

November 2011

Dear Customers,

Kohara Gear Industry Co., Ltd.
Sales Department

Revisions of Finished Bore Spiral Bevel Gears

First, we would like to express our gratitude to you for your frequent purchasing of our products.

We also would like to inform you that we have implemented specification changes for the following KHK standardized gear products. Revisions are made for the purpose of improvements in the usage of our products, so we know that you will appreciate, understand, and accept these changes.

The specification change is implemented for newly-manufactured products, and shipping of the before-revised products will be continued for a while, depending on the model of the products you order. However, please be informed that before-revised products and revised products are not packaged/shipped in mixture.

To keep offering you useful and safe-to-use products, we continue to make great efforts to modify our production system and the quality of our products. Again, we appreciate your continuous use of KHK products, thank you.

Regards,

Notification

1.Products

- (1) Finished Bore Spiral Miter Gears MMSA / MMSB : 30 items
- (2) Finished Bore Spiral Bevel Gears MBSA / MBSB : 74 items

2. Changes

Before Change : Finished *without* a tap hole at the keyway

(Has a center tap positioned at 90-degree from the keyway)

After Change : (1) Finished *with* a tap hole at the keyway

(Also has a center tap positioned at 90-degree from the keyway)

(2) Sizes of tap holes are changed for some number of products.

For details, please see the reference in the following page.

(3) MBSA2-1545L Products have 2 tap holes without keyways.

Advantages made by the improvements

For this finished product, where secondary operations can not be applied, adding a tap hole at the keyway is expensive and requires a long lead time as electro-discharge machining is applied or it has to be handled as a custom order. This improvement is made without changing the price, and it allows the product to be a finished gear with 2 tap holes, one of which are positioned at the keyway, so you will have more usage options without extra costs. The use of the added tap hole at the keyway also gives an advantage that it prevents rattling of the key or scarring for the shaft.

3. Implementation for manufacturing of revised products

Effective for manufacturing commencing 21.December.2011

For the detailed information, please see "Changes in Catalog Offering" at our web site.

URL: <http://www.khkgears.co.jp/en/>

Should you have any questions, please feel free to contact our Sales Department.

MMSA/MMSB | Added Tap Holes

No.	Product Name	Bore			Keyway	Tap hole sizes Changed
		A	Width	Depth		
1	MMSB1.5-20R	12	4	1.8		M5→M4
2	MMSB1.5-20L	12	4	1.8		M5→M4
3	MMSA2-20R	14	5	2.3		M5→M4
4	MMSB2-20R	16	5	2.3		M5→M4
5	MMSA2-20L	14	5	2.3		M5→M4
6	MMSB2-20L	16	5	2.3		M5→M4
7	MMSA2.5-20R	18	6	2.8		M5→M5
8	MMSB2.5-20R	20	6	2.8		M5→M5
9	MMSA2.5-20L	18	6	2.8		M5→M5
10	MMSB2.5-20L	20	6	2.8		M5→M5
11	MMSA3-20R	20	6	2.8		M5→M5
12	MMSB3-20R	22	6	2.8		M5→M5
13	MMSA3-20L	20	6	2.8		M5→M5
14	MMSB3-20L	22	6	2.8		M5→M5
15	MMSA3.5-20R	25	8	3.3		M8→M6
16	MMSB3.5-20R	28	8	3.3		M8→M6
17	MMSA3.5-20L	25	8	3.3		M8→M6
18	MMSB3.5-20L	28	8	3.3		M8→M6
19	MMSA4-20R	28	8	3.3		M8→M6
20	MMSB4-20R	30	8	3.3		M8→M6
21	MMSA4-20L	28	8	3.3		M8→M6
22	MMSB4-20L	30	8	3.3		M8→M6
23	MMSA5-20R	30	8	3.3		M8→M6
24	MMSB5-20R	35	10	3.3		M8
25	MMSA5-20L	30	8	3.3		M8→M6
26	MMSB5-20L	35	10	3.3		M8
27	MMSA6-20R	40	12	3.3		M8
28	MMSB6-20R	45	14	3.8		M8→M10
29	MMSA6-20L	40	12	3.3		M8
30	MMSB6-20L	45	14	3.8		M8→M10

