

HYCNC

精益求精 创一流品质

Keep Improving And Create
First-class Quality

济南弘阳数控机械有限公司
JINAN HONGYANG CNC MACHINERY
CO., LTD

济南弘阳数控机械有限公司

JINAN HONGYANG CNC MACHINERY CO., LTD

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公司邮箱：hongyangcnc@163.com

BRIEF INTRODUCTION

企业简介

济南弘阳数控机械有限公司成立于2008年。现有员工100余人，库存面积10000平方米。主要用于雕刻机零件，包括主轴电机、变频器、步进电机、驱动器、混合式伺服电机、伺服电机、dsp系列控制器、主轴冷却水泵、润滑油泵、对刀仪、限位开关、水冷真空泵、风冷真空泵、电源、变压器、齿轮箱、机架、导轨、滑块或块、刀柄刀夹、电缆拖链、主轴防尘罩、真空吸尘器雕刻机配件

公司各种精密齿条齿轮一次性最大齿条长度2100mm,可根据客户需求生产1~22模数各种规格直斜齿条。公司拥有领先的技术和丰富的生产经验，配合高素质的团队和完整的科学管理体系，提供售前售后服务技术与解决方案,更好的服务客户。产品主要配套用于玻璃切割机械、数控切割机、雕刻机、激光切割机、造纸机械、船舶制造、轧钢设备、轻工机械设备、高层建筑设

Jinan Hongyang CNC Machinery Co., Ltd. was established in 2008. The existing staff of more than 100 people, inventory area of 10,000 square meters. Mainly used for engraving machine parts, Including spindle motor, inverter, stepper motor, drive, hybrid servo motor, servo motor, dsp series controller, spindle cooling pump, lubrication pump, tool setting instrument, limit switch, water cooled vacuum pump, air cooled vacuum pump, power supply, transformer, gear box, frame, guide rail, slide block or block, tool holder, cable drag chain, spindle dust cover, vacuum cleaner and so on Engraving machine accessories

The company's various precision rack gear one-time maximum rack length of 2100mm, according to customer needs to produce 1~22 modulus of various specifications straight bevel rack. The company has leading technology and rich production experience, with a high-quality team and a complete scientific management system, to provide pre-sales and after-sales service technology and solutions, better service customers. The products are mainly used in glass cutting machinery, CNC cutting machine, engraving machine, laser cutting machine, paper making machinery, shipbuilding, steel rolling equipment, light industry machinery equipment, high-rise building equipment, mechanical automation equipment and so on.

Management standard science, the formation of a strict management system, with the continuous improvement of their own system, the overall manufacturing process innovation and a complete quality inspection system, constantly in the summary and absorption of domestic and foreign rack manufacturing experience on the basis of improving the production process, improve the testing means, now, the production process and product quality are in the domestic leading level, products sold throughout the country.

备、机械自动化设备等。

管理规范科学，形成严格的管理制度，凭借自身体系的不断完善，整体制造工艺流程的革新和完整的质量检测体系,不断在总结、吸收国内外齿条制造经验的基础上改进生产工艺,完善检测手段,如今,生产工艺和产品质量均处于国内领先水平，产品畅销全国。

弘阳数控秉承“信誉第一、用户至上、质量第一、价格取胜”为宗旨，严格按照客户的规格、品种和质量要求，做到工于心、精于细,竭诚为广大客户提供高质量的产品和完善的售后服务。济南弘阳数控机械有限公司全体员工愿与广大新老客户具诚合作，共创未来。热诚欢迎海内外各界朋友光临、指导！

Hongyang numerical control adhering to the "reputation first, customer first, quality first, price win" for the purpose, in strict accordance with customer specifications, varieties and quality requirements, to do the heart, fine, dedicated to provide our customers with high quality products and perfect after-sales service. Jinan Hongyang CNC Machinery Co., Ltd. staff is willing to cooperate with the majority of new and old customers sincerely, create the future. Warmly welcome friends from all walks of life at home and abroad to visit and guide!



