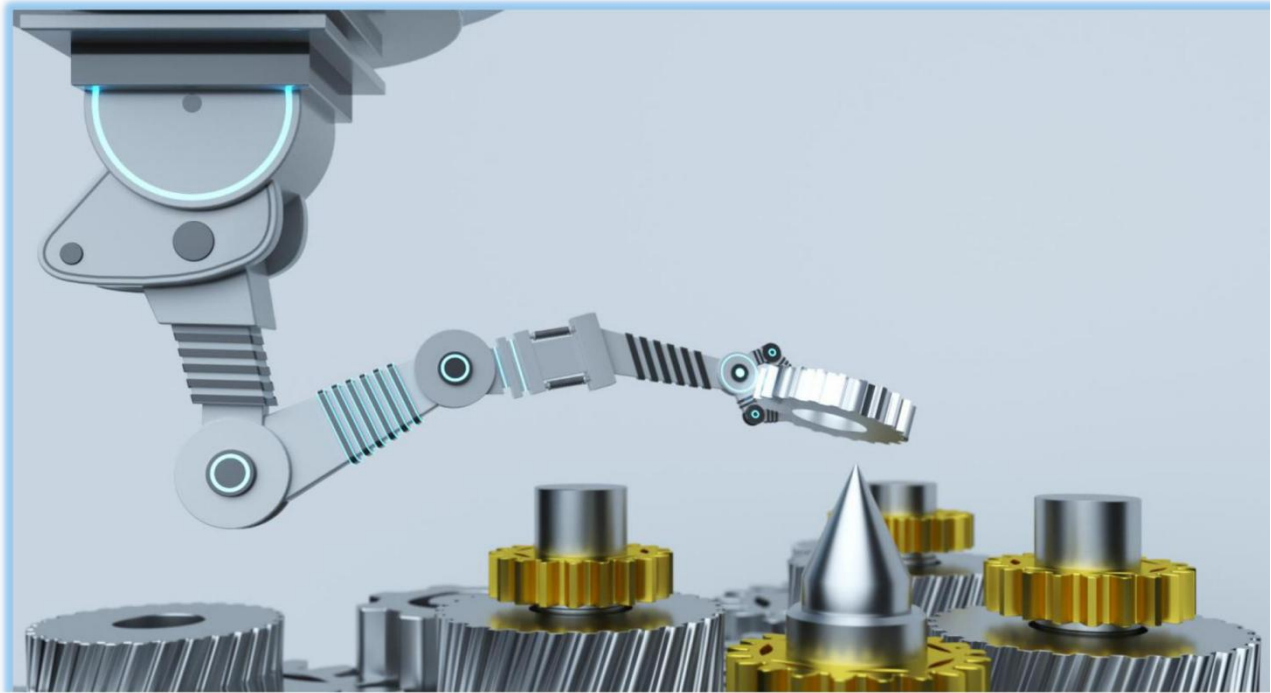


天津市昊荣盛业机电设备有限公司 Tianjin Haorongshengye Electrical Equipment Co., Ltd.



企业文化 Corporate culture

Tianjin Haorongshengye Electrical Equipment Co., Ltd. was founded in Tianjin in 2008 and is a professional manufacturer and exporter that is concerned with the design, development and production.

We provide customized precision parts, transmission solutions, and assembly services based on client specifications or drawings. Our primary product line includes: gears, gear racks, timing pulleys, sprockets, transmission chains, guide and rails, ball screw and nuts, CNC machine parts and so on.

Our facilities are ISO 9001:2015 and CE certified. We implement rigorous quality control throughout the entire life cycle—maintaining strict oversight during production and performing exhaustive inspections upon completion to ensure stable, reliable performance. Serving industries from CNC machinery and robotics to semiconductors and packaging, we operate as a direct source factory. This allows us to provide rapid delivery and competitive pricing, making us your ideal long-term transmission partner.

We look forward to building successful global partnerships.

目录页

CATALOG

企业介绍

天津市昊荣盛业机电设备有限公司于2008年在天津成立，是一家集设计、研发与生产于一体的专业制造商及出口商。

我厂依据客户提供的规格要求或图纸，提供定制化的精密零部件、传动解决方案及装配服务。主要产品线涵盖：齿轮、齿条、同步带轮、链轮、传动链、导轨、滚珠丝杠螺母、CNC 精密机加工件等。

我厂生产设施已通过 ISO 9001:2015 及 CE 认证。我厂实行贯穿产品全生命周期的严格质量管控——在生产过程中保持严密监控，并在完工后进行全面详尽的检验，以确保产品性能稳定可靠。作为一家源头工厂，我厂服务领域广泛，涵盖从 CNC 数控机床、机器人技术到半导体及包装设备等各类行业。凭借这一优势，我厂能够实现快速交付并提供极具竞争力的价格，从而成为您理想的长期传动系统合作伙伴。

我们期待与全球各地的合作伙伴建立互惠共赢的成功合作关系。

网址

Website: <http://www.tjhrs.com>

01

精密齿轮 Precision gear



02

精密齿条 Precision gear rack

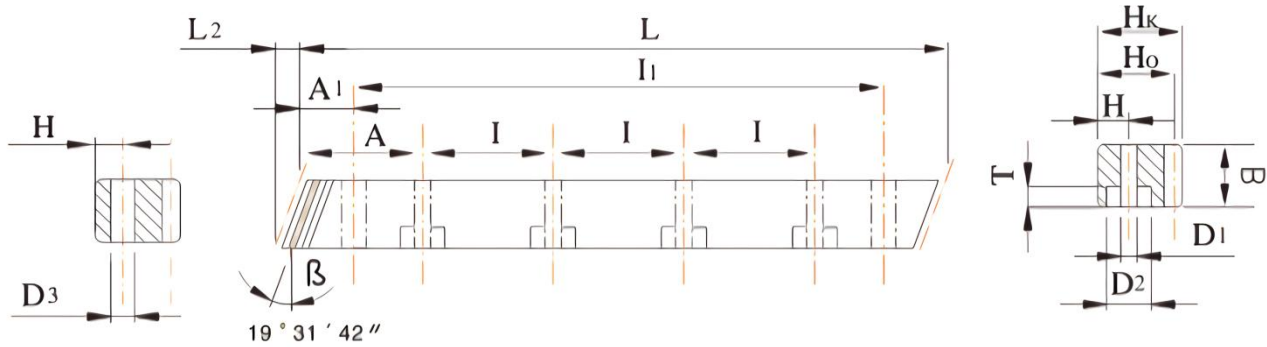


天津市昊荣盛业机电设备有限公司

Tianjin Haorongshengye Electrical Equipment Co., Ltd.

斜齿条，右旋 19°31'42"，磨削齿面，20°压力角

Slant rack, 19°31'42" right-hand, Grinding tooth surface, 20° pressure angle



型号 Code	模数 Module	齿距 Pt	L	L2	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
HRSY2	2	6.666	500	8.5	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.022	2.1
HRSY2	2	6.666	1000	8.5	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.022	4.1
HRSY3	3	10.000	500	10.3	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7	0.024	3
HRSY3	3	10.000	1000	10.3	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	0.024	5.9
HRSY4	4	13.333	506.67	13.8	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7	0.024	5.7
HRSY4	4	13.333	1000	13.8	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	0.024	10.7
HRSY5	5	16.666	500	17.4	30	49	49	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7	0.025	6.5
HRSY5	5	16.666	1000	17.4	60	49	49	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	0.025	13
HRSY6	6	20.000	500	20.9	25	59	49	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7	0.026	10
HRSY6	6	20.000	1000	20.9	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	0.026	19.8
HRSY8	8	26.666	480	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120.0	240.0	19.7	0.027	21.3
HRSY8	8	26.666	960	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120.0	720.0	19.7	0.027	42.7
HRSY10	10	33.333	500	35.11	15	99	99	89	62.5	125	4	32	33	48	32	125.0	250.0	19.7	0.028	34
HRSY10	10	33.333	1000	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125.0	750.0	19.7	0.028	68

精度等级: DIN6h25(JIS2级)

材料: C45

齿形: 斜齿

齿面处理: 磨削

硬度处理: 45~50度 HRC

四面磨削: 有

右旋角: 19°31'42"

