

Bevel Gears Made from Steel, Spiral Tooth System, Ratio 1:1

Material up to module 1.5: 42CrMo4, with cyclo-palloid spiral tooth system, teeth induction hardened.

Material from module 2.0: 16MnCr5, with palloid spiral tooth system, teeth case hardened.

Hubs and bores soft.

Products marked with * are not hardened.**

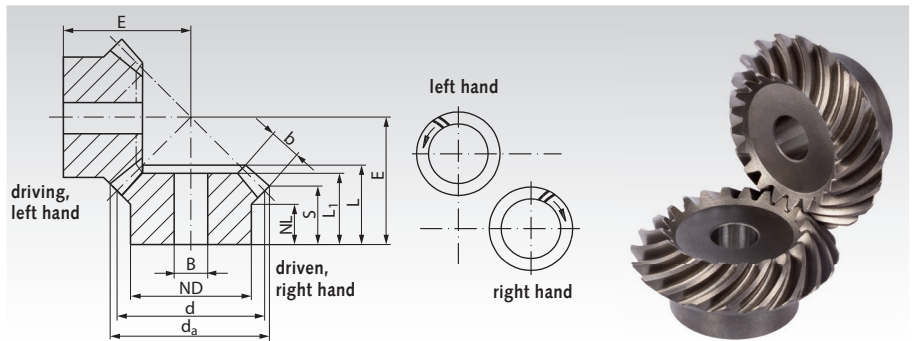
Tooth quality 8 modelled on DIN 3967.

Sold in pairs only.

Ordering Details: e.g.:

Product No. 385 316 00 = 1 Pair of Bevel Gears Ratio 1:1

Mod. 0.6 25/25 Teeth



Ratio 1:1

Product No.	Module	Number of teeth	d _a mm	d mm	ND mm	NL mm	L ₁ mm	L mm	S ¹⁾ mm	b mm	BH7 mm	E mm	Torque* Nm	Weight g/Pair
385 316 00	0,6	25	23,3	22,5	19	7,2	12	13,4	9,2	6	6	20	2,1	50
385 320 00	0,6	30	27,8	27	22	7	13	14,9	9,9	7	8	23	3,0	75
385 322 00	0,6	35	32,3	31,5	25	7,2	15	16,3	10,6	8	8	26	3,5	116
385 511 00	1	20	31,4	30	25	8,4	15	17,3	11,7	8	8	26	6,3	112
385 516 00	1	25	38,9	37,5	25	8	16	19,0	11,9	10	10	30	10,0	155
385 520 00	1	30	46,4	45	30	8	19	21,7	13,2	12	10	35	14,3	278
385 611 00	1,3	20	41,8	40	30	7,3	19	20,7	12,9	11	10	32	14,8	222
385 616 00	1,3	25	51,8	50	30	8	19	21,8	11,9	14	10	36	18,5	326
385 620 00	1,3	30	61,8	60	35	8	21	24,2	12,9	16	12	42	31,5	530
385 709 00	1,5	18	41,7	39,6	30	8	17	20,3	13,2	10	10	32	15,9	209
385 715 00	1,5	24	54,9	52,8	35	8	20	22,6	12,7	14	10	38	21,2	408
385 719 00	1,5	28	63,7	61,6	40	8	20	23,2	13,3	14	12	43	34,5	576
386 011 00**	2	20	72,8	70	45	15	28	32,7	21,4	16	16	55	66,7	973
386 016 00**	2	25	80,3	78	45	15	29	32,3	22,4	14	16	60	72,8	1200
381 018 00***	2	26	82,8	80	55	20	35	37,7	26,4	16	16	65	42,0	1581
386 111 00**	2,5	20	91,5	88	56	18	34	36,9	22,8	20	20	65	130,5	1700
386 116 00**	2,5	25	99,5	96	54	16	32	37,2	23,8	19	20	70	154,7	2000
381 119 00***	2,5	28	109,9	106,4	70	25	44	47,7	33,6	20	20	85	98,6	3400
386 411 00**	3	20	104,2	100	68	17	36	43,4	27,1	23	25	75	216	2600
386 416 00**	3	25	116,2	112	64	18	34	41,7	26,1	22	25	80	257	2800
386 516 00**	3,5	25	132,9	128	72	20	38	46,2	28,5	25	30	90	396	4200
381 518 00***	3,5	26	144,9	140	85	30	57	62,3	42,5	28	30	110	238	7300

¹⁾ Theoretical dimensions, from module 2, tips of teeth levelled.

* Basis for calculations see page 274.

** Gears with ground hub contact surfaces and bores.

*** Not hardened.

Description of spiral toothed bevel gears

Distinctive features of bevel gears with spiral tooth system (spiral bevel gears):

Klingelnberg Cyclo-Palloid Tooth System: These gears are produced using the continuous generating method with a two-part cutter head. The tooth curvature follows the path of a extended epicycloid.

Klingelnberg Palloid Tooth System: These gears are produced using the continuous indexing method with a cone shaped gear hob. The tooth curvature follows the path of an extended involute.

Gleason-Circarc Gearing: These gears are produced using the continuous indexing method with a disk-shaped cutting head. The tooth curvature follows the path of a circular arc.

Cyclo-Palloid-, Palloid- and Gleason Tooth Systems are not interchangeable.

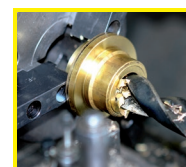
Available from stock: Cyclo-Palloid Tooth System Mod. 0.6 up to 1.5. Palloid Tooth System Mod. 2.0 up to 3.5.

Gleason Tooth System not in stock, supplied on demand.

The spiral tooth system offers very quiet running as there are always several teeth in mesh. Without load, the contact profile zone should be in the middle of the tooth, lengthwise. Under load the contact profile zone evenly expands towards the inside and outside diameter. The ground contact surfaces of the hubs and bores guarantee an exact adjustment of the assembly dimension E.

Sense of rotation:

If the transmission ratio is not 1:1, the rotational direction marked on the drawing above should be preferred (more favourable direction of the axial forces).



**Reworking within
24h-service possible.
Custom made parts
on request.**