专业生产直齿条及斜齿条

Specializing in the production of straight rack and inclined rack



CORPORATE CONCEPTS

企业理念

人才

人才理念

以人为本，择人不拘形式，选才注重能力

TALENT CONCEPT

People oriented, choose people regardless of form, and pay attention to ability in talent selection

服务

服务理念

超出期望，真情久久

SERVICE IDEA

Beyond expectation, the truth lasts for a long time

竞争

竞争理念

尊重竞争对手，超越竞争对手

COMPETITION CONCEPT

Respect competitors and surpass them

发展



发展理念

专注主业，持续稳健

DEVELOPMENT CONCEPT

Focus on the main business and keep steady

专业生产直齿条及斜齿条

Specializing in the production of straight rack and inclined rack



以质量取胜市场
用优质设备打造优质产品
齐全的硬件设备
流水线的生产模式
规范化的管理
高素质的科技人员
成就了一代代精品产品

Win the market with quality
Create high-quality products with high-quality equipment
Complete hardware equipment
Production mode of assembly line
Standardized management
High quality scientific and technological personnel
It has achieved excellent products from generation to generation

磨齿机

Gear grinding machine

拥有高精度的数控全自动齿条制造专用设备、配套完整的生产体系、规范科学的制度化管理、先进的制造工艺流程、完整的质量检测体系。

It has high-precision CNC automatic rack manufacturing special equipment, complete supporting production system, standardized and scientific institutionalized management, advanced manufacturing process flow, and complete quality inspection system.