压力角: 20度

Precision Grade: DIN6h25(JIS2 Grade)

Material: C45

Type: Helical Rack

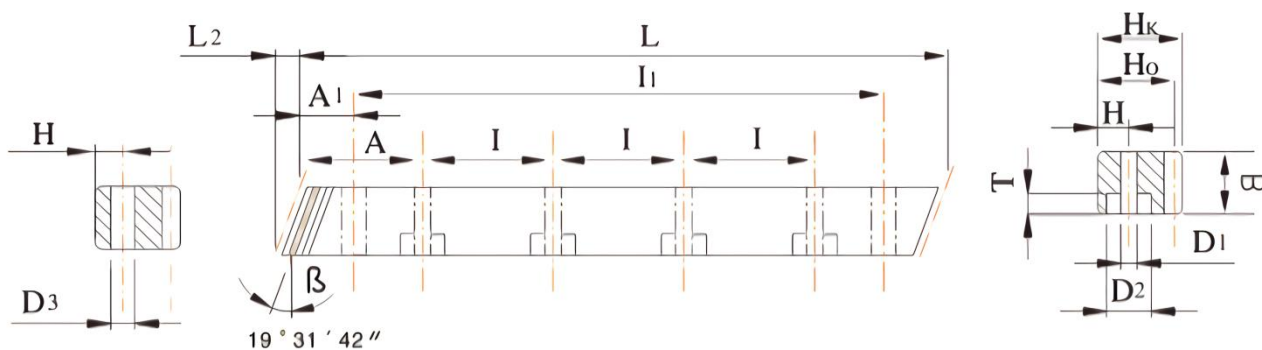
Treatment of Teeth: Ground

Hardness: 45~50 degree HRC

Sides Ground: Included.

Right Hand Angle: 19°31'42"

Pressure Angle: 20 degree

斜齿条，右旋 $19^{\circ}31'42''$ ，铣削齿面， 20° 压力角Slant rack, $19^{\circ}31'42''$ right-hand, Milled tooth surface, 20° pressure angle

模数 Module	齿距 Pt	L	L2	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
1	3.333	505	5.32	159	15	15	14	62.5	125	4	6	5	8	5	31.7	441.6	5.7	0.037	0.8
1	3.333	999	5.32	318	15	15	14	62.5	125	8	6	5	8	5	31.7	935.6	5.7	0.037	1.6
1.5	5.000	500	6.7	100	19	19	17.5	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.040	1.6
1.5	5.000	1000	6.7	200	19	19	17.5	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.040	3.2
2	6.666	500	8.9	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.042	2.1
2	6.666	1000	8.9	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.042	4.1
3	10.000	500	10.6	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7	0.044	3
3	10.000	1000	10.6	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	0.044	5.9
4	13.333	506.67	14.2	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7	0.046	5.7
4	13.333	1000	14.2	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	0.046	10.7
5	16.666	500	17.4	30	49	39	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7	0.047	6.5
5	16.666	1000	17.4	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	0.047	13
6	20.000	500	20.9	25	59	49	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7	0.052	10
6	20.000	1000	20.9	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	0.052	19.8
8	26.666	480	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120.0	240.0	19.7	0.057	21.3
8	26.666	960	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120.0	720.0	19.7	0.057	42.5
10	33.333	500	35.11	30	99	99	89	62.5	125	4	32	33	48	32	125.0	250.0	19.7	0.060	34
10	33.333	1000	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125.0	750.0	19.7	0.060	68

精度等级: DIN7e25(JIS3 级)

材 料: C45

齿 形: 斜齿

齿面处理: 精铣

硬度处理: 调质, 20~25 度 HRC

四面磨削: 有

右 旋 角: $19^{\circ}31'42''$ 压 力 角: 20°

Precision Grade: DIN7e25(JIS3 Grade)

Material: C45

Type: Helical Rack

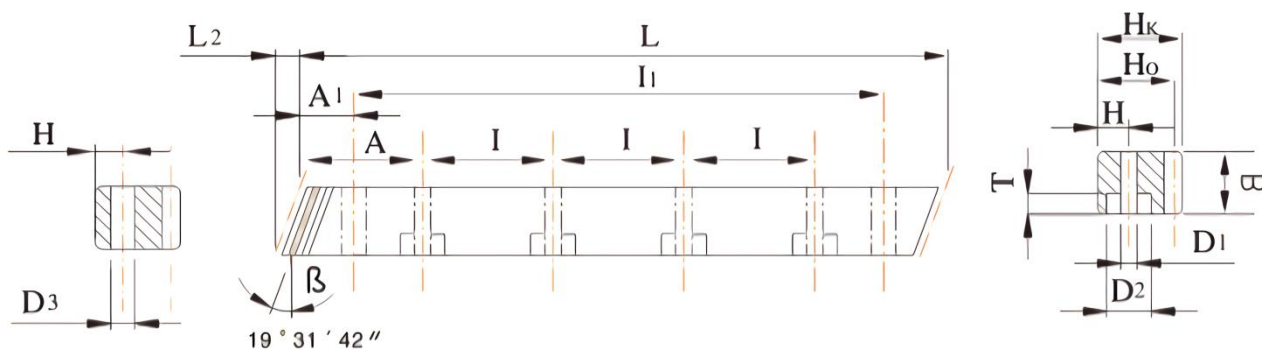
Treatment of Teeth: Milled

Hardness: Quenched, 20~25 degree HRC

Sides Ground: Included.

Right Hand Angle: $19^{\circ}31'42''$

Pressure Angle: 20 degree

斜齿条，右旋 $19^{\circ}31'42''$ ，铣削齿面， 20° 压力角Slant rack, $19^{\circ}31'42''$ right-hand, Milled tooth surface, 20° pressure angle

模数 Module	齿距 Pt	L	L2	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
1	3.333	505	5.32	159	15	15	14	62.5	125	4	6	5	8	5	31.7	441.6	5.7	0.039	0.8
1	3.333	999	5.32	318	15	15	14	62.5	125	8	6	5	8	5	31.7	935.6	5.7	0.039	1.6
1.5	5.000	500	6.7	100	19	19	17.5	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.042	1.6
1.5	5.000	1000	6.7	200	19	19	17.5	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.042	3.2
2	6.666	500	8.9	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.044	2.1
2	6.666	1000	8.9	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.044	4.1
3	10.000	500	10.6	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7	0.046	3
3	10.000	1000	10.6	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	0.046	5.9
4	13.333	506.67	14.2	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7	0.048	5.7
4	13.333	1000	14.2	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	0.048	10.7
5	16.666	500	17.4	30	49	49	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7	0.050	6.5
5	16.666	1000	17.4	60	49	49	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	0.050	13
6	20.000	500	20.9	25	59	59	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7	0.055	10
6	20.000	1000	20.9	50	59	59	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	0.055	19.8
8	26.666	480	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120.0	240.0	19.7	0.060	21.3
8	26.666	960	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120.0	720.0	19.7	0.060	42.5
10	33.333	500	35.11	30	99	99	89	62.5	125	4	32	33	48	32	125.0	250.0	19.7	0.065	34
10	33.333	1000	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125.0	750.0	19.7	0.065	68

精度等级: DIN8e27(JIS4级)

材 料: C45

齿 形: 斜齿

齿面处理: 精铣

硬度处理: 调质, 20~25度 HRC

四面磨削: 无

右旋角: $19^{\circ}31'42''$

压力角: 20度

Precision Grade: DIN8e27(JIS4Grade)

Material: C45

Type: Helical Rack

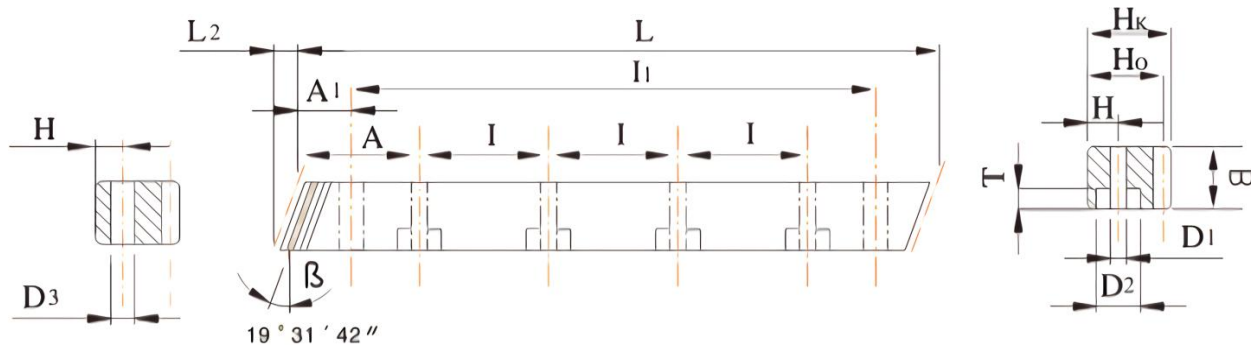
Treatment of Teeth: Milled

Hardness: Quenched, 20~25 degree HRC

Sides Ground: Not Included.

