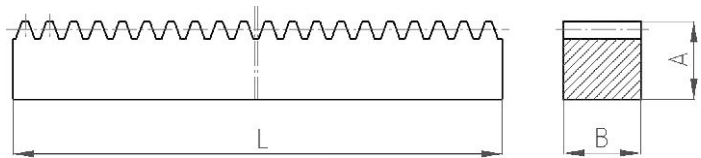
Racks

Racks According to DIN 782

Pressure angle 20°



Material: C45



Racks

Mod.	LENGTH			
	500	1000	2000	
	AXB	AXB	AXB	
1	15X15	15X15	15X15	
1.5	17X17	17X17	17X17	
2	20X20	20X20	20X20	
2.5	25X25	25X25	25X25	
3	30X30	30X30	30X30	
4	-	25X25	25X25	
4	-	30X30	30X30	
4	40X40	40X40	40X40	
5	50X50	50 X50	50 X50	
6	-	60X60	60X60	