三坐标测量仪

Specializing In The Production Of Straight Rack And Inclined Rack



蔡司三坐标是世界顶级品牌

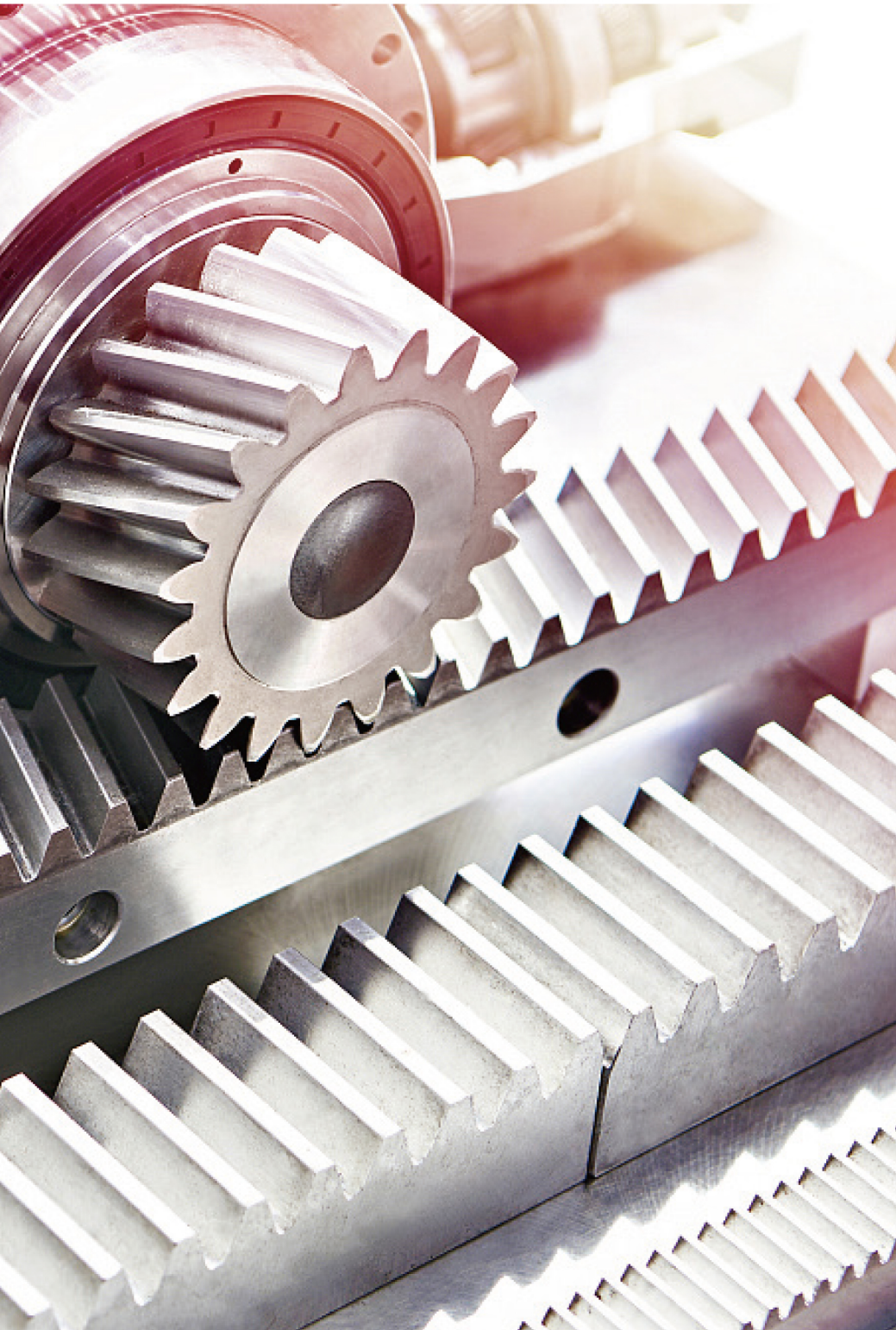
具有功用最全面，
精度最高的，
测量速度、稳定性
和重复性好。

Zeiss CMM is a world-class brand
With the most comprehensive
functions and the highest accuracy,
The measurement speed, stability
and repeatability are good.



研磨齿条

Specializing In The Production Of Straight Rack And Inclined Rack

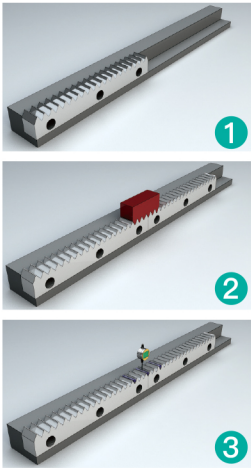


齿条装配须知

齿条可以对接安装到任意长度。装配时两根齿条之间的间隙需调整至配合齿距。安装齿条需使用定位销。

Assembling Instruction:

The racks can be connected to any length .The gap between two adjacent racks should be adjusted to match the pitch .Locking pins shoculd be used when assembling the racks.



- 1、定位并紧固齿条。
Fix the rack.
- 2、用反向齿规为下一根齿条定位。
Use opposite tooth gauge to fix next ack.
- 3、逐个检查每个接口，用量针检测齿条的平行度。
Check every joint and measure the levelling of theracks with round bars.

型号说明
Code Description

材料 Material	齿型 Rack Type	棒形 Shape	齿面处理 Treatment Of Tooth	硬度处理 Hardness	模数 Module	长度 Length	钻孔 Holes	四面研磨 Sides Ground
C	S	T	G	H/Q	20	05	N	-G
↓	↓	↓	↓	↓	↓	↓	↓	↓
C=S45C	S=直齿 Straight	T=四角棒 Tetragon	G=磨削 Ground	H=硬化处理 Hardened	M2	05=500mm	N=无钻孔 No Holes	G=四面研磨 Sides Ground
M=SCM440	H=齿斜 Helical	R=圆棒 Round	M=精铣 Milled	Q=调质 Tempered & Quenched 无硬度处理 Without Hardness		10=1,1000mm		