MBSA/MBSB | Added Tap Holes

No.	Product Name	Bore			Keyway	Tap hole sizes Changed
		A	Width	Depth		
1	MBSA2-3020R	20	6	2.8		M6→M5
2	MBSB2-3020R	22	6	2.8		M6→M5
3	MBSA2-2030L	15	5	2.3		M5→M4
4	MBSB2-2030L	18	6	2.8		M5→M5
5	MBSA2.5-3020R	22	6	2.8		M6→M5
6	MBSB2.5-3020R	25	8	3.3		M8→M6
7	MBSA2.5-2030L	18	6	2.8		M6→M5
8	MBSB2.5-2030L	20	6	2.8		M6→M5
9	MBSA3-3020R	25	8	3.3		M8→M6
10	MBSB3-3020R	30	8	3.3		M8→M6
11	MBSA3-2030L	22	6	2.8		M6→M5
12	MBSB3-2030L	25	8	3.3		M8→M6
13	MBSA4-3020R	35	10	3.3		M8
14	MBSB4-3020R	40	12	3.3		M8
15	MBSA4-2030L	30	8	3.3		M8→M6
16	MBSB4-2030L	35	10	3.3		M8
17	MBSA5-2030L	35	10	3.3		M8
18	MBSB5-2030L	40	12	3.3		M8
19	MBSA6-2030L	45	14	3.8		M8→M10
20	MBSB6-2030L	50	14	3.8		M8→M10
21	MBSA2-4020R	20	6	2.8		M6→M5
22	MBSB2-4020R	22	6	2.8		M6→M5
23	MBSA2-2040L	15	5	2.3		M5→M4
24	MBSB2-2040L	18	6	2.8		M6→M5
25	MBSA2.5-4020R	25	8	3.3		M8→M6
26	MBSB2.5-4020R	28	8	3.3		M8→M6
27	MBSA2.5-2040L	20	6	2.8		M6→M5
28	MBSB2.5-2040L	22	6	2.8		M6→M5
29	MBSA3-4020R	30	8	3.3		M8→M6
30	MBSB3-4020R	35	10	3.3		M8
31	MBSA3-2040L	22	6	2.8		M6→M5
32	MBSB3-2040L	25	8	3.3		M8→M6
33	MBSA4-2040L	30	8	3.3		M8→M6
34	MBSB4-2040L	35	10	3.3		M8
35	MBSA5-2040L	40	12	3.3		M8
36	MBSB5-2040L	45	14	3.8		M8→M10
37	MBSA6-2040L	50	14	3.8		M8→M10

No.	Product Name	Bore			Keyway	Tap hole sizes Changed
		A	Width	Depth		
38	MBSB6-2040L	55	16	4.3		M10
39	MBSA2-4518R	20	6	2.8		M6→M5
40	MBSB2-4518R	25	8	3.3		M8→M6
41	MBSA2-1845L	12	4	1.8		M5→M4
42	MBSB2-1845L	16	5	2.3		M5→M4
43	MBSA2.5-4518R	25	8	3.3		M8→M6
44	MBSB2.5-4518R	30	8	3.3		M8→M6
45	MBSA2.5-1845L	15	5	2.3		M5→M4
46	MBSB2.5-1845L	20	6			M6→M5
47	MBSA3-4518R	30	8	3.3		M8→M6
48	MBSB3-4518R	35	10	3.3		M8
49	MBSA3-1845L	20	6	2.8		M6→M5
50	MBSB3-1845L	25	8	3.3		M8→M6
51	MBSA4-1845L	28	8	3.3		M8→M6
52	MBSB4-1845L	32	10	3.3		M8
53	MBSA5-1845L	35	10	3.3		M8
54	MBSB5-1845L	42	12	3.3		M8
55	MBSA6-1845L	45	14	3.8		M8→M10
56	MBSB6-1845L	50	14	3.8		M8→M10
57	MBSA2-4515R	20	6	2.8		M6→M5
58	MBSB2-4515R	22	6	2.8		M6→M5
59	MBSA2-1545L	10	—	—		M4
60	MBSB2-1545L	12	4	1.8		M5→M4
61	MBSA2.5-4515R	22	6	2.8		M6→M5
62	MBSB2.5-4515R	25	8	3.3		M8→M6
63	MBSA2.5-1545L	12	4	1.8		M5→M4
64	MBSB2.5-1545L	15	5	2.3		M5→M4
65	MBSA3-4515R	30	8	3.3		M8→M6
66	MBSB3-4515R	32	10	3.3		M8
67	MBSA3-1545L	18	6	2.8		M6→M5
68	MBSB3-1545L	20	6	2.8		M6→M5
69	MBSA4-1545L	22	6	2.8		M6→M5
70	MBSB4-1545L	25	8	3.3		M8→M6
71	MBSA5-1545L	28	8	3.3		M8→M6
72	MBSB5-1545L	32	10	3.3		M8
73	MBSA6-1545L	35	10	3.3		M8
74	MBSB6-1545L	40	12	3.3		M8