



The "GLEASON" system range of bevel gears with spiral tothing is an extension of the range of standard bevel gear pairs with which this range shares the declared intentions and objectives.

The criteria adopted comply as closely as possible with International Standards as regards general sizing and the definition of the geometric features, whereas the choice of the key nominal data has been based on a progression depending on the range of the normal numbers established by the **DIN 323** and **ISO R3/R17** standards.

The spiral tothing complying with the "GLEASON" system is the result of a specific project designed to achieve optimised functional features compared with the geometric parameters that frequently conflict with each other.

The key sizing for the tothing, in particular refers to the following:

- The choice of a reduced tooth height - Correction by profile displacement

- Adoption of a normal pressure angle:

$\alpha_n = 20^\circ$ - The constant tooth bottom gap along the whole tooth surface and other geometric solutions. This series of bevel gear with spiral tothing is designed for general use in plants and in general mechanical applications. The project has been designed therefore, to privilege the mechanical performance normally requested by this sector and special attention has been paid in defining the geometric features that can determine the tooth covering factor and the restraining reactions which determine the load on the bevel gear pair bearings.

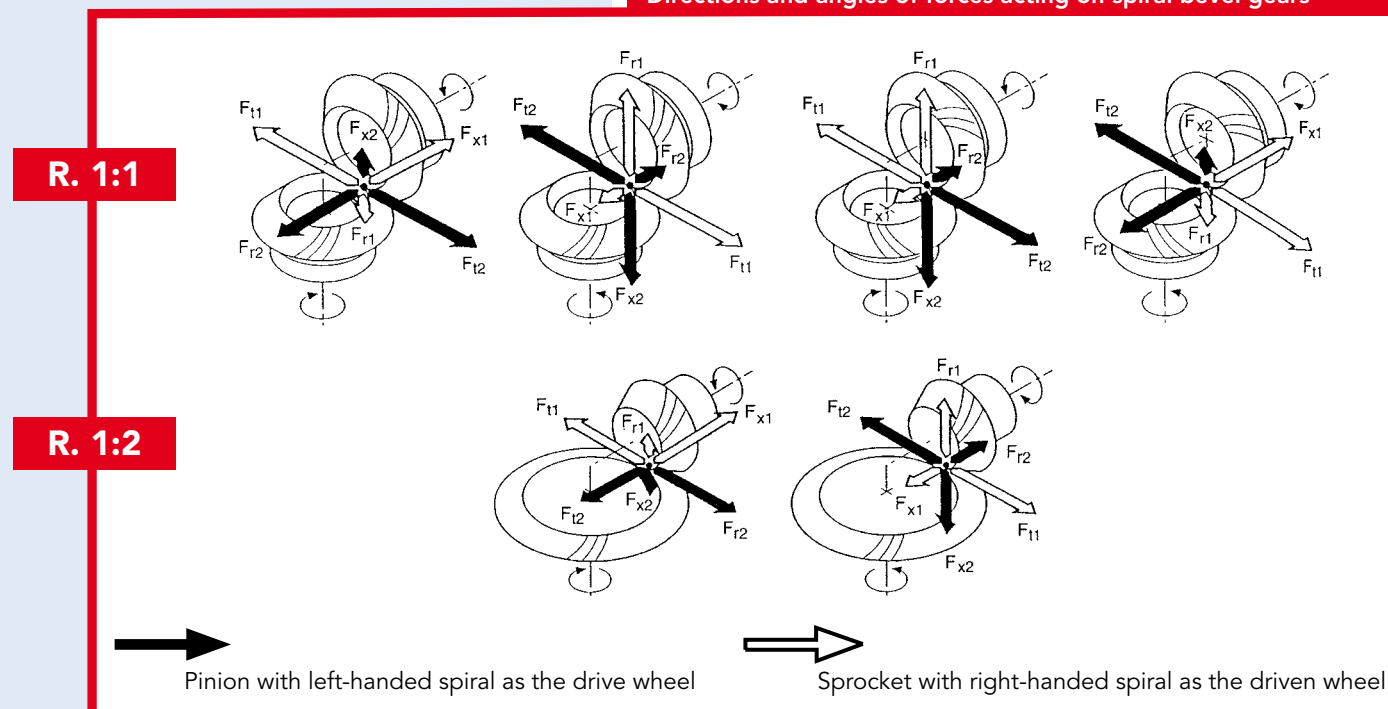
By their very nature bevel gears with spiral tothing are designed for a more demanding use compared with that of straight teeth bevel gear pairs therefore, CHIARAVALLI GROUP SpA has made available the Company's range of bevel gear pairs with the intention of providing a solution that will be appreciated by the users of this product.

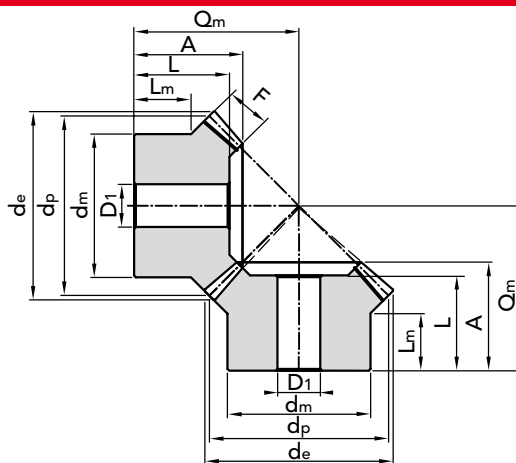
Naturally and in the framework of the Company's traditional technical collaboration with end users, the CHIARAVALLI GROUP SpA technical office is available to provide suggestions concerning more specific circumstances and problems.