Right Hand Angle: $19^{\circ}31'42''$

Pressure Angle: 20 degree

斜齿条，右旋 $19^{\circ}31'42''$ ，铣削齿面， 20° 压力角Slant rack, $19^{\circ}31'42''$ right-hand, Milled tooth surface, 20° pressure angle

模数 Module	齿距 Pt	L	L2	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
1	3.333	505	5.32	159	15	15	14	62.5	125	4	6	5	8	5	31.7	441.6	5.7	0.057	0.8
1	3.333	999	5.32	318	15	15	14	62.5	125	8	6	5	8	5	31.7	935.6	5.7	0.057	1.6
1.5	5.000	500	6.7	100	19	19	17.5	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.059	1.6
1.5	5.000	1000	6.7	200	19	19	17.5	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.059	3.2
2	6.666	500	8.9	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.061	2.2
2	6.666	1000	8.9	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.061	4.4
3	10.000	500	10.6	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7	0.065	3.1
3	10.000	1000	10.6	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	0.065	6.2
4	13.333	506.67	14.2	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7	0.068	5.7
4	13.333	1000	14.2	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	0.068	11.1
5	16.666	500	17.4	30	49	39	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7	0.070	6.5
5	16.666	1000	17.4	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	0.070	13.26
6	20.000	500	20.9	25	59	49	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7	0.072	10.1
6	20.000	1000	20.9	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	0.072	20.12
8	26.666	480	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120.0	240.0	19.7	0.075	22.3
8	26.666	960	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120.0	720.0	19.7	0.075	44.85
10	33.333	500	35.11	30	99	99	89	62.5	125	4	32	33	48	32	125.0	250.0	19.7	0.077	34
10	33.333	1000	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125.0	750.0	19.7	0.077	69.8

精度等级: DIN9e27(JIS5 级)

材 料: C45

齿 形: 斜齿

齿面处理: 精铣

硬度处理: 40~45 度 HRC

四面磨削: 有

右 旋 角: $19^{\circ}31'42''$ 压 力 角: 20°

Precision Grade: DIN9e27(JIS5 Grade)

Material: C45

Type: Helical Rack

Treatment of Teeth: Milled

Hardness: 40~45 degree HRC

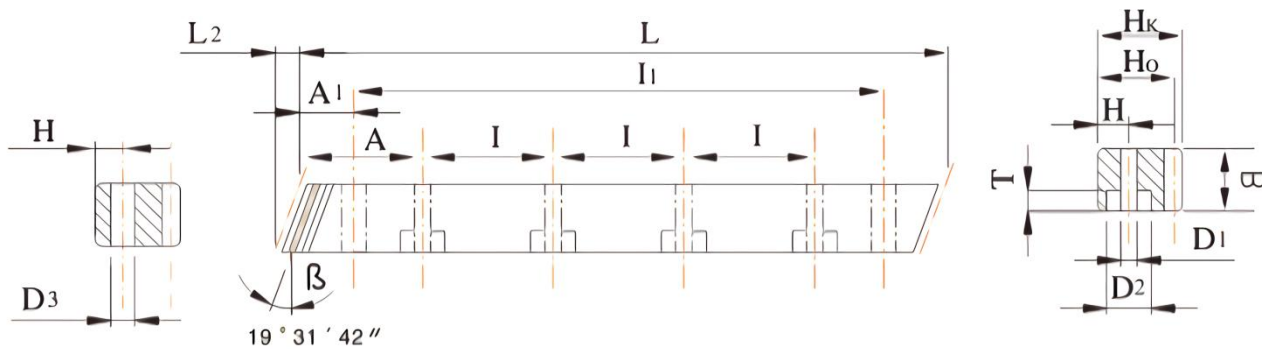
Sides Ground: Included.

Right Hand Angle: $19^{\circ}31'42''$

Pressure Angle: 20 degree

斜齿条，右旋 19°31'42"，铣削齿面，20°压力角

Slant rack, 19°31'42" right-hand, Milled tooth surface, 20° pressure angle



模数 Module	齿距 Pt	L	L2	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
1	3.333	505	5.32	159	15	15	14	62.5	125	4	6	5	8	5	31.7	441.6	5.7	0.072	0.8
1	3.333	999	5.32	318	15	15	14	62.5	125	8	6	5	8	5	31.7	935.6	5.7	0.072	1.6
1.5	5.000	500	6.7	100	19	19	17.5	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.079	1.6
1.5	5.000	1000	6.7	200	19	19	17.5	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.079	3.2
2	6.666	500	8.9	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.086	2.1
2	6.666	1000	8.9	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.086	4.1
3	10.000	500	10.6	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7	0.091	3
3	10.000	1000	10.6	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	0.091	5.9
4	13.333	506.67	14.2	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7	0.095	5.7
4	13.333	1000	14.2	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	0.095	10.7
5	16.666	500	17.4	30	49	39	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7	0.098	6.5
5	16.666	1000	17.4	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	0.098	13
6	20.000	500	20.9	25	59	49	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7	0.100	10
6	20.000	1000	20.9	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	0.100	19.8
8	26.666	480	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120.0	240.0	19.7	0.105	21.3
8	26.666	960	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120.0	720.0	19.7	0.105	42.5
10	33.333	500	35.11	30	99	99	89	62.5	125	4	32	33	48	32	125.0	250.0	19.7	0.110	34
10	33.333	1000	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125.0	750.0	19.7	0.110	68

精度等级: DIN10e27(JIS6 级)

材 料: C45

齿 形: 斜齿

齿面处理: 精铣

硬度处理: 40~45 度 HRC

四面磨削: 无

右 旋 角: 19°31'42"

压 力 角: 20 度

Precision Grade: DIN10e27(JIS6 Grade)

Material: C45

Type: Helical Rack

Treatment of Teeth: Milled

Hardness: 40~45 degree HRC

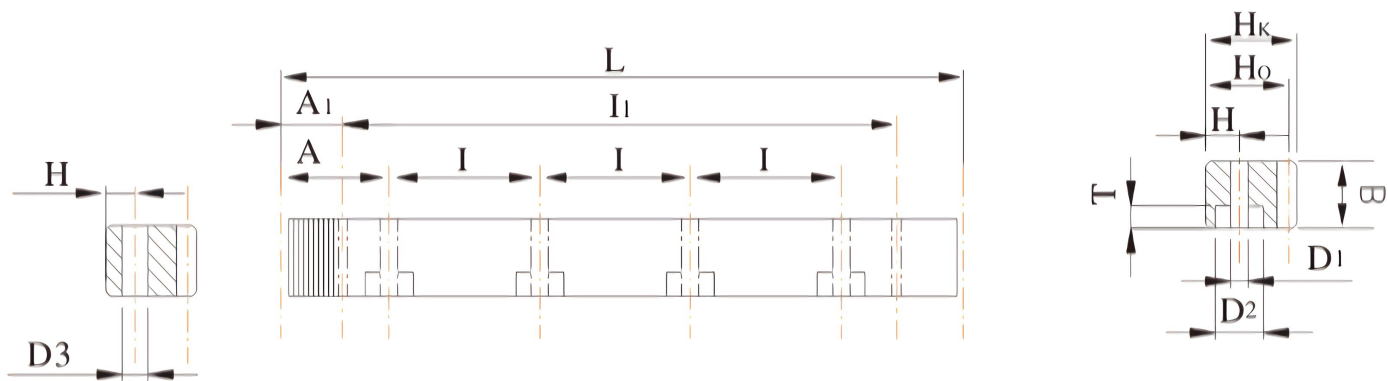
Sides Ground: Not Included.

