

精密契合 索特品质
PRECISE FIT SOTER QUALITY

SOTER

精密契合 索特品质
PRECISE FIT
SOTER QUALITY



INTENSIVE CULTIVATION
SPIRIT OF THE CRAFTSMAN

THE SPIRIT OF
CRAFTSMEN

CARVE AND
POLISH

STRIVE FOR
PERFECTION

CUSTOMER SATISFACTION
IS MORE THAN 98%.

SPIRIT OF THE CRAFTSMAN
INTENSIVE CULTIVATION

SOTER

浙江索特传动科技有限公司
ZHEJIANG SOTER TRANSMISSION SCIENCE AND TECHNOLOGY CO., LTD.

📍 Add: 浙江省温岭市东部新区二十四街5号
☎ Tel: 0576-86865666 ✉ E-mail: sttz@cnstcd.com
🌐 http://www.cnstcd.com

放眼世界 / 成为全球合作伙伴

Look to the world
and
become a global partner

SÖTER 索特

索特传动 精密契合
PRECISE FIT
SÖTER QUALITY



TECHNICAL

QUALITY MANAGEMENT SYSTEM CERTIFICATE

质量管理体系认证证书



ADVANTAGES

CORPORATE HONOR

企业荣誉



CONTENTS

PURSuing PRECISION QUALITY
CREATING EXCELLENT PRODUCTS

企业目录

索特传动

驱动工业精准未来

以匠心之道

铸就传动之精

索特传动科技

SPiRiT OF THE CRAFTSMAN
INTENSIVE CULTIVATION

01

企业简介
Company Profile

01/02

02

生产设备概况
Overview Of Production
Equipment

03/06

03

齿条承载力
Racks Bearing Capacity
Selection Table

07/08

04

齿条装配说明
Racks Assembly Instructions

09

05

齿条传动形式
Racks Drive

10

06

产品展示及参数
Introduction And Introduction
Of Products

11/12

07

直齿条
Straight Rack

13/16

08

斜齿条
Helical Rack

17/20

09

V型导轨齿条
V Guide Racks

21/24

10

零背隙齿条、导轨
Backlash-free rack
Guide Rail

25/29

11

研磨齿轮
Ground Gear

30/34

12

EITeSEN

35/36

GERMAN STANDARD
INDEPENDENTLY REFINED
CASTING EXCELLENT QUALITY



企业简介

COMPANY PROFILE

浙江索特传动科技有限公司始创于 2016 年，企业深耕精密齿条研发与制造领域多年。依托持续发展积淀，公司生产规模稳步扩张，深度融入精益制造管理理念，组建实力雄厚的专业技术团队。

2022 年，由郑州机械研究所牵头修订齿条行业国家标准，公司核心负责人全程参与编制工作；全新标准 GB/Z 10096-2022 正式替代旧版 GB/T 10096-1988，并于 2022 年 10 月 12 日正式发布实施。

伴随高端装备市场对齿条精度要求的持续升级，公司产品凭借优异品质在国内外同行中脱颖而出，广泛应用于高端传动领域，逐步实现国产替代进口，现已成为国内极具影响力的精密齿条标杆品牌。

全流程自主生产是企业核心优势，齿条从毛坯加工到成品精加工，全程自主管控、一体化生产。核心工序采用齿面高频淬火工艺，确保产品硬度均匀、性能稳定、耐磨耐耗，大幅延长使用寿命。公司全套研磨设备均选用国内一线原装品牌，同时引进瑞士 SCHNEEBERGER 高端磨齿设备，齿条精度可达 DIN5 级，精度品质行业领先。

目前，企业已与国内多领域龙头企业建立长期战略合作关系，产销规模连年稳步增长。公司重视技术创新与自主研发，累计斩获十余项发明专利、实用新型专利，先后荣获国家高新技术企业、浙江省专精特新中小企业、国家级科技型中小企业等多项权威认证，是国内现阶段规模领先、实力雄厚的专业化精密齿条生产基地。

Zhejiang Suote Transmission Technology Co., Ltd. was founded in 2016. For years, the enterprise has been deeply engaged in the R&D and manufacturing of high-precision racks. With sustained development and accumulation, the company has steadily expanded its production scale, thoroughly adopted lean manufacturing management concepts, and built a strong professional technical team.

In 2022, the national industry standard for racks was revised under the leadership of Zhengzhou Research Institute of Mechanical Engineering. Core management personnel of our company fully participated in the standard compilation. The new standard GB/Z 10096-2022 officially replaced the old version GB/T 10096-1988, and was released and implemented on October 12, 2022.

With the continuous upgrading of precision requirements for racks in the high-end equipment market, our products stand out among domestic and foreign peers by virtue of superior quality. Widely applied in high-end transmission fields, our products gradually realize import substitution and have become a benchmark brand of high-precision racks with great influence in China.

In-house full-process production is our core advantage. All racks are independently controlled and integrally produced from blank processing to finished finishing. The key process adopts tooth surface high-frequency quenching to ensure uniform hardness, stable performance, excellent wear resistance and longer service life. All grinding equipment is equipped with first-class domestic original brands. Meanwhile, we introduce high-end gear grinding machines from the Swiss brand SCHNEEBERGER, enabling our racks to reach DIN 5 precision grade, leading the industry in accuracy and quality.

At present, the company has established long-term strategic cooperative relations with leading enterprises in various domestic industries, with annual production and sales volume growing steadily. Attaching great importance to technological innovation and independent research and development, we have obtained more than ten invention patents and utility model patents. We have been awarded many authoritative honors, including National High-tech Enterprise, Zhejiang Specialized, Refined, Differential and Innovative SME, and National Science and Technology-based SME. We are currently a large-scale and powerful professional production base of precision racks in China.

精工智造

SOPHISTICATED CRAFT

精密设备，高端研发团队，品质保障!
Precision equipment, high-end R&D team, quality assurance!