GLEASON SYSTEM



Directions and angles of forces acting on spiral bevel gears




RATIO 1:1
GLEASON SYSTEM


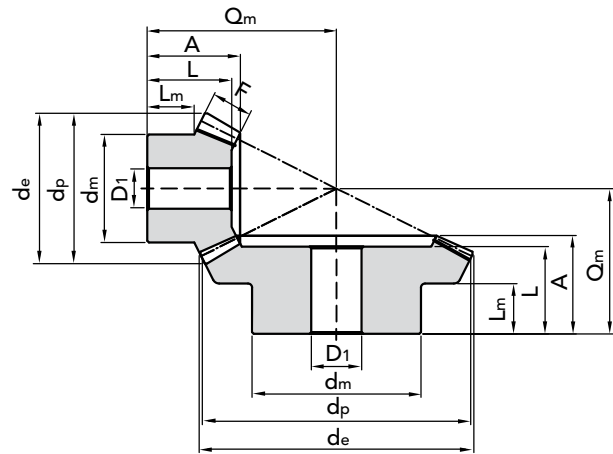
M	Z	PART NUMBER SX	PART NUMBER DX	d_p	d_m	D_1	F	d_e	L_m	L	A	Q_m	Kg
1,5	16	31151116	31151117	24	18	8	6	25,3	9	16	16,7	24	0,04
	20	31151120	31151121	30	22	8	7	31,3	10	18	19,4	29	-0,05
	25	31151125	31151126	37,5	28	8	8	38,8	11,5	21	22,5	35	-0,1
	30	31151130	31151131	45	32	10	10	46,3	11	23	25,1	40	0,40
2	16	31201116	31201117	32	25	10	9	34	9,45	16,9	19,9	29	0,06
	20	31201120	31201121	40	32	10	12	42	11,95	21,7	24,9	36	-0,05
	25	31201125	31201126	50	40	12	14	52	11,9	24,8	27,4	42	-0,1
	30	31201130	31201131	60	50	12	16	62	12,95	26,9	29,9	48	0,42
2,5	16	31251116	31251117	40	32	12	10	42,5	13	21,8	24,8	37	0,13
	20	31251120	31251121	50	40	12	12	52,5	16	26,7	30,2	46	-0,05
	25	31251125	31251126	62,5	50	15	15	65	16	29,9	33,2	53	-0,1
	30	31251130	31251131	75	55	15	18	77,5	16	31,8	35	59	0,69
3	16	31301116	31301117	48	40	15	12	51	16	25,8	29,4	44	0,23
	20	31301120	31301121	60	45	15	18	63	13,5	30,7	34,5	51	-0,076
	25	31301125	31301126	75	55	15	20	78	16	33,7	37,5	60	-0,127
	30	31301130	31301131	90	60	20	22	93	19	35,8	39,5	68	0,99
4	16	31401116	31401117	64	50	15	15	68	17,75	30,8	36	56	0,51
	20	31401120	31401121	80	60	18	17	84	18	32,5	37,5	64	-0,102
	25	31401125	31401126	100	70	20	21	104	18	35,2	40,4	74	-0,152
	30	31401130	31401131	120	80	25	25	124	16	38,1	43,2	84	2,10
5	16	31501116	31501117	80	60	20	17	85	18,9	35,5	41,9	68	0,88
	20	31501120	31501121	100	70	20	21	105	18,5	37,7	44,8	78	-0,127
	25	31501125	31501126	125	90	20	26	130	18,5	41,8	47,8	90	-0,178
	30	31501130	31501131	150	110	30	32	155	18	45,7	52,5	103	4,25

MATERIAL C 45 UNI 7847

CAD drawings available on our site
www.chiaravalli.com

Quantity, availability and prices
on B2B Chiaravalli



**RATIO 1:2****GLEASON SYSTEM**

M	Z	PART NUMBER SX	PART NUMBER DX	d_p	d_m	D_1	F	d_e	L_m	L	A	Q_m	Kg
1,5	16	31151216		24	20	10	8	26,5	9,5	17	18,6	35 -0,05 -0,1	0,07
	32		31151232	48	32	12	8	48,3	10	18	20	28 -0,05 -0,1	0,29
2	16	31201216		32	27	10	10	35,5	11,7	21	22,5	45 -0,05 -0,1	0,09
	32		31201232	64	40	12	10	64,5	10	21,5	24,1	35 -0,05 -0,1	0,32
2,5	16	31251216		40	32	12	12	44,5	14	25,1	27,5	56 -0,05 -0,1	0,17
	32		31251232	80	50	15	12	80,5	15	25,9	29,2	43 -0,05 -0,1	0,57
3	16	31301216		48	40	15	15	53,5	12	25,2	28,4	62 -0,076 -0,127	0,25
	32		31301232	96	60	15	15	97	15	29,8	34,6	51 -0,076 -0,127	1,03
4	16	31401216		64	50	20	20	71,5	13,5	32,2	36,2	81 -0,102 -0,152	0,52
	32		31401232	128	80	20	20	129	23	38,7	44,2	66 -0,102 -0,152	2,21
5	16	31501216		80	60	20	25	89,5	21	45,3	50	106 -0,127 -0,178	1,16
	32		31501232	160	90	25	25	162	27	46,8	53,7	81 -0,127 -0,178	2,79

MATERIAL **C 43 UNI 7847**CAD drawings available on our site
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