Right Hand Angle: 19°31'42"

Pressure Angle: 20 degree

直齿条，磨削齿面，20°压力角

Straight tooth system, Grinding tooth surface, 20° pressure angle



模数 Module	齿距 P	L	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
2	6.283	502.65	80	24	24	22	62.8	125.66	4	8	7	11	7	31.3	440.1	5.7	0.022	2.1
2	6.283	1005.30	160	24	24	22	62.8	125.66	8	8	7	11	7	31.3	942.7	5.7	0.022	4.2
3	9.425	508.90	54	29	29	26	63.6	127.23	4	9	10	15	9	34.4	440.1	7.7	0.024	3
3	9.425	1017.90	108	29	29	26	63.6	127.23	8	9	10	15	9	34.4	949.1	7.7	0.024	6
4	12.566	502.60	40	39	39	35	62.8	125.66	4	12	10	15	9	37.5	427.7	7.7	0.024	5.3
4	12.566	1005.30	80	39	39	35	62.8	125.66	8	12	10	15	9	37.5	930.3	7.7	0.024	10.6
5	15.708	502.60	32	49	39	34	62.8	125.66	4	12	14	20	13	30.1	442.4	11.7	0.025	6.7
5	15.708	1005.30	64	49	39	34	62.8	125.66	8	12	14	20	13	30.1	945.0	11.7	0.025	13.4
6	18.850	508.90	27	59	49	43	63.6	127.23	4	16	18	26	17	31.4	446.1	15.7	0.026	10.3
6	18.850	1017.80	54	59	49	43	63.6	127.23	8	16	18	26	17	31.4	955.1	15.7	0.026	20.5
8	25.133	502.65	20	79	79	71	62.8	125.66	4	25	22	33	21	26.6	449.45	19.7	0.027	22.1
8	25.133	1005.31	40	79	79	71	62.8	125.66	8	25	22	33	21	26.6	952.0	19.7	0.027	44.3
10	31.415	502.65	16	99	99	89	62.8	125.66	4	32	48	48	32	125.66	252.3	19.7	0.028	34.8
10	31.415	1005.31	32	99	99	89	62.8	125.66	8	32	48	48	32	125.66	753.9	19.7	0.028	69.5

精度等级: DIN6h25(JIS2 级)

材 料: C45

齿 形: 直齿

齿面处理: 磨削

硬度处理:40~45 度 HRC

四面磨削: 有

压 力 角: 20 度

Precision Grade:DIN6h25(JIS2Grade)

Material:C45

Type:Straight Rack

Treatment of Teeth:Ground

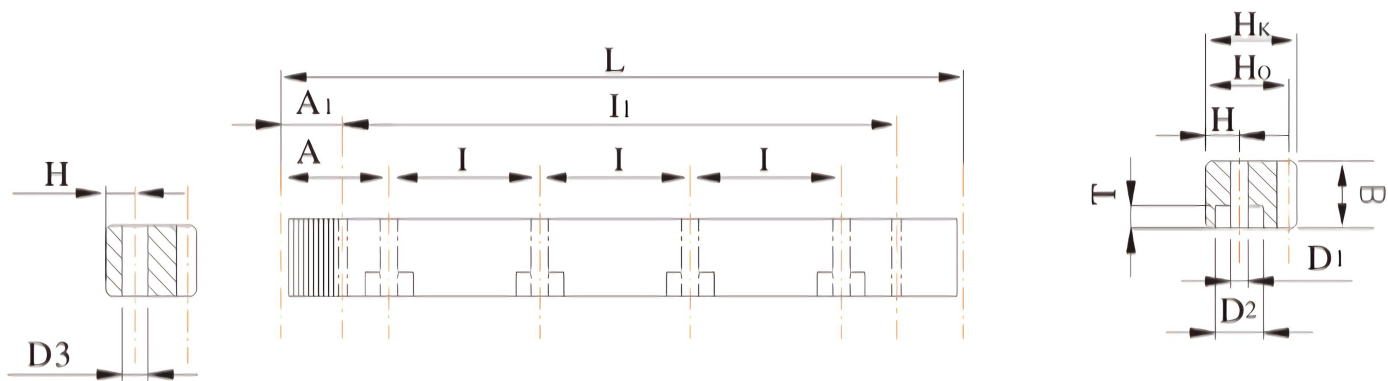
Hardness:40~45degree HRC

Sides Ground:Included.

Pressure Angle:20 degree

直齿条，铣削齿面，20°压力角

Straight tooth system, Milled tooth surface, 20° pressure angle



模数 Module	齿距 P	L	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
1	3.141	499.51	159	15	15	14	62.4	124.88	4	6	5	8	5	29.0	441.5	5.7	0.037	0.8
1	3.141	999.03	318	15	15	14	62.4	124.88	8	6	5	8	5	29.0	941.0	5.7	0.037	1.6
1.5	4.712	499.51	106	19	19	17.5	62.4	124.88	4	8	7	11	7	29.0	441.5	5.7	0.040	1.10
1.5	4.712	999.03	212	19	19	17.5	62.4	124.88	8	8	7	11	7	29.0	941.0	5.7	0.040	2.20
2	6.283	502.65	80	24	24	22	62.8	125.66	4	8	7	11	7	31.3	440.1	5.7	0.042	2.1
2	6.283	1005.31	160	24	24	22	62.8	125.66	8	8	7	11	7	31.3	942.7	5.7	0.042	4.3
3	9.425	508.94	54	29	29	26	63.6	127.23	4	9	10	15	9	34.4	440.1	7.7	0.044	3.0
3	9.425	1017.88	108	29	29	26	63.6	127.23	8	9	10	15	9	34.4	949.1	7.7	0.044	6.0
4	12.566	502.65	40	39	39	35	62.8	125.66	4	12	10	15	9	37.5	427.7	7.7	0.046	5.2
4	12.566	1005.30	80	39	39	35	62.8	125.66	8	12	10	15	9	37.5	930.3	7.7	0.046	10.5
5	15.708	502.60	32	49	39	34	62.8	125.66	4	12	14	20	13	30.1	442.4	11.7	0.047	6.7
5	15.708	1005.30	64	49	39	34	62.8	125.66	8	12	14	20	13	30.1	945.0	11.7	0.047	13.4
6	18.850	509.94	27	59	49	45.3	63.6	127.23	4	16	18	26	17	31.4	446.1	15.7	0.052	10.4
6	18.850	1017.88	54	59	49	43	63.6	127.23	8	16	18	26	17	31.4	955.0	15.7	0.052	20.2
8	25.133	502.65	20	79	79	71	62.8	125.66	4	25	22	33	21	26.6	449.45	19.7	0.057	22.3
8	25.133	1005.31	40	79	79	71	62.8	125.66	8	25	22	33	21	26.6	952.0	19.7	0.057	44.7
10	31.415	502.65	16	99	99	89	62.8	125.66	4	32	33	48	32	125.66	252.3	19.7	0.060	34.8
10	31.415	1005.31	32	99	99	89	62.8	125.66	8	32	33	48	32	125.66	753.9	19.7	0.060	68.7

精度等级: DIN7e25(JIS3级)

材料: C45

齿形: 直齿

齿面处理: 精铣

硬度处理: 40~45度 HRC

四面磨削: 有

压力角: 20度

Precision Grade: DIN7e25(JIS3Grade)

Material: C45

Type: Straight Rack

Treatment of Teeth: Milled

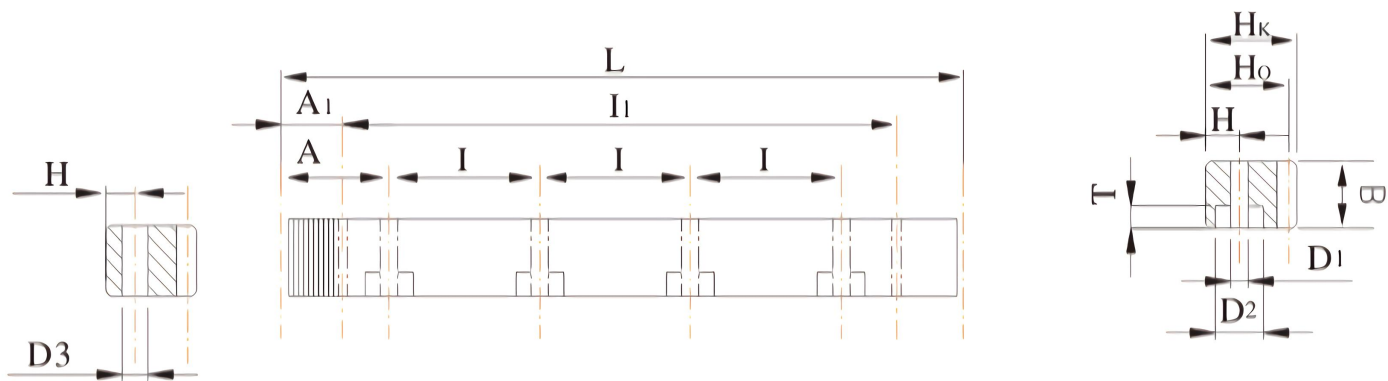
Hardness: 40~45 degree HRC

Sides Ground: Included.