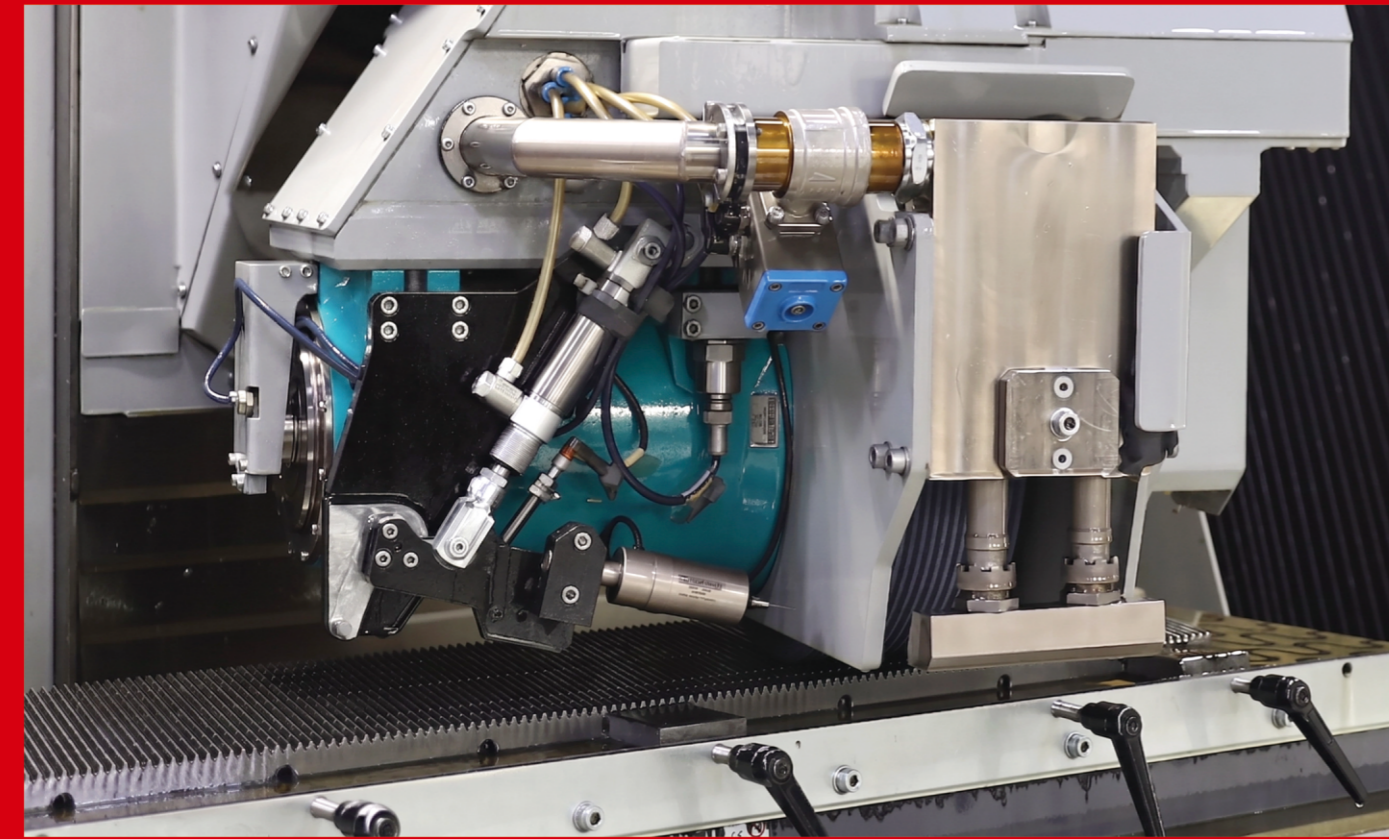
无可挑剔的智造设备
Impeccable intellectual equipment.

精确到丝米的测量单位
Accurate to the measuring unit of silk meter.

中外研发团队无缝衔接
Chinese and foreign R&D teams seamlessly link up.

索特是精工品质与品牌
Soteris Seiko quality and brand.

魅力完美结合的典范!
The perfect combination of charm!

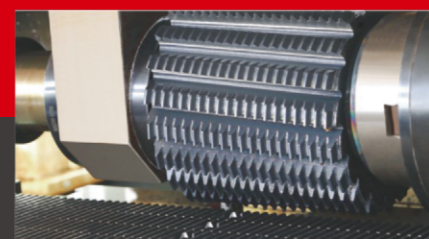


为全球客户 提供高品质产品

PROVIDING HIGH
QUALITY PRODUCTS
FOR GLOBAL CUSTOMERS

索特制造基地配备国内领先的数控加工设备，全现代化的设备以及管理系统，严格管控生产制造环节领先国际的技术标准，精细的工艺制造确保产品具备世界领先水平。

Sort Manufacturing Base is equipped with leading domestic NC machining equipment, fully modern equipment and management system, strict control of production and manufacturing links, leading international technical standards, fine process manufacturing to ensure that products have the world's leading level.



PROVIDING HIGH
QUALITY PRODUCTS
FOR GLOBAL CUSTOMERS



追求精密品质
打造卓越产品

Pursuing precision quality
Creating excellent products

CORPORATE CULTURE 企业文化

企业愿景 VISION

提升中国传动产品行业形象，
成就可持续发展的品牌领跑者！
Enhance the image of China's transmission industry
and achieve sustainable brand leader!

索特精神 SPIRIT

开拓，永不停歇！品质至上，追求卓越！
Open up and never stop! Quality first,
pursuit of excellence!

企业文化 CORPORATE CULTURE

创新科研、精密智造、诚心服务、确保客户放心！
Innovative research, precision manufacturing,
sincere service to ensure customer confidence!

索特质量观 CONCEPT OF QUALITY

工匠精神，精雕细琢，精益求精，顾客满意度98%
The spirit of craftsmen, carve and polish, strive for
perfection. customer satisfaction is more than 98%

承载力选择表

SELECTION AND LOAD TABLES

在具有充足的润滑油脂，安全及使用系数1.0，线速度v=1.5m/s的情况下，最大允许扭矩
Nmmwmm permissible torques in Nm with sdequate lubrication with gafely and application factor 1.0: and a speed of 1.5 mis

模数 module		1 b=10mm				1,5 b=15mm				2 b=20mm					
齿数 number of teeth		15	20	25	40	15	20	25	40	15	20	25	30	40	
齿条 rack 材料和齿形 material&tooth system	圆柱齿轮 pinion														
C45材料 C45 soft直齿 straight	C45材料 C45 soft	0.3	0.9	1.1	10.7	1.0	2.8	8.8	35.3	4.4	14.1	26.9	44.2	98.2	
	C45高频淬火 C45 ind.-hardened	1.2	2.5	4.5	14.7	2.0	5.7	17.7	60.0	13.8	28.1	48.0	74.1	134.7	
C45高频淬火 C45 ind.-hardened 直齿 straight	C45高频淬火 C45 ind.-hardened	2.0	8.7	14.7	25.3	7.0	28.2	52.9	95.3	29.8	75.0	128.2	151.7	200.2	
C45高频淬火 C45 ind.-hardened 齿面经磨削 直齿 ground teeth; straight	C45高频淬火 C45 ind.-hardened														
C45高频淬火 C45 ind.-hardened 齿面经磨削 斜齿 ground teeth; helical	C45高频淬火 C45 ind.-hardened														
16MnCr5渗碳淬火 16MnCr5 case-hardened 齿面经磨削 直齿 ground teeth; straight	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth									159.8	200.0	200.0	320.3		
16MnCr5渗碳淬火 16MnCr5 case-hardened 齿面经磨削 斜齿 ground teeth; helical	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth									180.9	227.8	227.8	365.2		
42CrMo4V调质 42CrMo4V quenched&tempered 直齿 straight	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth									42.8	68.2	68.2	186.7		
42CrMo4V调质 42CrMo4V quenched&tempered 斜齿 helical	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth									45.9	73.0	73.0	195.1		

模数 module		2.5 b=25mm				3 b=30mm				
齿数 number of teeth		15	20	25	40	15	20	25	30	40
齿条 rack 材料和齿形 material&tooth system	圆柱齿轮 pinion									
C45材料 C45 soft直齿 straight	C45材料 C45 soft	8.5	25.1	52.8	175.2	13	46	97.2	159.6	339.8
	C45高频淬火 C45 ind.-hardened	15.6	45.1	95	145.2	40.8	91.9	168.2	243.4	450.3
C45高频淬火 C45 ind.-hardened 直齿 straight	C45高频淬火 C45 ind.-hardened	60	149.9	255.8	399.7	87.1	215.1	440.0	497.3	780
C45高频淬火 C45 ind.-hardened 齿面经磨削 直齿 ground teeth; straight	C45高频淬火 C45 ind.-hardened									
C45高频淬火 C45 ind.-hardened 齿面经磨削 斜齿 ground teeth; helical	C45高频淬火 C45 ind.-hardened									
16MnCr5渗碳淬火 16MnCr5 case-hardened 齿面经磨削 直齿 ground teeth; straight	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth							420.1	530.2	880.0
16MnCr5渗碳淬火 16MnCr5 case-hardened 齿面经磨削 斜齿 ground teeth; helical	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth							504.7	605	
42CrMo4V调质 42CrMo4V quenched&tempered 直齿 straight	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth							138.0	234.8	620.2
42CrMo4V调质 42CrMo4V quenched&tempered 斜齿 helical	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth							145	245.1	