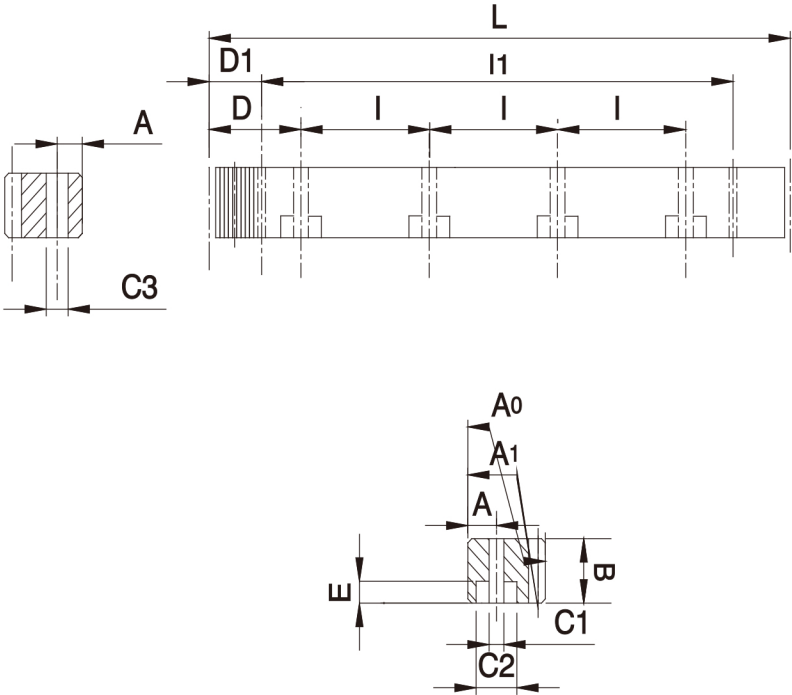


参数说明

精度等级: DIN 6h25
材料: (S45C中碳钢)C45
齿型: 直齿
齿面处理: 磨削
硬度处理: 高週波, 硬度为HRC48~52度
四面研磨: 有
压力角: 20度
总齿节误差: 0.036mm/1000mm

Manufacturing Description:

Precision Grade: DIN 6h25
Material: (S45C Medium Carbon Steel) C45
Type: Straight Rack
Treatment of Teeth: Ground
Hardness: High Frequency HRC48~52 degree.
Sides Ground: Included
Pressure Angle: 20 Degree
Total Pitch Error: 0.036mm/1000mm



型号 Code			模数 Module	L	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3
CSTGH	010	05	1	499.51	159	15	15	14	-	-	-	-	-	-	-	-	-	-
CSTGH	015	05	1.5	499.51	106	19	19	17.5	62.44	124.88	4	8	7	11	7	29	440.5	5.7
CSTGH	015	10	1.5	999.03	212	19	19	17.5	62.44	124.88	8	8	7	11	7	29	941	5.7
CSTGH	020	05	2	502.65	80	24	24	22	62.83	125.66	4	8	7	11	7	31.3	440.1	5.7
CSTGH	020	10	2	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.7	5.7
CSTGH	030	05	3	508.94	54	29	29	26	63.62	127.23	4	9	10	15	9	34.4	440.1	7.7
CSTGH	030	10	3	1017.88	108	29	29	26	63.62	127.23	8	9	10	15	9	34.4	949.1	7.7
CSTGH	040	05	4	502.65	40	39	39	35	62.83	125.66	4	12	10	15	9	37.5	427.7	7.7
CSTGH	040	10	4	1005.31	80	39	39	35	62.83	125.66	8	12	10	15	9	37.5	930.3	7.7
CSTGH	050	05	5	502.65	32	49	39	34	62.83	125.66	4	12	14	20	13	30.1	442.4	11.7
CSTGH	050	10	5	1005.31	64	49	39	34	62.83	125.66	8	12	14	20	13	30.1	945	11.7
CSTGH	060	05	6	508.94	27	59	49	43	63.62	127.23	4	16	18	26	17	31.4	446.1	15.7
CSTGH	060	10	6	1017.88	54	59	49	43	63.62	127.23	8	16	18	26	17	31.4	955.0	15.7
CSTGH	080	05	8	502.65	20	79	79	71	62.83	125.66	4	25	22	33	21	26.6	449.5	19.7
CSTGH	080	10	8	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952	19.7
CSTGH	100	10	10	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.7	753.96	19.7
CSTGH	120	12	12	1017.90	27	120	120	108	63.6	127.23	8	40	39	58	38	127.23	763.4	19.7