Pressure Angle: 20 degree

直齿条，铣削齿面，20°压力角

Straight tooth system, Milled tooth surface, 20° pressure angle



模数 Module	齿距 P	L	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
1	3.141	499.51	159	15	15	14	62.4	124.88	4	6	5	8	5	29.0	441.5	5.7	0.039	0.8
1	3.141	999.03	318	15	15	14	62.4	124.88	8	6	5	8	5	29.0	941.0	5.7	0.039	1.6
1.5	4.712	499.51	106	19	19	17.5	62.4	124.88	4	8	7	11	7	29.0	441.5	5.7	0.042	1.10
1.5	4.712	999.03	212	19	19	17.5	62.4	124.88	8	8	7	11	7	29.0	941.0	5.7	0.042	2.20
2	6.283	502.65	80	24	24	22	62.8	125.66	4	8	7	11	7	31.3	440.1	5.7	0.044	2.1
2	6.283	1005.31	160	24	24	22	62.8	125.66	8	8	7	11	7	31.3	942.7	5.7	0.044	4.3
3	9.425	508.94	54	29	29	26	63.6	127.23	4	9	10	15	9	34.4	440.1	7.7	0.046	3.0
3	9.425	1017.88	108	29	29	26	63.6	127.23	8	9	10	15	9	34.4	949.1	7.7	0.046	6.0
4	12.566	502.65	40	39	39	35	62.8	125.66	4	12	10	15	9	37.5	427.7	7.7	0.048	5.2
4	12.566	1005.30	80	39	39	35	62.8	125.66	8	12	10	15	9	37.5	930.3	7.7	0.048	10.5
5	15.708	502.60	32	49	39	34	62.8	125.66	4	12	14	20	13	30.1	442.4	11.7	0.050	6.7
5	15.708	1005.30	64	49	39	34	62.8	125.66	8	12	14	20	13	30.1	945.0	11.7	0.050	13.4
6	18.850	509.94	27	59	49	45.3	63.6	127.23	4	16	18	26	17	31.4	446.1	15.7	0.055	10.4
6	18.850	1017.88	54	59	49	43	63.6	127.23	8	16	18	26	17	31.4	955.0	15.7	0.055	20.2
8	25.133	502.65	20	79	79	71	62.8	125.66	4	25	22	33	21	26.6	449.45	19.7	0.060	22.3
8	25.133	1005.31	40	79	79	71	62.8	125.66	8	25	22	33	21	26.6	952.0	19.7	0.060	44.7
10	31.415	502.65	16	99	99	89	62.8	125.66	4	32	33	48	32	125.66	252.3	19.7	0.065	34.8
10	31.415	1005.31	32	99	99	89	62.8	125.66	8	32	33	48	32	125.66	753.9	19.7	0.065	68.7

精度等级: DIN8e27(JIS4 级)

材 料: C45

齿 形: 直齿

齿面处理: 精铣

硬度处理: 调质, 20~25 度 HRC

四面磨削: 无

压 力 角: 20 度

Precision Grade: DIN8e27(JIS4 Grade)

Material: C45

Type: Straight Rack

Treatment of Teeth: Milled

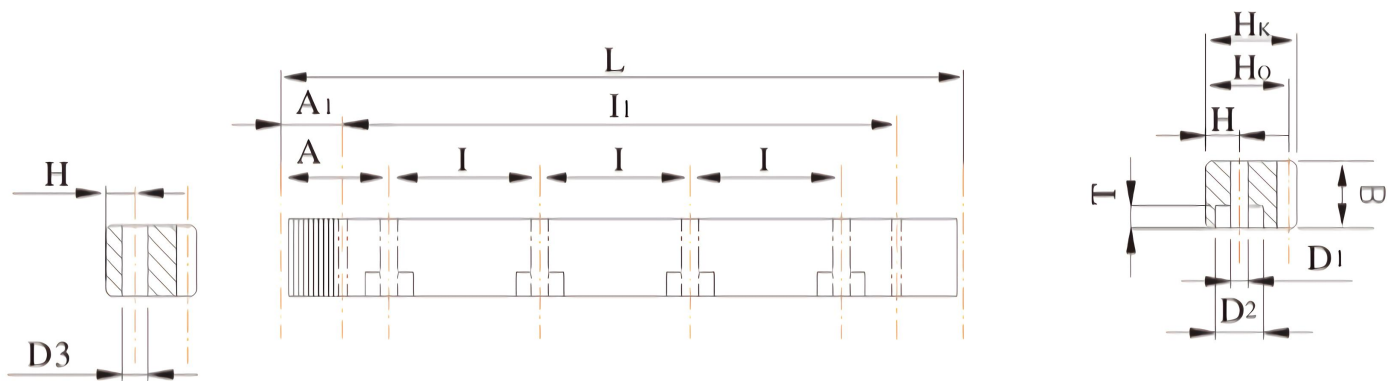
Hardness: Quenched, 20~25 degree HRC

Sides Ground: Not Included.

Pressure Angle: 20 degree

直齿条，铣削齿面，20°压力角

Straight tooth system, Milled tooth surface, 20° pressure angle



模数 Module	齿距 P	L	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
1	3.141	499.51	159	15	15	14	62.4	124.88	4	6	5	8	5	29.0	441.5	5.7	0.057	0.8
1	3.141	999.03	318	15	15	14	62.4	124.88	8	6	5	8	5	29.0	941.0	5.7	0.057	1.6
1.5	4.712	499.51	106	17	17	15.5	62.4	124.88	4	6	5	8	5	29.0	441.5	5.7	0.059	1.1
1.5	4.712	999.03	212	17	17	15.5	62.4	124.88	8	6	5	8	5	29.0	941.0	5.7	0.059	2.2
2	6.283	502.65	80	20	20	18	62.8	125.66	4	8	7	11	7	31.3	440.1	5.7	0.061	1.41
2	6.283	1005.31	160	20	20	18	62.8	125.66	8	8	7	11	7	31.3	942.7	5.7	0.061	2.81
2.5	7.854	502.65	64	25	25	22.5	62.8	125.66	4	8	7	11	7	31.3	440.1	5.7	0.063	2.21
2.5	7.854	1005.31	128	25	25	22.5	62.8	125.66	8	8	7	11	7	31.3	942.7	5.7	0.063	4.42
3	9.425	508.94	54	30	30	27	63.6	127.23	4	9	10	15	9	34.4	440.1	7.7	0.065	3.22
3	9.425	1017.88	108	30	30	27	63.6	127.23	8	9	10	15	9	34.4	949.1	7.7	0.065	6.44
4	12.566	502.65	40	40	40	36	62.8	125.66	4	12	10	15	9	37.5	427.7	7.7	0.068	5.65
4	12.566	1005.30	80	40	40	36	62.8	125.66	8	12	10	15	9	37.5	930.3	7.7	0.068	11.31
5	15.708	502.60	32	50	50	45	62.8	125.66	4	12	14	20	13	30.1	442.4	11.7	0.070	6.87
5	15.708	1005.3	64	50	50	45	62.8	125.66	8	12	14	20	13	30.1	945.0	11.7	0.070	13.74
6	18.850	508.94	27	60	60	54	63.6	127.23	4	16	18	26	17	31.4	446.1	15.7	0.072	10.49
6	18.850	1017.88	64	60	60	54	63.6	127.23	8	16	18	26	17	31.4	955.0	15.7	0.072	20.99
8	25.133	502.65	20	80	79.5	71.5	62.8	125.66	4	25	22	33	21	26.6	449.45	19.7	0.075	22.3
8	25.133	1005.31	40	80	79.5	71.5	62.8	125.66	8	25	22	33	21	26.6	952.0	19.7	0.075	44.6
10	31.415	502.65	16	100	100	90	62.8	125.66	4	32	33	48	32	125.66	252.3	19.7	0.077	35.5
10	31.415	1005.31	32	100	100	90	62.8	125.66	8	32	33	48	32	125.66	753.9	19.7	0.077	70.6