承载力选择表

SELECTION AND LOAD TABLES

在具有充足的润滑油脂，安全及使用系数1.0，线速度v=1.5m/s的情况下，最大允许扭矩
Nmmwmm permissible torques in Nm with sdequate lubrication with gafely and application factor 1.0: and a speed of 1.5 mis

模数 module		4 b=40mm					5 b=50mm				6 b=60mm		
齿数 number of teeth		15	20	25	30	40	15	20	25	40	15	20	25
齿条 rack 材料和齿形 material&tooth system	圆柱齿轮 pinion												
C45材料 C45 soft直齿 straight	C45材料 C45 soft	39.9	115.1	240.2	414.1	850.1	89.8	230.0	489.7	800.4	170.2	429.7	870.4
	C45高频淬火 C45 ind.-hardened	130	249.9	415.2	593.2	1100.4	259.7	499.7	800.4	1200.1	470	810.3	1400.5
C45高频淬火 C45 ind.-hardened 直齿 straight	C45高频淬火 C45 ind.-hardened	220.2	640.1	1070.1	1306.9	1710.4	450	1150.0	1660.4	1999.5	794.6	2200.5	2950.0
C45高频淬火 C45 ind.-hardened 齿面经磨削 直齿 ground teeth; straight	C45高频淬火 C45 ind.-hardened							1080	2060.0				3640.0
C45高频淬火 C45 ind.-hardened 齿面经磨削 斜齿 ground teeth; helical	C45高频淬火 C45 ind.-hardened							1330				3170.0	4180.0
16MnCr5渗碳淬火 16MnCr5 case-hardened 齿面经磨削 直齿 ground teeth; straight	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth								159.8	1330.4	2000.3		
16MnCr5渗碳淬火 16MnCr5 case-hardened 齿面经磨削 斜齿 ground teeth; helical	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth										770.1	180.9	1530.2
42CrMo4V调质 42CrMo4V quenched&tempered 直齿 straight	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth								42.8	575.0	1550.4		
42CrMo4V调质 42CrMo4V quenched&tempered 斜齿 helical	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth								240.8	45.9	589.9		

模数 module		8 b=80mm			10 b=100mm	
齿数 number of teeth		15	20	25	20	
齿条 rack 材料和齿形 material&tooth system	圆柱齿轮 pinion					
C45材料 C45 soft直齿 straight	C45材料 C45 soft	420.1	1050.5	2101.0		
	C45高频淬火 C45 ind.-hardened	1149.5	2101.0	3398.0		4000
C45高频淬火 C45 ind.-hardened 直齿 straight	C45高频淬火 C45 ind.-hardened	1898.0	4502.0	7500.0		9900.0
C45高频淬火 C45 ind.-hardened 齿面经磨削 直齿 ground teeth; straight	C45高频淬火 C45 ind.-hardened		6870.0			12850.0
C45高频淬火 C45 ind.-hardened 齿面经磨削 斜齿 ground teeth; helical	C45高频淬火 C45 ind.-hardened					14000.0
16MnCr5渗碳淬火 16MnCr5 case-hardened 齿面经磨削 直齿 ground teeth; straight	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth					
16MnCr5渗碳淬火 16MnCr5 case-hardened 齿面经磨削 斜齿 ground teeth; helical	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth					
42CrMo4V调质 42CrMo4V quenched&tempered 直齿 straight	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth					
42CrMo4V调质 42CrMo4V quenched&tempered 斜齿 helical	16MnCr5 渗碳淬火 16MnCr5 case-hardened 齿面经磨削 ground teeth					

齿条装配说明

INSTRUCTION OF RACK
ASSEMBLY STEPS

为了可以更顺利的安装连接用齿条，标准齿条的两端断面将会加工为半齿齿底，以方便跟下一支齿条的端面半齿齿底连接成一个全齿。如图表示为两支齿条如何连接并由齿规可以拥有准确的齿距位置。关于斜齿齿条相接可以借由反向齿规的配合以便可以精准的连接齿条。

1.在齿条安装相接时，我们建议先锁上齿条侧面的安装孔，并依照基座上相对应的孔位依序锁上;并借由安装齿规可以很准确的将齿条的齿距位置安装完成。

2.最后再将齿条上的两端侧面的固定销孔给固定上即完成安装。

To ensure smoother installation of connecting racks, both end faces of standard racks are machined to the half-tooth root form. This allows easy meshing with the half-tooth root on the end face of the next rack to form a full tooth. The diagram shows how two racks are connected and accurately positioned for correct tooth pitch using a tooth gauge. For helical rack connection, a reverse tooth gauge can be used to achieve precise rack engagement.

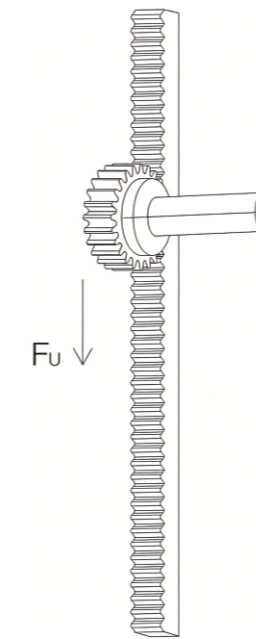
1. When installing and joining racks, we recommend first fastening the mounting holes on the side of the rack, then tightening them sequentially according to the corresponding holes on the base. The tooth pitch of the rack can be accurately positioned with the help of a mounting tooth gauge.

2. Finally, secure the fixing pin holes on both side faces of the rack to complete the installation.



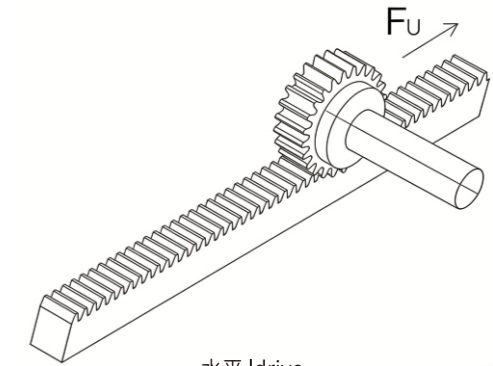
齿条传动形式

SELECTION RACK AND PINION DRIVE



上升 / 下降 | lift / lower
Fu = m · g + m · a

- 概括 | General
- 名称 | Description
- 加速度 | Acceleration
- 速度 | Speed
- 距离 | Distance
- 时间 | Time
- 转速 | Revolutions Perminute.rpm
- 分度圆直径 | Pitch Diameter
- 扭矩 | Torque
- 功率 | Power