单位/Dimension:mm

直齿条系列

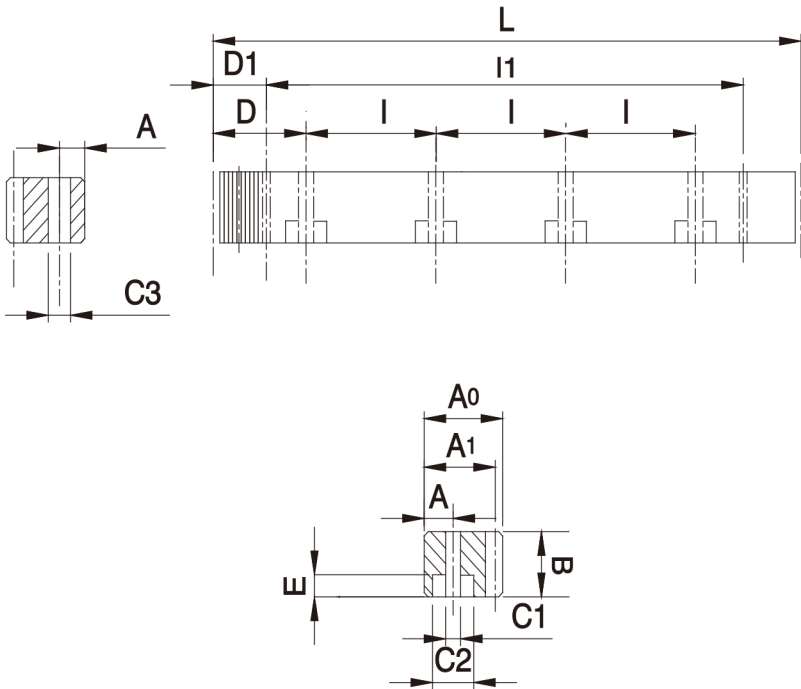
Straight Rack Series

参数说明

精度等级: DIN 8e27
材料: S45c
齿型: 直齿
齿面处理: 精铣
硬度处理: 硬度HRC18~20度
四面研磨: 无
压力角: 20度
总齿节误差: 0.1mm/1000mm

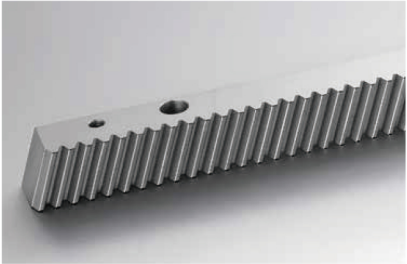
Manufacturing Description:

Precision Grade: DIN 8e27
Material: S45C
Type: Straight Rack
Treatment of Teeth: Milled
Hardness: HRC18~20 degree
Sides Ground: not Included
Pressure Angle: 20 Degree
Total Pitch Error: 0.1mm/1000mm



型号 Code			模数 Module	L	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3
CSTMQ	010	05	1	499.51	159	15	15	14	-	-	-	-	-	-	-	-	-	-
CSTMQ	015	05	1.5	499.51	106	19	19	17.5	62.44	124.88	4	8	7	11	7	29	441.5	5.7
CSTMQ	015	10	1.5	999.03	212	19	19	17.5	62.44	124.88	8	8	7	11	7	29	941	5.7
CSTMQ	020	05	2	502.65	80	24	24	22	62.83	125.66	4	8	7	11	7	31.3	440.1	5.7
CSTMQ	020	10	2	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.7	5.7
CSTMQ	030	05	3	508.94	54	29	29	26	63.62	127.23	4	9	10	15	9	34.4	440.1	7.7
CSTMQ	030	10	3	1017.88	108	29	29	26	63.62	127.23	8	9	10	15	9	34.4	949.1	7.7
CSTMQ	040	05	4	502.65	40	39	39	35	62.83	125.66	4	12	10	15	9	37.5	427.7	7.7
CSTMQ	040	10	4	1005.31	80	39	39	35	62.83	125.66	8	12	10	15	9	37.5	930.3	7.7
CSTMQ	050	05	5	502.65	32	49	39	34	62.83	125.66	4	12	14	20	13	30.1	442.4	11.7
CSTMQ	050	10	5	1005.31	64	49	39	34	62.83	125.66	8	12	14	20	13	30.1	945.0	11.7
CSTMQ	060	05	6	508.94	27	59	49	43	63.62	127.23	4	16	18	26	17	31.4	446.1	15.7
CSTMQ	060	10	6	1017.88	54	59	49	43	63.62	127.23	8	16	18	26	17	31.4	955.0	15.7
CSTMQ	080	05	8	502.65	20	79	79	71	62.83	125.66	4	25	22	33	21	26.6	449.5	19.7
CSTMQ	080	10	8	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952	19.7
CSTMQ	100	10	10	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.7	753.96	19.7