精度等级: DIN9e27(JIS5 级)

材 料: C45

齿 形: 直齿

齿面处理: 精铣

硬度处理: 20~25 度 HRC

四面磨削: 有

压 力 角: 20 度

Precision Grade: DIN9e27(JIS5 Grade)

Material: C45

Type: Straight Rack

Treatment of Teeth: Milled

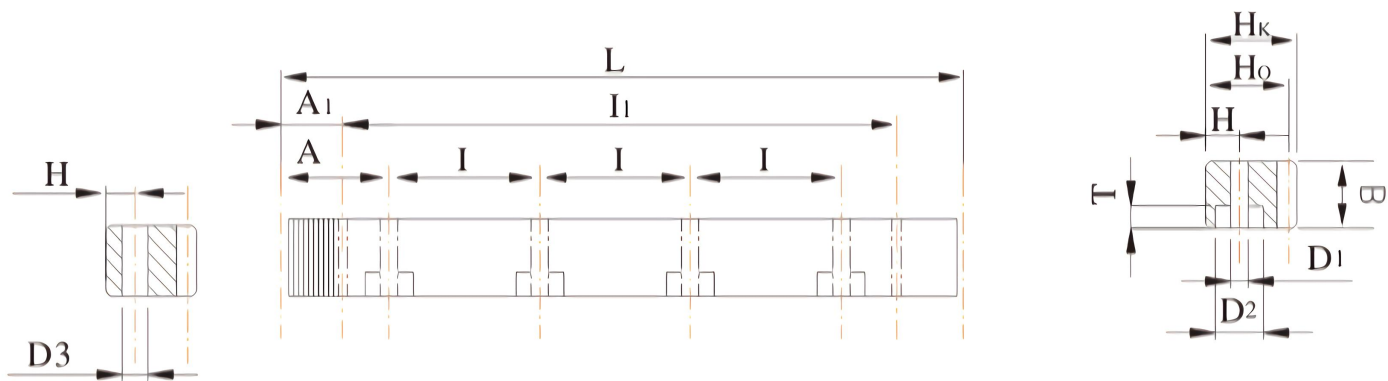
Hardness: 20~25 degree HRC

Sides Ground: Included.

Pressure Angle: 20 degree

直齿条，铣削齿面，20°压力角

Straight tooth system, Milled tooth surface, 20° pressure angle



模数 Module	齿距 P	L	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
1	3.1.1	499.51	159	15	15	14	62.4	124.88	4	6	5	8	5	29.0	441.5	5.7	0.072	0.8
1	3.141	999.03	318	15	15	14	62.4	124.88	8	6	5	8	5	29.0	941.0	5.7	0.072	1.6
1.5	4.712	499.51	106	19	19	17.5	62.4	124.88	4	8	7	11	7	29.0	441.5	5.7	0.079	1.1
1.5	4.712	999.03	212	19	19	17.5	62.4	124.88	8	8	7	11	7	29.0	941.0	5.7	0.079	2.2
2	6.283	502.65	80	24	24	22	62.8	125.66	4	8	7	11	7	31.3	440.1	5.7	0.086	2.1
2	6.283	1005.31	160	24	24	22	62.8	125.66	8	8	7	11	7	31.3	942.7	5.7	0.086	4.3
3	9.425	508.94	54	29	29	26	63.6	127.23	4	9	10	15	9	34.4	440.1	7.7	0.091	3
3	9.425	1017.88	108	29	29	26	63.6	127.23	8	9	10	15	9	34.4	949.1	7.7	0.091	6
4	12.566	502.65	40	39	39	35	62.8	125.66	4	12	10	15	9	37.5	427.7	7.7	0.095	5.2
4	12.566	1005.30	80	39	39	35	62.8	125.66	8	12	10	15	9	37.5	930.3	7.7	0.095	10.5
5	15.708	502.61	32	49	39	34	62.8	125.66	4	12	14	20	13	30.1	442.4	11.7	0.098	6.7
5	15.708	1005.3	64	49	39	34	62.8	125.66	8	12	14	20	13	30.1	945.0	11.7	0.098	13.4
6	18.850	508.94	27	59	49	43	63.6	127.23	4	16	18	26	17	31.4	446.1	15.7	1.100	10.4
6	18.850	1017.88	54	59	49	43	63.6	127.23	8	16	18	26	17	31.4	955.0	15.7	0.100	20.2
8	25.133	502.65	20	79	79	71	62.8	125.66	4	25	22	33	21	26.6	449.45	19.7	0.105	22.3
8	25.133	1005.31	40	79	79	71	62.8	125.66	8	25	22	33	21	26.6	952.0	19.7	0.105	44.7
10	31.415	502.65	16	99	99	89	62.8	125.66	4	32	33	48	32	125.66	252.3	19.7	0.110	34.8
10	31.415	1005.31	32	99	99	89	62.8	125.66	8	32	33	48	32	125.66	753.9	19.7	0.110	68.7

精度等级: DIN10e27(JIS6 级)

材 料: C45

齿 形: 直齿

齿面处理: 精铣

硬度处理:HRC40~45

四面磨削: 无

压 力 角: 20 度

Precision Grade:DIN10e27(JIS6Grade)

Material:C45

Type:Straight Rack

Treatment of Teeth:Milled

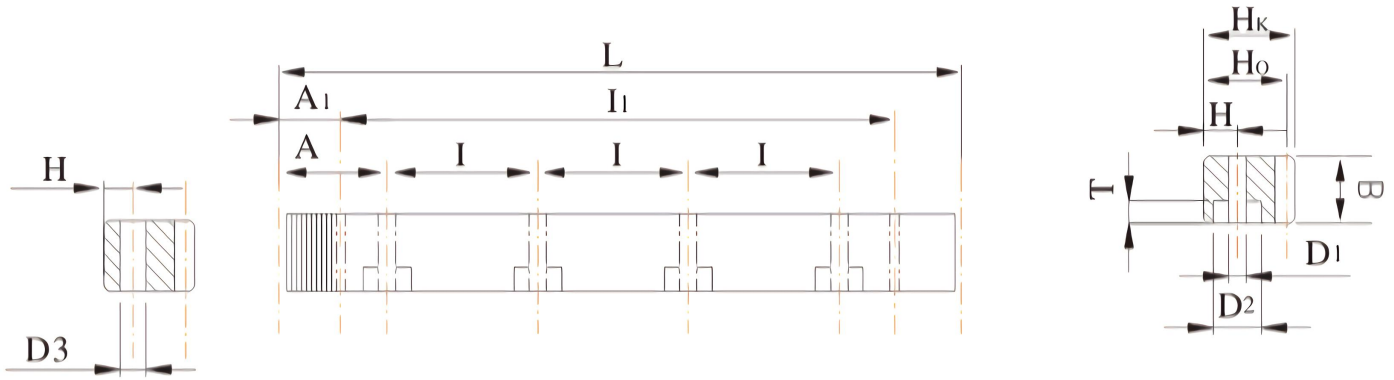
Hardness:40~45 degree HRC

Sides Ground:Not Included.

Pressure Angle:20 degree

直齿条, 磨削齿面, 20°压力角

Straight tooth system, Grinding tooth surface, 20° pressure angle.