水平 | drive
Fu = m · g · μ + m · a

代号/公式
symbol/formula

$a = \frac{V}{t} = \frac{2s}{t^2}$ 单位
dimension

$a = \frac{V}{t} = \sqrt{2as}$ m/s²

s m/s

t m

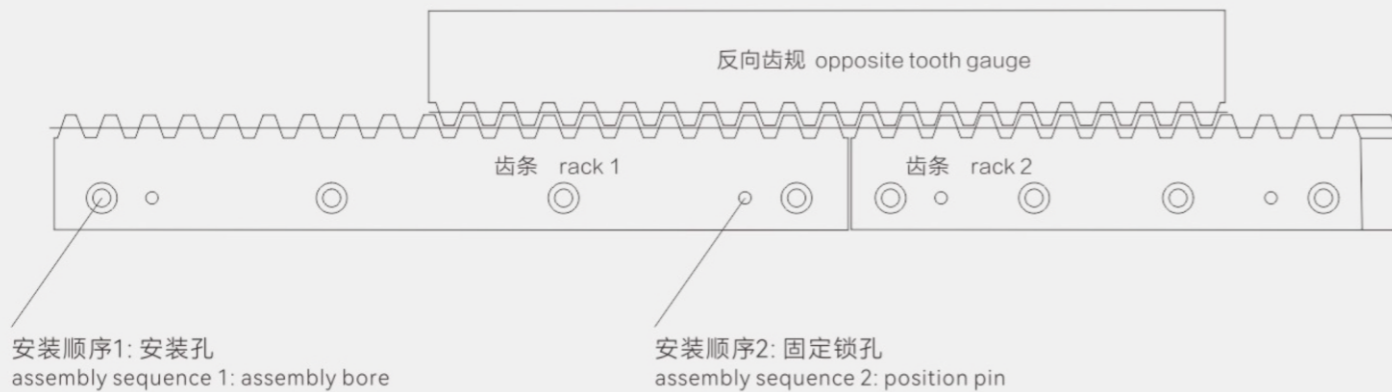
$n = \frac{v60.000}{\pi \cdot d_o}$ s

$d_o = \frac{F_u \cdot d_o}{2000}$ 1/min

$P = \frac{Mn}{9550} = \frac{F_u \cdot n \cdot d_o}{19100}$ mm

$M = \frac{F_u \cdot d_o}{2000}$ Nm

$P = \frac{Mn}{9550} = \frac{F_u \cdot n \cdot d_o}{19100}$ kW



安装顺序1: 安装孔
assembly sequence 1: assembly bore

安装顺序2: 固定锁孔
assembly sequence 2: position pin

第09页至第10页是关于各种齿轮、齿条配合时所能承受的最大允许功率表
On pages 2 and 4 are listed some selection tables for rack/pinion drives for the maximum permissible power.

设计参数 The dimensioning happened with application factor:

- 使用系数 ----- 1,0
application factor:
- 齿间连接安全系数 ----- 1,0
safety for stress at, single tooth contact
- 防齿裂安全系数 ----- 1,4
safety for Tooth root stress:
- 使用寿命 ----- 20,000h
service life in hours:

• 所测得的试验齿条的弯曲疲劳极限 σ_{Flim} 和试验齿条的接触疲劳极限 σ_{Hlim} 值如下
We calculate with following values for rolling load σ_{lim} and bending load σ_{Hlim}

材料	σ_{lim} [N/mm ²]	σ_{Hlim} [N/mm ²]
C45	440	550
C45 高频淬火 induction hardened	750	1250
16MnCr5 渗碳淬火	920	1500
Carburized and hardened 42CrMo4V	600	730



规格参数

SPECIFICATION

型号: 552020100
规格: 24x24x1000
模数: M2
齿数: Z=150
压力角: $\alpha=20$
齿顶高系数: $ha=1$
齿型: 斜齿
右旋角: $19^{\circ}31'42''$
精度等级: DIN6国标5级
硬度处理: 齿面高频淬火 HRC48-52°
生产工艺: 四面研磨, 齿面研磨

Model: 552020100
Specification: 24x24x1000
Module: M2
The number of teeth: Z=150
Pressure angle: $\alpha=20$
Addendum coefficient: $ha=1$
Tooth profile: helical teeth
Right angle: $19^{\circ}31'42''$
Precision grade: DIN6 GB5
Hardness treatment: Tooth surface high frequency HRC48-52°
Production process: four side grinding, tooth surface grinding



规格参数

SPECIFICATION

型号: 552030100
规格: 29x29x1000
模数: M3
齿数: Z=100
压力角: $\alpha=20$
齿顶高系数: $ha=1$
齿型: 斜齿
右旋角: $19^{\circ}31'42''$
精度等级: DIN6国标5级
硬度处理: 齿面高频淬火 HRC48-52°
生产工艺: 四面研磨, 齿面研磨

Model: 552030100
Specification: 29x29x1000
Module: M3
The number of teeth: Z=100
Pressure angle: $\alpha=20$
Addendum coefficient: $ha=1$
Tooth profile: helical teeth
Right angle: $19^{\circ}31'42''$
Precision grade: DIN6 GB5
Hardness treatment: Tooth surface high frequency HRC48-52°
Production process: four side grinding, tooth surface grinding



技术要求

TECHNICAL REQUIREMENT

精度等级: DIN6国标5级
 材料: S45C/42CrMo
 齿型: 直齿
 硬度处理: 高频淬火HRC48-52/HRC50-55
 生产工艺: 硬齿面处理后四面平磨, 齿面研磨

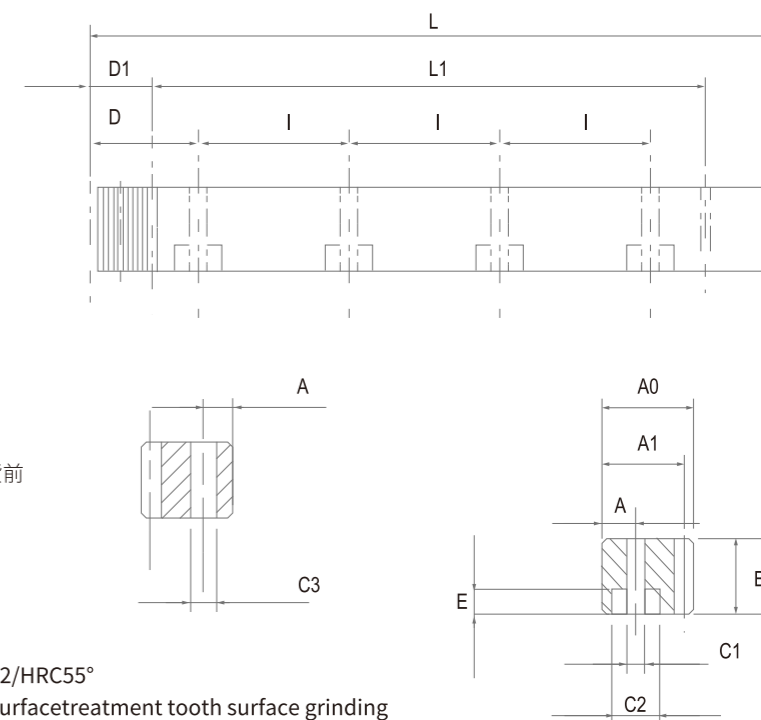
亦供应无钻孔的齿条, 请与型号后备注"N", 如551020100-N。
 不同尺寸与材质可以依照图面客制化。

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前
 请与本公司联系确认。

Precision grade: DIN6 National standard 5
 Material Science: S45C/42CrMo
 MoTooth type: Straight tooth
 Hardness treatment: High frequency quenching HRC48-52/HRC55°
 Production process: Four side grinding after hard tooth surfacetreatment tooth surface grinding

Racks without holes are also available. Note "N" in the end of code number. I.e. 551020100-N.
 Other Dimensions/ Materials could be customized by drawings.

The content of this document is subject to change without notice.
 Please contact us before ordering.



