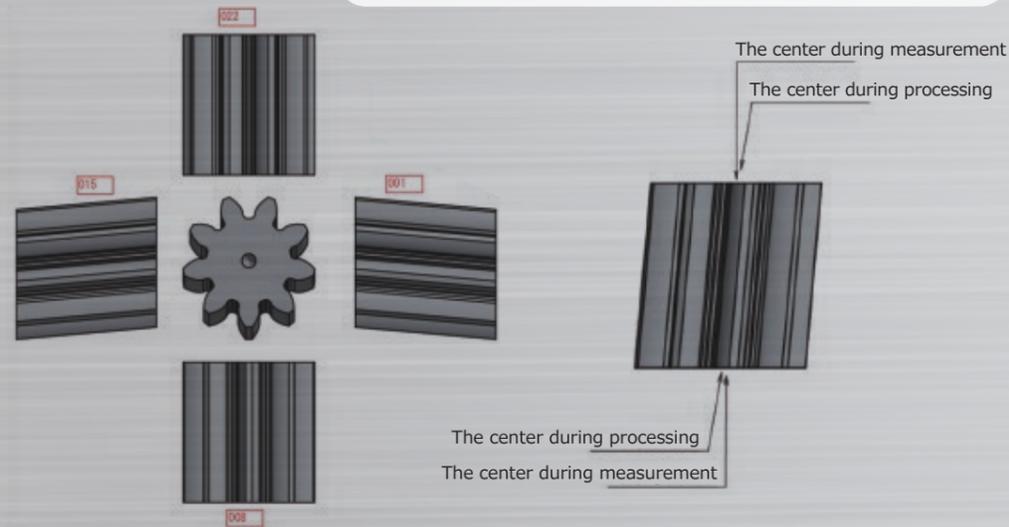
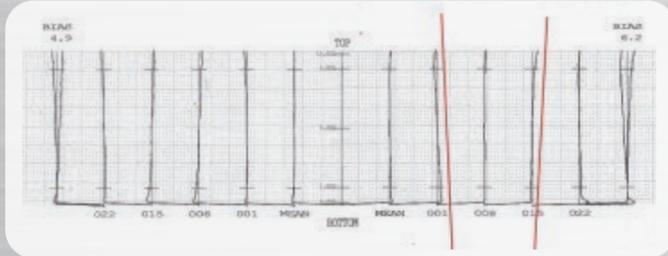
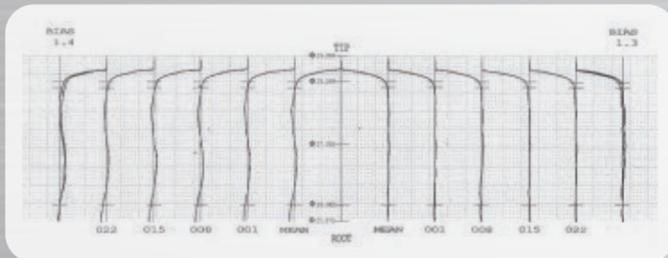


Countermeasure form tooth profile measurement result

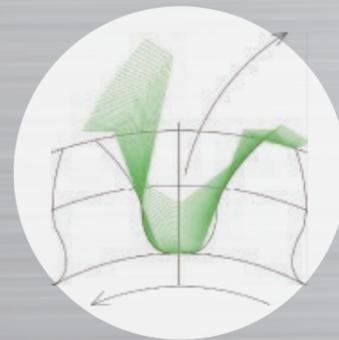
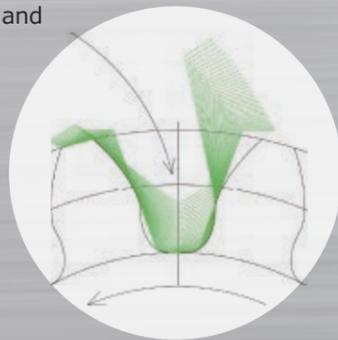
If the tooth line measurement is the ideal shape as shown in the right figures of 008 and 022, or reverse dislocation as shown in the figures of 001 and 015, the gear may be tilted during processing or measurement as shown in the figure below. The same tendency occurs when the pitch error or the tooth groove amplitude is large.