模数 Module	齿距 P	L	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
1.591	5	500	100	20	20	18.41	62.5	125	4	8	7	11	7	35	430	5.7	0.022	1.2
1.591	5	1000	200	20	20	18.41	62.5	125	8	8	7	11	7	35	930	5.7	0.022	2.4
2.546	8	504	63	25	25	22.46	64.5	125	4	12	7	11	7	35	434	5.7	0.024	2.3
2.546	8	1008	126	25	25	22.46	64.5	125	8	12	7	11	7	35	938	5.7	0.024	4.6
3.183	10	500	50	30	30	26.81	62.5	125	4	12	10	15	9	35	430	7.7	0.024	3.2
3.183	10	1000	100	30	30	26.81	62.5	125	8	12	10	15	9	35	930	7.7	0.024	6.4
3.819	12	504	42	40	40	36.194	64.5	125	4	18	10	15	9	35	343	7.7	0.024	5.8
3.819	12	1008	84	40	40	36.19	64.5	125	8	18	10	15	9	35	938	7.7	0.024	11.4
5.092	16	496	31	50	50	44.91	64.5	125	4	22	14	20	13	35	426	11.1	0.025	8.2
5.092	16	1008	63	50	50	44.91	64.5	125	8	22	14	20	13	35	938	11.1	0.025	16.5
6.366	20	500	25	60	60	53.64	62.5	125	4	26	18	26	17	35	430	15.7	0.026	12
6.366	20	1000	50	60	60	53.64	62.5	125	8	26	18	26	17	35	930	15.7	0.026	25
7.957	25	500	20	80	80	72.05	62.5	125	4	36	22	33	21	120	260	19.7	0.027	23.0
7.957	25	1000	40	80	80	72.05	62.5	125	8	36	22	33	21	120	760	19.7	0.027	46.5

精度等级: DIN6h25(JIS2 级)

材 料: C45

齿 形: 直齿

齿面处理: 磨削

硬度处理:HRC45~50

四面磨削: 有

压力角: 20度

Precision Grade:DIN6h25(JIS2Grade)

Material:C45

Type: Straight Rack

Treatment of Teeth: Ground

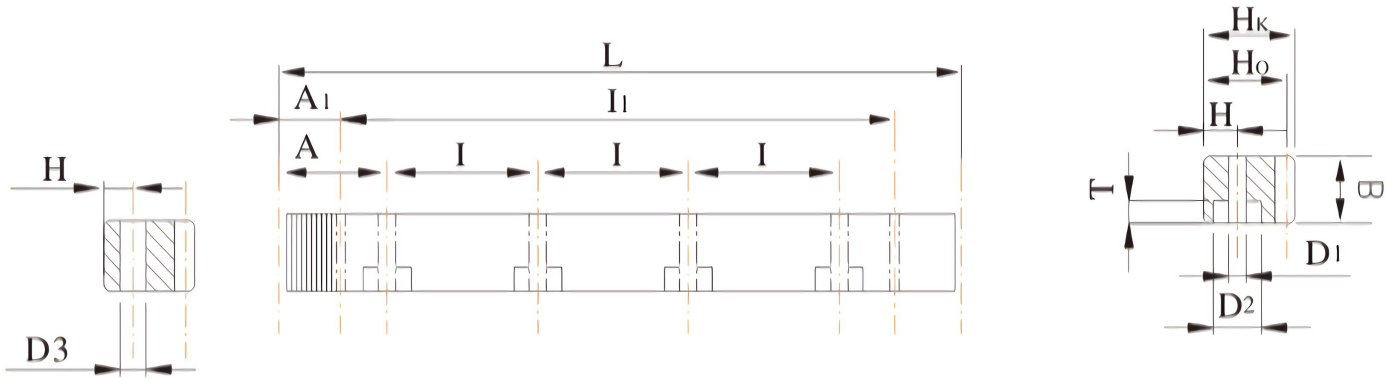
Hardness: 45~50 degree HRC

Sides Ground: Included.

Pressure Angle: 20 degree

直齿条, 铣削齿面, 20°压力角

Straight tooth system, Milled tooth surface, 20° pressure angle



模数 Module	齿距 P	L	齿数 Z	B	Hk	Ho	A	I	孔数 Hole No.	H	D1	D2	T	A1	I1	D3	总齿距误差 Pitch Error 300mm	M(kg)
1.591	5	500	100	20	20	18.41	62.5	125	4	8	7	11	7	35	430	5.7	0.044	1.2
1.591	5	1000	200	20	20	18.41	62.5	125	8	8	7	11	7	35	930	5.7	0.044	2.4
2.546	8	504	63	25	25	22.46	64.5	125	4	12	7	11	7	35	434	5.7	0.048	2.3
2.546	8	1008	126	25	25	22.46	64.5	125	8	12	7	11	7	35	938	5.7	0.048	4.6
3.183	10	500	50	30	30	26.81	62.5	125	4	12	10	15	9	35	430	7.7	0.048	3.2
3.183	10	1000	100	30	30	26.81	62.5	125	8	12	10	15	9	35	930	7.7	0.048	6.4
3.819	12	504	42	40	40	36.194	64.5	125	4	18	10	15	9	35	343	7.7	0.048	5.8
3.819	12	1008	84	40	40	36.19	64.5	125	8	18	10	15	9	35	938	7.7	0.048	11.4
5.092	16	496	31	50	50	44.91	64.5	125	4	22	14	20	13	35	426	11.1	0.050	8.2
5.092	16	1008	63	50	50	44.91	64.5	125	8	22	14	20	13	35	938	11.1	0.050	16.5
6.366	20	500	25	60	60	53.64	62.5	125	4	26	18	26	17	35	430	15.7	0.052	12
6.366	20	1000	50	60	60	53.64	62.5	125	8	26	18	26	17	35	930	15.7	0.052	25
7.957	25	500	20	80	80	72.05	62.5	125	4	36	22	33	21	120	260	19.7	0.054	23.0
7.957	25	1000	40	80	80	72.05	62.5	125	8	36	22	33	21	120	760	19.7	0.054	46.5

精度等级: DIN7e25(JIS3 级)

材 料: C45

齿 形: 直齿

齿面处理: 精铣

硬度处理: 调质, 20~25 度 HRC

四面磨削: 有

压力角: 20 度

Precision Grade: DIN7e25(JIS3 Grade)

Material: C45

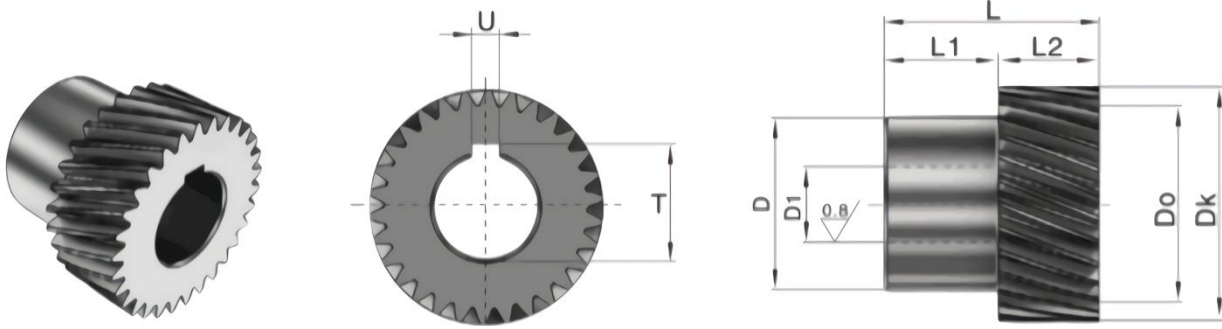
Type: Straight Rack

Treatment of Teeth: Milled

Hardness: Quenched, 20~25 degree HRC

Sides Ground: Included.