端面齿距 $P_e = \text{模数} \times \pi$ $F_p = \text{总齿距误差}$

单位/Dimension: mm

型号 Code	模数 Module	Pt	L	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3	Fp
551 010 050	1.5	4.7123	499.51	106	17	17	15.5	62.44	124.88	4	7	6	9.5	7	29	441.5	5.7	0.029
551 010 100	1.5	4.7123	999.03	212	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.0	5.7	0.033
551 015 050	1.5	4.7123	499.50	106	19	19	17.5	62.44	124.88	4	8	7	11	7	29	441.5	5.7	0.029
551 015 100	1.5	4.7123	999.03	212	19	19	17.5	62.44	124.88	8	8	7	11	7	29	941.0	5.7	0.033
551 020 050	2	6.2831	502.65	80	24	24	22	62.83	125.66	4	8	7	11	7	31.3	440.1	5.7	0.029
551 020 100	2	6.2831	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.7	5.7	0.034
551 030 050	3	9.4247	508.94	54	29	29	26	63.62	127.23	4	9	10	15	9	34.4	440.1	7.7	0.032
551 030 100	3	9.4247	1017.88	108	29	29	26	63.62	127.23	8	9	10	15	9	34.4	949.1	7.7	0.037
551 040 050	4	12.5666	502.65	40	39	39	35	62.83	125.66	4	12	10	15	9	37.5	427.7	7.7	0.034
551 040 100	4	12.5666	1005.31	80	39	39	35	62.83	125.66	8	12	10	15	9	37.5	930.3	7.7	0.04
551 050 050	5	15.7079	502.65	32	49	49	34	62.83	125.66	4	12	14	20	13	30.1	442.4	11.7	0.034
551 050 100	5	15.7079	1005.31	64	49	49	34	62.83	125.66	8	12	14	20	13	30.1	945.0	11.7	0.04
551 060 050	6	18.8495	508.94	27	59	59	43	63.62	127.23	4	16	18	26	17	31.4	446.1	15.7	0.034
551 060 100	6	18.8495	1017.88	54	59	59	43	63.62	127.23	8	16	18	26	17	31.4	955.0	15.7	0.04
551 080 050	8	25.1327	502.65	20	79	79	71	62.83	125.66	4	25	22	33	21	26.6	449.5	19.7	0.037
551 080 100	8	25.1327	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952.0	19.7	0.043
551 100 100	10	31.4159	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.67	754.0	19.7	0.043
551 120 100	12	37.6991	1017.88	27	120	120	108	63.6	127.23	8	40	39	58	38	127.23	763.4	19.7	0.046

技术要求

TECHNICAL REQUIREMENT

精度等级: DIN8国际7级
材 料: S45C
齿 型: 直齿
硬度处理: 调质处理HB20-25°
生产工艺: 四面平磨精插

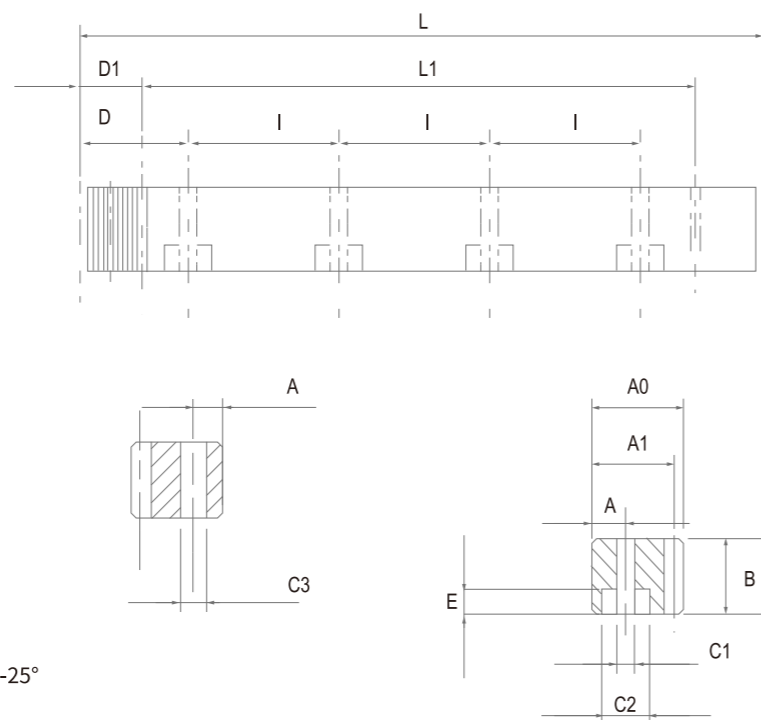
亦供应无钻孔的齿条, 请与型号后备注"N", 如661020100-N。
不同尺寸与材质以可依照图面客制化。

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前
请与本公司联系确认。

Accuracy level: DIN8 international 7 level.
Material: S45C
Tooth profile: straight tooth
Hardness treatment: quenching and tempering treatment HB20-25°
Production process: four side flat grinding and fine cutting

Racks without holes are also available. Note "N" in the end of code number. I.e. 661020100-N.
Other Dimensions/ Materials could be customized by drawings.

The content of this document is subject to change without notice.
Please contact us before ordering.



技术要求

TECHNICAL REQUIREMENT

精度等级: DIN8国际7级
材 料: S45C
齿 型: 直齿
硬度处理: 高频淬火HRC48-52°
生产工艺: 四面平磨精插, 表面发黑或磷化

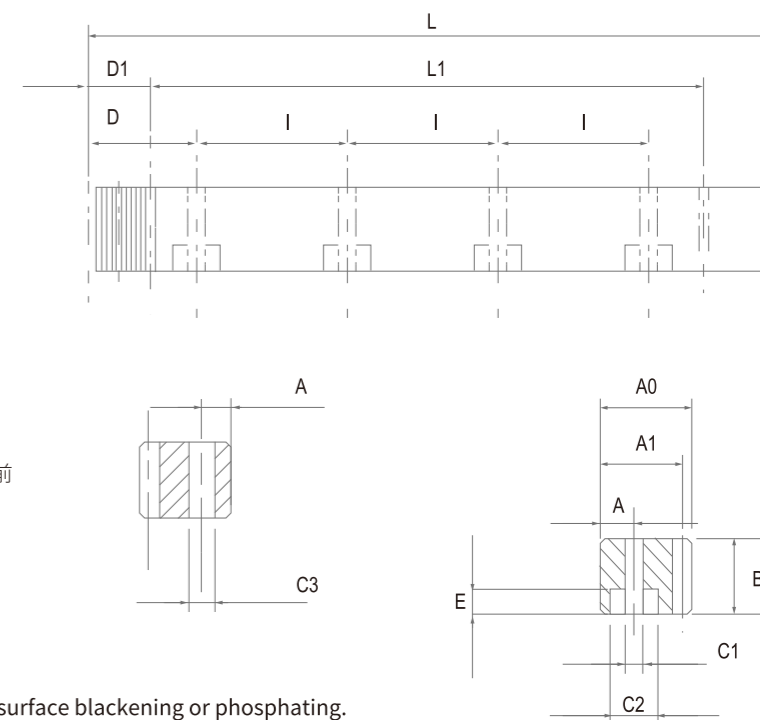
亦供应无钻孔的齿条, 请与型号后备注"N", 如STOER010N。
不同尺寸与材质以可依照图面客制化。

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前
请与本公司联系确认。

Accuracy level: DIN8 international 7 level.
Material: S45C
Tooth profile: straight tooth
Hardness treatment: high frequency quenching HRC48-52
Production process: four sides flat grinding, fine insertion, surface blackening or phosphating.

Racks without holes are also available. Note "N" in the end of code number. I.e. SOTER010N.
Other Dimensions/ Materials could be customized by drawings.

The content of this document is subject to change without notice.
Please contact us before ordering.