If there is a difference between the right tooth surface and the left tooth surface according to the tooth profile measurement, it may be that one tooth surface of the hob is worn, or the continuous rigidity of the workpiece is insufficient. As shown in the left figure below, when the direction of the gear rotation is subject to cutting resistance, the tooth profile of the workpiece will deteriorate due to the influence of the continuous rigidity of the workpiece and machine backlash.



It should be solved by ensuring the rigidity or expanding the outside diameter of the hob to reduce the helix angle.

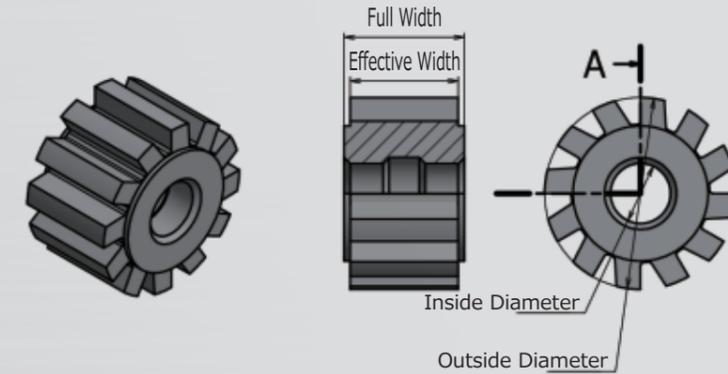


The direction of the gear rotation is subject to cutting resistance

The reverse direction of the gear rotation is subject to cutting resistance

Size of carbide material in stock

The following sizes of standard tooth profile can be provided with short delivery time. When the hob size marked with ✖ is produced according to the maximum module of the rightmost column of the table below, the number of hob threads will be less than 5.



Inside Diameter $\phi 8$ type

Catalog No	Outside Diameter	Effective Width	Full Width	Inside Diameter	The number of Tooth Blades	Maximum Module
1	16	9	10	8	12	0.4
2	16	12	12	8	12	0.4
✖ 3	20	9	10	8	12	0.6
✖ 4	25	9	10	8	12	0.6
✖ 5	25	11	12	8	12	0.75
6	25	14	15	8	12	0.85
7	25	19	20	8	12	0.85

Inside Diameter $\phi 10$ type

Catalog No	Outside Diameter	Effective Width	Full Width	Inside Diameter	The number of Tooth Blades	Maximum Module
8	20	11	12	10	12	0.6
9	20	18	20	10	12	0.6
✖ 10	25	11	12	10	12	0.75
11	25	19	20	10	12	0.85
12	25	23	25	10	12	0.85
✖ 13	32	10	12	10	12	0.65
✖ 14	32	13	15	10	12	0.85
✖ 15	32	18	20	10	12	1.25
16	32	38	43	13	12	1.25
17	32	46	50	13	12	1.25

The following sizes, including those of the special tooth profile can be provided with short delivery time. Even if the size is not in the following table, it may be provided with short delivery time. Please contact us.

The items marked with ✖ is for dry processing.

Inside Diameter $\phi 8$ type

Outside Diameter	Effective Width	Full Width	Inside Diameter	The number of Tooth Blades
✖ 22	11	12	8	12
24	10	10	8	0

Inside Diameter $\phi 10$ type

Outside Diameter	Effective Width	Full Width	Inside Diameter	The number of Tooth Blades
✖ 20	42	50	10	12
24	17	20	10	0
24	30	30	10	0
24	50	50	10	0
✖ 25	37	43	10	0
25	41	50	10	0
26	12	12	10	0
✖ 32	23	25	10	12
32	26	30	10	12
32	40	40	10	0
32	44	50	10	0
35	25	25	10	0
✖ 38	22	25	10	12

Inside Diameter $\phi 13$ type

Outside Diameter	Effective Width	Full Width	Inside Diameter	The number of Tooth Blades
25	40	40	13	0
✖ 25	42	48	13	0
✖ 26	46	50	13	12
28	43	43	13	0
✖ 32	40	45	13	12
32	44	48	13	15
✖ 32	44	50	13	12
✖ 32	54	60	13	12
40	26	30	13	15
✖ 40	44	50	13	12
✖ 50	46	50	22	15