单位/Dimension:mm



参数说明

精度等级：DIN 6h25

材料：S45c

齿型：斜齿

齿面处理：磨削

硬度处理：高调波，硬度为HRC48~52度

四面研磨：有

右旋角：19°31’42”

压力角：20度

总齿节误差：0.036mm/1000mm

Manufacturing Description:

Precision Grade: DIN 6h25

Material: S45C

Type: Helical Rack

Treatment of Teeth: Ground

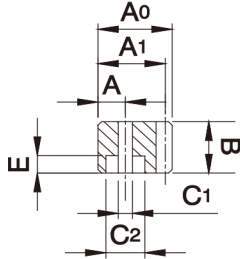
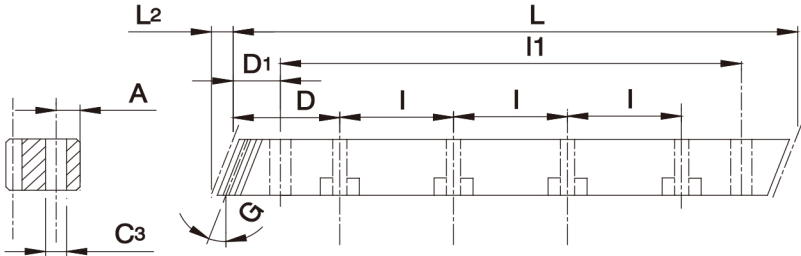
Hardness: Heat treatment:48~52 degree

Sides Ground: Included

Right hand angle: 19° 31’42”

Pressure angle: 20 Degree

Total Pitch Error: 0.036mm/1000mm



型号 Code	模数 Module	L	L2	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3
CHTGH 010 05	1	500.00	3.14	150	15	15	14	-	-	-	-	-	-	-	-	-	-
CHTGH 015 05	1.5	500.00	6.7	100	19	19	17.5	62.50	125	4	8	7	11	7	31.7	436.6	5.7
CHTGH 015 10	1.5	1000.00	6.7	200	19	19	17.5	62.50	125	8	8	7	11	7	31.7	936.6	5.7
CHTGH 020 05	2	500.00	8.5	75	24	24	22	62.50	125	4	8	7	11	7	31.7	436.6	5.7
CHTGH 020 10	2	1000.00	8.5	150	24	24	22	62.50	125	8	8	7	11	7	31.7	936.6	5.7
CHTGH 030 05	3	500.00	10.3	50	29	29	26	62.50	125	4	9	10	15	9	35.0	430.0	7.7
CHTGH 030 10	3	1000.00	10.3	100	29	29	26	62.50	125	8	9	10	15	9	35.0	930.0	7.7
CHTGH 040 05	4	506.67	13.8	38	39	39	35	62.50	125	4	12	10	15	9	33.3	433.0	7.7
CHTGH 040 10	4	1000.00	13.8	75	39	39	35	62.50	125	8	12	10	15	9	33.3	933.4	7.7
CHTGH 050 05	5	500.00	17.4	30	49	39	34	62.50	125	4	12	14	20	13	37.5	425.0	11.7
CHTGH 050 10	5	1000.00	17.4	60	49	39	34	62.50	125	8	12	14	20	13	37.5	925.0	11.7
CHTGH 060 05	6	500.00	20.9	25	59	49	43	62.50	125	4	16	18	26	17	37.5	425.0	15.7
CHTGH 060 10	6	1000.00	20.9	50	59	49	43	62.50	125	8	16	18	26	17	37.5	925.0	15.7
CHTGH 080 05	8	480.00	28.0	18	79	79	71	60.00	120	4	25	22	33	21	120.0	240.0	19.7
CHTGH 080 10	8	960.00	28.0	36	79	79	71	60.00	120	8	25	22	33	21	120.0	720.0	19.7
CHTGH 100 10	10	1000.00	35.11	30	99	99	89	62.50	125	8	32	33	48	32	125.0	750.0	19.7
CHTGH 120 10	12	1000.00	42.56	25	120	120	108	40.00	125	8	40	39	58	38	125.0	750.0	19.7