端面齿距 $P_e = \text{模数} \times \pi$ $F_p = \text{总齿距误差}$

单位/Dimension: mm

型号 Code	模数 Module	Pt	L	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3	Fp
661 010 050	1.5	4.7123	499.51	106	17	17	15.5	62.44	124.88	4	7	6	9.5	7	29	441.5	5.7	0.066
661 010 100	1.5	4.7123	999.03	212	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.0	5.7	0.074
661 015 050	1.5	4.7123	499.50	106	19	19	17.5	62.44	124.88	4	8	7	11	7	29	441.5	5.7	0.066
661 015 100	1.5	4.7123	999.03	212	19	19	17.5	62.44	124.88	8	8	7	11	7	29	941.0	5.7	0.074
661 020 050	2	6.2831	502.65	80	24	24	22	62.83	125.66	4	8	7	11	7	31.3	440.1	5.7	0.066
661 020 100	2	6.2831	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.7	5.7	0.074
661 030 050	3	9.4247	508.94	54	29	29	26	63.62	127.23	4	9	10	15	9	34.4	440.1	7.7	0.066
661 030 100	3	9.4247	1017.88	108	29	29	26	63.62	127.23	8	9	10	15	9	34.4	949.1	7.7	0.072
661 040 050	4	12.5666	502.65	40	39	39	35	62.83	125.66	4	12	10	15	9	37.5	427.7	7.7	0.072
661 040 100	4	12.5666	1005.31	80	39	39	35	62.83	125.66	8	12	10	15	9	37.5	930.3	7.7	0.078
661 050 050	5	15.7079	502.65	32	49	49	34	62.83	125.66	4	12	14	20	13	30.1	442.4	11.7	0.072
661 050 100	5	15.7079	1005.31	64	49	49	34	62.83	125.66	8	12	14	20	13	30.1	945.0	11.7	0.078
661 060 050	6	18.8495	508.94	27	59	59	43	63.62	127.23	4	16	18	26	17	31.4	446.1	15.7	0.072
661 060 100	6	18.8495	1017.88	54	59	59	43	63.62	127.23	8	16	18	26	17	31.4	955.0	15.7	0.078
661 080 050	8	25.1327	502.65	20	79	79	71	62.83	125.66	4	25	22	33	21	26.6	449.5	19.7	0.08
661 080 100	8	25.1327	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952.0	19.7	0.085
661 100 100	10	31.4159	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.67	754.0	19.7	0.09
661 120 100	12	37.6991	1017.88	27	120	120	108	63.6	127.23	8	40	39	58	38	127.23	763.4	19.7	0.09

端面齿距 $P_e = \text{模数} \times \pi$ $F_p = \text{总齿距误差}$

单位/Dimension: mm

型号 Code	模数 Module	Pt	L	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3	Fp
771 010 050	1.5	4.7123	499.51	106	17	17	15.5	62.44	124.88	4	7	6	9.5	7	29	441.5	5.7	0.08
771 010 100	1.5	4.7123	999.03	212	17	17	15.5	62.44	124.88	8	7	6	9.5	7	29	941.0	5.7	0.09
771 015 050	1.5	4.7123	499.50	106	19	19	17.5	62.44	124.88	4	8	7	11	7	29	441.5	5.7	0.08
771 015 100	1.5	4.7123	999.03	212	19	19	17.5	62.44	124.88	8	8	7	11	7	29	941.0	5.7	0.09
771 020 050	2	6.2831	502.65	80	24	24	22	62.83	125.66	4	8	7	11	7	31.3	440.1	5.7	0.08
771 020 100	2	6.2831	1005.31	160	24	24	22	62.83	125.66	8	8	7	11	7	31.3	942.7	5.7	0.09
771 030 050	3	9.4247	508.94	54	29	29	26	63.62	127.23	4	9	10	15	9	34.4	440.1	7.7	0.088
771 030 100	3	9.4247	1017.88	108	29	29	26	63.62	127.23	8	9	10	15	9	34.4	949.1	7.7	0.101
771 040 050	4	12.5666	502.65	40	39	39	35	62.83	125.66	4	12	10	15	9	37.5	427.7	7.7	0.095
771 040 100	4	12.5666	1005.31	80	39	39	35	62.83	125.66	8	12	10	15	9	37.5	930.3	7.7	0.109
771 050 050	5	15.7079	502.65	32	49	49	34	62.83	125.66	4	12	14	20	13	30.1	442.4	11.7	0.095
771 050 100	5	15.7079	1005.31	64	49	49	34	62.83	125.66	8	12	14	20	13	30.1	945.0	11.7	0.109
771 060 050	6	18.8495	508.94	27	59	59	43	63.62	127.23	4	16	18	26	17	31.4	446.1	15.7	0.095
771 060 100	6	18.8495	1017.88	54	59	59	43	63.62	127.23	8	16	18	26	17	31.4	955.0	15.7	0.109
771 080 050	8	25.1327	502.65	20	79	79	71	62.83	125.66	4	25	22	33	21	26.6	449.5	19.7	0.1
771 080 100	8	25.1327	1005.31	40	79	79	71	62.83	125.66	8	25	22	33	21	26.6	952.0	19.7	0.11
771 100 100	10	31.4159	1005.31	32	99	99	89	62.83	125.66	8	32	33	48	32	125.67	754.0	19.7	0.12
771 120 100	12	37.6991	1017.88	27	120	120	108	63.6	127.23	8	40	39	58	38	127.23	763.4	19.7	0.12



技术要求

TECHNICAL REQUIREMENT

精度等级: DIN6国际5级
 材料: S45C/42CrMo
 齿型: 斜齿
 右旋角: 19°31'42"
 硬度处理: 高频淬火HRC48-52°/渗碳淬火HRC50-55°
 生产工艺: 硬齿面处理后四面平磨, 齿面研磨

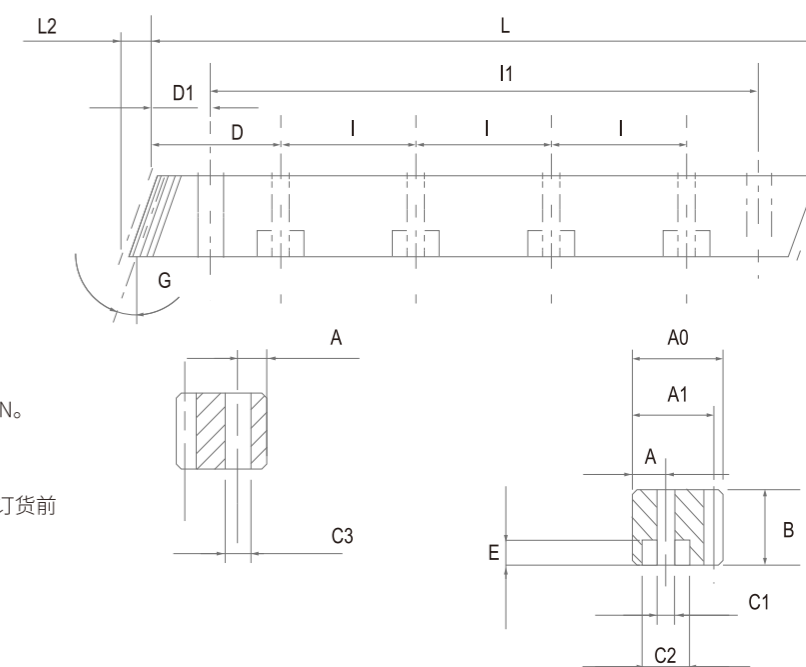
亦供应无钻孔的齿条, 请与型号后备注"N", 如STOER010N。
 不同尺寸与材质以可依照图面客制化。

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前
 请与本公司联系确认。

Accuracy level: DIN6 international 5 level.
 Material: S45C/42CrMo
 Tooth profile: helical teeth
 Right angle: 19°31'42"
 Hardness treatment: high frequency quenching HRC48-52°/HRC50-55°
 Production process: four sides flat grinding, fine insertion, surface blackening or phosphating.