Pressure Angle: 20 degree

斜齿齿轮, 左旋 $19^{\circ}31'42''$, 磨削齿轮, 20° 压力角Helical gear, $19^{\circ}31'42''$ left-hand, Grinding gear, 20° pressure angle

齿距 Pt	模数 Module	齿数 Z	D1	Dk	D0	D	L	L1	L2	T	U	侧隙 (mm)
3.333	1	20	12	23.22	21.22	20	20	5	15	13.8	4	0.08~0.16
3.333	1	25	12	28.53	26.53	20	20	5	15	13.8	4	0.08~0.16
3.333	1	30	15	33.83	31.83	30	20	5	15	16.8	4	0.08~0.16
3.333	1	35	15	39.14	37.14	35	20	5	15	17.3	5	0.08~0.16
5.000	1.5	21	16	36.42	33.423	30	46	26	20	18.3	5	0.08~0.16
5.000	1.5	30	22	50.75	47.747	36	48	28	20	24.8	6	0.08~0.16
5.000	1.5	39	22	65.07	62.071	36	48	28	20	24.8	6	0.10~0.18
6.666	2	21	22	48.56	44.563	36	56	28	28	24.8	6	0.10~0.20
6.666	2	30	22	67.66	63.662	36	56	28	28	24.8	6	0.12~0.22
6.666	2	30	32	67.66	63.662	55	65	37	28	35.3	10	0.12~0.22
6.666	2	39	32	86.76	82.761	55	65	37	28	35.3	10	0.12~0.22
8.333	2.5	20	22	58.05	53.052	36	56	28	28	24.8	6	0.10~0.20
8.333	2.5	25	22	71.31	66.315	36	56	28	28	24.8	6	0.12~0.22
8.333	2.5	25	32	71.31	66.315	55	65	37	28	35.3	10	0.12~0.22
10.000	3	20	22	69.66	63.662	36	56	28	28	24.8	6	0.12~0.22
10.000	3	20	32	69.66	63.662	55	65	37	28	35.3	10	0.12~0.22
10.000	3	25	22	85.58	79.578	36	56	28	28	24.8	6	0.12~0.22
10.000	3	25	32	85.58	79.578	55	65	37	28	35.3	10	0.12~0.22
13.333	4	18	32	84.39	76.394	55	75	35	40	35.3	10	0.14~0.24
13.333	4	21	32	97.13	89.127	55	75	35	40	35.3	10	0.14~0.24
13.333	4	21	35	97.13	89.127	55	75	35	40	38.3	10	0.14~0.24
13.333	4	24	32	109.86	101.859	55	75	35	40	35.3	10	0.14~0.24
13.333	4	24	35	109.86	101.859	55	75	35	40	38.3	10	0.14~0.24
16.666	5	18	45	105.49	95.483	68	85	35	50	48.8	14	0.14~0.24
16.666	5	24	45	137.32	127.324	68	85	35	50	48.8	14	0.16~0.26
16.666	6	20	55	139.32	127.324	80	100	40	60	59.3	16	0.16~0.26
16.666	6	25	75	171.16	159.155	110	120	60	60	79.9	20	0.16~0.26
26.666	8	18	75	168.79	152.789	110	140	60	80	79.9	20	0.18~0.28

精度等级: DIN6h25(JIS2 级)

材 料: 42Cr(SCM420)

齿 形: 斜齿

齿面处理: 磨削

硬度处理: 55~60 度 HRC

左旋角: $19^{\circ}31'42''$ 压 力 角: 20°

Precision Grade: DIN6h25(JIS2 Grade)

Material: 42Cr(SCM420)

Type: Helical Rack

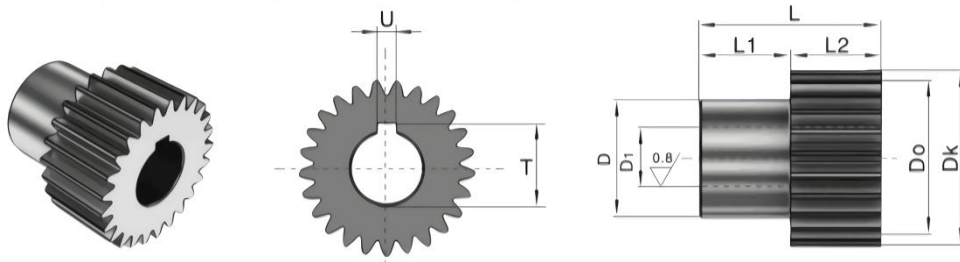
Treatment of Teeth: Ground

Hardness: 55~60 degree HRC

Left Hand Angle: $19^{\circ}31'42''$ Pressure Angle: 20°

直齿齿轮, 磨削齿轮, 20°压力角

Spur gear, Grinding gear, 20° pressure angle



齿距 Pt	模数 Module	齿数 Z	D1	Dk	D0	D	L	L1	L2	T	U	侧隙 (mm)
3.141	1	20	12	22	20	20	20	5	15	13.8	4	0.08~0.16
3.141	1	25	12	27	25	20	20	5	15	13.8	4	0.08~0.16
3.141	1	30	15	42	40	30	20	5	15	16.8	4	0.08~0.16
3.141	1	35	15	30	37	35	20	5	15	17.3	5	0.08~0.16
4.712	1.5	25	16	40.5	37.5	30	46	26	20	18.3	5	0.08~0.16
4.712	1.5	32	22	51	48	36	48	28	20	24.8	6	0.10~0.18
4.712	1.5	40	22	63	60	36	48	28	20	24.8	6	0.01~0.20
6.283	2	25	16	54	50	30	54	26	28	18.3	5	0.01~0.20
6.283	2	25	22	54	50	36	56	28	28	24.8	6	0.01~0.20
6.283	2	28	30	60	56	50	60	32	28	33.3	8	0.12~0.22
6.283	2	32	16	68	64	30	54	26	28	18.3	5	0.12~0.22
6.283	2	32	22	68	64	36	56	28	28	24.8	6	0.12~0.22
6.283	2	32	32	68	64	55	65	37	28	35.3	10	0.12~0.22
6.283	2	36	40	76	72	62	65	37	28	43.3	12	0.12~0.22
6.283	2	40	32	84	80	55	65	37	28	35.3	10	0.12~0.22
6.283	2	50	45	104	100	68	65	37	28	48.8	14	0.12~0.22
7.854	2.5	22	22	60	55	36	56	28	28	24.8	6	0.12~0.22
7.854	2.5	28	32	75	70	55	65	37	28	35.3	10	0.12~0.22
7.854	2.5	36	40	95	90	62	65	37	28	43.3	12	0.12~0.22
9.425	3	22	22	72	66	36	56	28	28	24.8	6	0.12~0.22
9.425	3	22	32	72	66	55	65	37	28	35.3	10	0.12~0.22
9.425	3	25	40	81	75	62	65	37	28	43.3	12	0.12~0.22
9.425	3	28	22	90	84	36	56	28	28	24.8	6	0.12~0.22
9.425	3	28	32	90	84	55	65	37	28	35.3	10	0.12~0.22
9.425	3	32	40	102	96	62	65	37	28	43.3	12	0.12~0.22
9.425	3	36	45	114	108	68	65	37	28	48.8	14	0.14~0.24
12.566	4	20	32	88	80	55	75	35	40	35.3	10	0.14~0.24
12.566	4	20	35	88	80	55	75	35	40	38.3	10	0.14~0.24
12.566	4	22	45	96	88	68	75	35	40	48.8	14	0.14~0.24
12.566	4	25	32	108	100	55	75	35	40	35.3	10	0.14~0.24
12.566	4	25	35	108	100	55	75	35	40	38.3	10	0.14~0.24
12.566	4	25	55	108	100	80	80	40	40	59.3	16	0.14~0.24
12.566	4	28	45	120	112	68	75	35	40	48.8	14	0.14~0.24
12.566	4	32	55	136	128	80	80	40	40	59.3	16	0.16~0.26
12.566	4	40	75	168	160	110	100	60	40	79.9	20	0.16~0.26
15.708	5	21	45	115	105	68	85	35	50	48.8	14	0.16~0.26
15.708	5	25	45	135	125	68	85	35	50	48.8	14	0.16~0.26
15.708	5	25	55	135	125	80	90	40	50	59.3	16	0.16~0.26
18.850	6	21	55	138	126	80	100	40	60	59.3	16	0.16~0.26
18.850	6	25	75	162	150	110	120	60	60	79.9	20	0.18~0.28

精度等级: DIN6h25(JIS2 级)

材 料: 42Cr(SCM420)

齿 形: 直齿

齿面处理: 磨削

硬度处理: 55~60 度 HRC

压 力 角: 20 度

Precision Grade: DIN6h25(JIS2 Grade)

Material: 42Cr(SCM420)

Type: Straight Rack

Treatment of Teeth: Ground

Hardness: 55~60 degree HRC

Pressure Angle: 20 degree



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