单位/Dimension:mm

斜齿条系列

Oblique Tooth Series

参数说明

精度等级：DIN 8e27

材料：(SCM440铬钼合金钢)42CrMo4

齿型：斜齿

齿面处理：精铣

硬度处理：调质处理，硬度为HRC21~24度

四面研磨：无

右旋角：19°31’42”压力角:20度

总齿节误差：0.1mm/1000mm

Manufacturing Description:

Precision Grade: DIN8e27

Material: (SCM440 Chromium Molybdenum

Alloy Steel) 42CrMo4

Type: Helical Rack

Treatment of Teeth: Milled

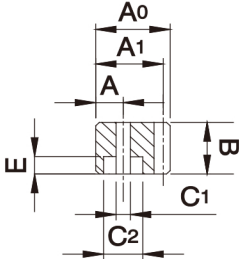
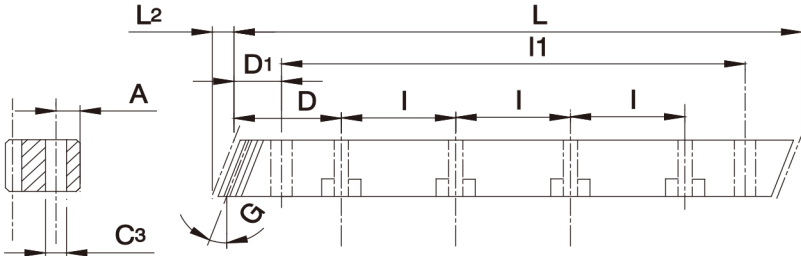
Hardness: Quenched; HRC21~24 Degree

Sides ground: not included

Right hand angle: 19° 31’42”

Pressure angle: 20 Degree

Total Pitch Error: 0.1mm/1000mm



型号 Code	模数 Module	L	L2	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3
MHTMQ 010 05	1	500.00	5.35	150	15	15	14	-	-	-	-	-	-	-	-	-	-
MHTMQ 015 05	1.5	500.00	6.7	100	19	19	17.5	62.50	125	4	8	7	11	7	31.7	436.6	5.7
MHTMQ 015 10	1.5	1000.00	6.7	200	19	19	17.5	62.50	125	8	8	7	11	7	31.7	936.6	5.7
MHTMQ 020 05	2	500.00	8.9	75	24	24	22	62.50	125	4	8	7	11	7	31.7	436.6	5.7
MHTMQ 020 10	2	1000.00	8.9	150	24	24	22	62.50	125	8	8	7	11	7	31.7	936.6	5.7
MHTMQ 030 05	3	500.00	10.6	50	29	29	26	62.50	125	4	9	10	15	9	35.0	430.0	7.7
MHTMQ 030 10	3	1000.00	10.6	100	29	29	26	62.50	125	8	9	10	15	9	35.0	930.0	7.7
MHTMQ 040 05	4	506.67	14.0	38	39	39	35	62.50	125	4	12	10	15	9	33.3	433.0	7.7
MHTMQ 040 10	4	1000.00	14.2	75	39	39	35	62.50	125	8	12	10	15	9	33.3	933.4	7.7
MHTMQ 050 05	5	500.00	17.4	30	49	39	34	62.50	125	4	12	14	20	13	37.5	425.0	11.7
MHTMQ 050 10	5	1000.00	17.4	60	49	39	34	62.50	125	8	12	14	20	13	37.5	925.0	11.7
MHTMQ 060 05	6	500.00	20.9	25	59	49	43	62.50	125	4	16	18	26	17	37.5	425.0	15.7
MHTMQ 060 10	6	1000.00	20.9	50	59	49	43	62.50	125	8	16	18	26	17	37.5	925.0	15.7
MHTMQ 080 05	8	480.00	28.0	18	79	79	71	60.00	120	4	25	22	33	21	120.0	240.0	19.7
MHTMQ 080 10	8	960.00	28.0	36	79	79	71	60.00	120	8	25	22	33	21	120.0	720.0	19.7
MHTMQ 100 10	10	1000.00	35.11	30	99	99	89	62.50	125	8	32	33	48	32	125.0	750.0	19.7

单位/Dimension:mm