Racks without holes are also available. Note "N" in the end of code number. I.e. SÜTER010N.
 Other Dimensions/ Materials could be customized by drawings.

The content of this document is subject to change without notice.
 Please contact us before ordering.



端面距 $P_e = \text{模数} \times \pi / \cos(19^\circ 31' 42'')$ $F_p = \text{总距误差}$

单位/Dimension: mm

型号 Code	模数 Module	Pt	L	L2	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3	Fp
552 010 050	1.5	4.9999	500.00	6	100	17	17	15.5	62.5	125	4	7	6	9.5	7	31.7	436.6	5.7	0.029
552 010 100	1.5	4.9999	1000.00	6	200	17	17	15.5	62.5	125	8	7	6	9.5	7	31.7	936.6	5.7	0.033
552 015 050	1.5	4.9999	500.00	6.74	100	19	19	17.5	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.029
552 015 100	1.5	4.9999	1000.00	6.74	200	19	19	17.5	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.033
552 020 050	2	6.6666	500.00	8.5	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.029
552 020 100	2	6.6666	1000.00	8.5	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.034
552 030 050	3	9.9999	500.00	10.3	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7	0.032
552 030 100	3	9.9999	1000.00	10.3	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	0.037
552 040 050	4	13.3333	506.67	13.8	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7	0.034
552 040 100	4	13.3333	1000.00	13.8	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	0.04
552 050 050	5	16.6666	500.00	17.4	30	49	49	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7	0.034
552 050 100	5	16.6666	1000.00	17.4	60	49	49	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	0.04
552 060 050	6	19.9999	500.00	20.9	25	59	59	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7	0.034
552 060 100	6	19.9999	1000.00	20.9	50	59	59	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	0.04
552 080 050	8	26.6667	480.00	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120	240.0	19.7	0.037
552 080 100	8	26.6667	960.00	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120	720.0	19.7	0.043
552 100 100	10	33.3333	1000.00	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125	750.0	19.7	0.043
552 120 100	12	39.9999	1000.00	42.56	25	120	120	108	40	125	8	40	39	58	38	125	750.0	19.7	0.046

技术要求

TECHNICAL REQUIREMENT

精度等级: DIN8 国际7级

材 料: S45C

齿 型: 斜齿

右 旋 角: 19°31'42"

硬度处理: 调质处理HB20-25°

生产工艺: 四面平磨精插

亦供应无钻孔的齿条, 请与型号后备注"N", 如STOER010N。

不同尺寸与材质以可依照图面客制化。

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前
请与本公司联系确认。

Accuracy level: DIN8 international 7 level.

Material: S45C

Tooth profile: helical teeth

Right angle: 19°31'42"

Hardness treatment: quenching and tempering treatment HB20-25°

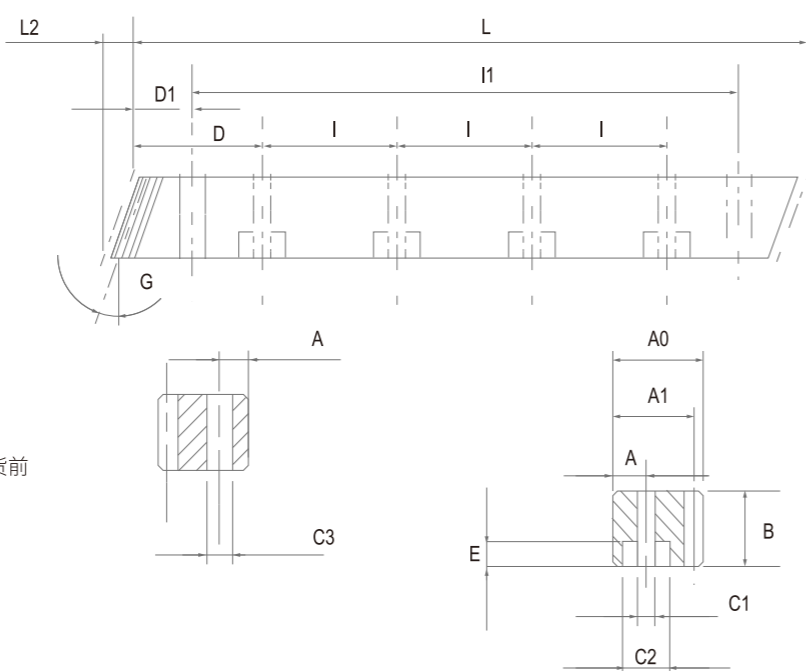
Production process: four sides flat grinding and fine cutting

Racks without holes are also available.Note"N" in the end of code number.i.e. SOTER010N.

Other Dimensions/ Materials could be customized by drawings.

The content of this document is subject to change without notice.

Please contact us before ordering.



技术要求

TECHNICAL REQUIREMENT

精度等级: DIN8 国际7级

材 料: S45C

齿 型: 斜齿

右 旋 角: 19°31'42"

硬度处理: 高频淬火HRC48-52°

生产工艺: 四面平磨精插, 表面发黑或磷化

亦供应无钻孔的齿条, 请与型号后备注"N", 如STOER010N。

不同尺寸与材质以可依照图面客制化。

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前
请与本公司联系确认。

Accuracy level: DIN8 international 7 level.

Material: S45C

Tooth profile: helical teeth

Right angle: 19°31'42"

Hardness treatment: high frequency quenching HRC48-52°

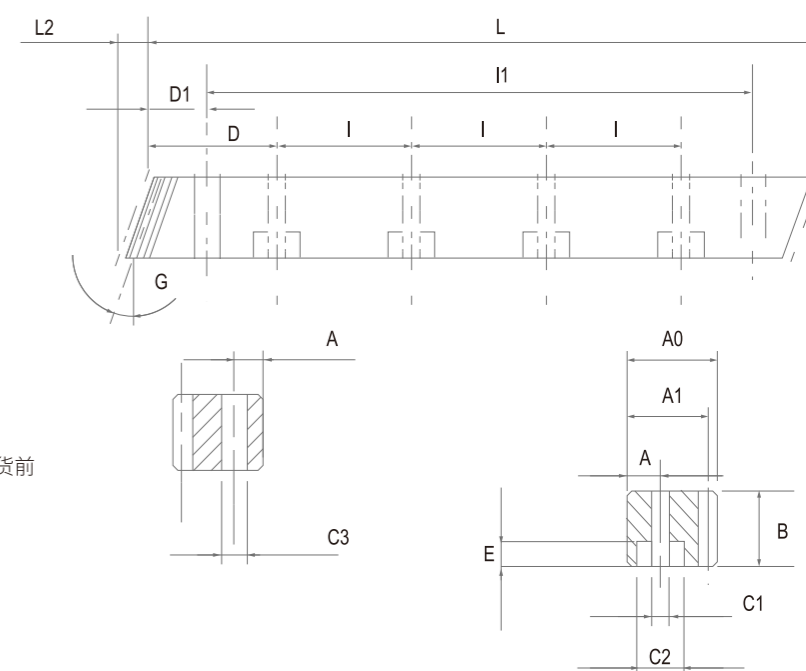
Production process: four sides flat grinding, fine insertion,surface blackening or phosphating.

Racks without holes are also available.Note"N" in the end of code number.i.e. SOTER010N.

Other Dimensions/ Materials could be customized by drawings.

The content of this document is subject to change without notice.

Please contact us before ordering.



端面距 $P_e = \text{模数} \times \pi / \cos(19^\circ 31' 42'')$ $F_p = \text{总距误差}$

单位/Dimension: mm

型号 Code	模数 Module	Pt	L	L2	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3	Fp
662 010 050	1.5	4.9999	500.00	6	100	17	17	15.5	62.5	125	4	7	6	9.5	7	31.7	436.6	5.7	0.066
662 010 100	1.5	4.9999	1000.00	6	200	17	17	15.5	62.5	125	8	7	6	9.5	7	31.7	936.6	5.7	0.074
662 015 050	1.5	4.9999	500.00	6.74	100	19	19	17.5	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.066
662 015 100	1.5	4.9999	1000.00	6.74	200	19	19	17.5	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.074
662 020 050	2	6.6666	500.00	8.5	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.066
662 020 100	2	6.6666	1000.00	8.5	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.074
662 030 050	3	9.9999	500.00	10.3	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7	0.066
662 030 100	3	9.9999	1000.00	10.3	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	0.072
662 040 050	4	13.3333	506.67	13.8	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7	0.072
662 040 100	4	13.3333	1000.00	13.8	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	0.078
662 050 050	5	16.6666	500.00	17.4	30	49	49	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7	0.072
662 050 100	5	16.6666	1000.00	17.4	60	49	49	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	0.078
662 060 050	6	19.9999	500.00	20.9	25	59	49	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7	0.072
662 060 100	6	19.9999	1000.00	20.9	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	0.078
662 080 050	8	26.6667	480.00	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120	240.0	19.7	0.08
662 080 100	8	26.6667	960.00	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120	720.0	19.7	0.085
662 100 100	10	33.3333	1000.00	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125	750.0	19.7	0.09
662 120 100	12	39.9999	1000.00	42.56	25	120	120	108	40	125	8	40	39	58	38	125	750.0	19.7	0.09

端面距 $P_e = \text{模数} \times \pi / \cos(19^\circ 31' 42'')$ $F_p = \text{总距误差}$

单位/Dimension: mm

型号 Code	模数 Module	Pt	L	L2	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3	Fp
772 010 050	1.5	4.9999	500.00	6	100	17	17	15.5	62.5	125	4	7	6	9.5	7	31.7	436.6	5.7	0.08
772 010 100	1.5	4.9999	1000.00	6	200	17	17	15.5	62.5	125	8	7	6	9.5	7	31.7	936.6	5.7	0.09
772 015 050	1.5	4.9999	500.00	6.74	100	19	19	17.5	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.08
772 015 100	1.5	4.9999	1000.00	6.74	200	19	19	17.5	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.09
772 020 050	2	6.6666	500.00	8.5	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.08
772 020 100	2	6.6666	1000.00	8.5	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.09
772 030 050	3	9.9999	500.00	10.3	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7	0.088
772 030 100	3	9.9999	1000.00	10.3	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	0.101
772 040 050	4	13.3333	506.67	13.8	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7	0.095
772 040 100	4	13.3333	1000.00	13.8	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	0.109
772 050 050	5	16.6666	500.00	17.4	30	49	49	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7	0.095
772 050 100	5	16.6666	1000.00	17.4	60	49	49	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	0.109
772 060 050	6	19.9999	500.00	20.9	25	59	49	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7	0.095
772 060 100	6	19.9999	1000.00	20.9	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	0.109
772 080 050	8	26.6667	480.00	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120	240.0	19.7	0.1
772 080 100	8	26.6667	960.00	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120	720.0	19.7	0.11
772 100 100	10	33.3333	1000.00	35.11	30	99	99	89	62.5	125	8	32	33	48	32	125	750.0	19.7	0.12
772 120 100	12	39.9999	1000.00	42.56	25	120	120	108	40	125	8	40	39	58	38	125	750.0	19.7	0.12

V型研磨导轨直齿条

V-TYPE GROUND STRAIGHT GUIDE RACK

技术要求

TECHNICAL REQUIREMENT

精度等级: DIN6e25

材 料: S45C/42CrMo

齿 型: 直齿

硬度处理: 高频淬火HRC48-52°/渗碳淬火HRC55-60°

生产工艺: 四面研磨, 齿面研磨, V型导轨面研磨

V型导轨硬度HRC50-55°/HRC55-60°

Accuracy level: DIN6e25

Material: S45C/42CrMo

Tooth type: straight tooth.

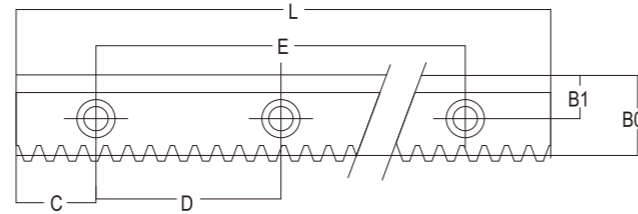
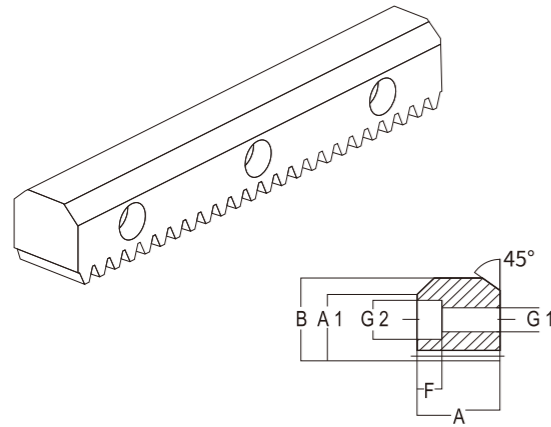
Production process: four sides grinding, tooth surface

grinding, Vrail surface grinding.

Vrail hardness HRC50-52°/HRC55-60°

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前
请与本公司联系确认。

The content of this document is subject to change without notice.
Please contact us before ordering.



总齿距误差/Total pitch error GTF/1000<0.036mm

单位/Dimension: mm

型号 Code	模数 Module	Pt	L	A	B	B0	C	D	B1	A1	G1	G2	F	E
VX55315063	1.5915	5	630	14.5	24.5	22.9	15	100	13	20	7	11	7	600
VX55315103	1.5915	5	1030	14.5	24.5	22.9	15	100	13	20	7	11	7	1000
VX55320063	1.5915	5	630	19.5	29.5	27.9	15	100	15.5	23.5	9	15	9	600
VX55320103	1.5915	5	1030	19.5	29.5	27.9	15	100	15.5	23.5	9	15	9	1000
VX55325063	2.3873	7.5	630	24.7	33	30.61	15	100	18.5	25.2	9	15	9	600
VX55325093	2.3873	7.5	930	24.7	33	30.61	15	100	18.5	25.2	9	15	9	900
VX55325123	2.3873	7.5	1230	24.7	33	30.61	15	100	18.5	25.2	9	15	9	1200
VX55335063	3.1831	10	630	34.6	46.6	43.41	15	100	28.6	36.7	11	18	11	600
VX55335093	3.1831	10	930	34.6	46.6	43.41	15	100	28.6	36.7	11	18	11	900
VX55335123	3.1831	10	1230	34.6	46.6	43.41	15	100	28.6	36.7	11	18	11	1200



V型研磨导轨斜齿条

V-TYPE GROUND HELICAL GUIDE RACK

技术要求

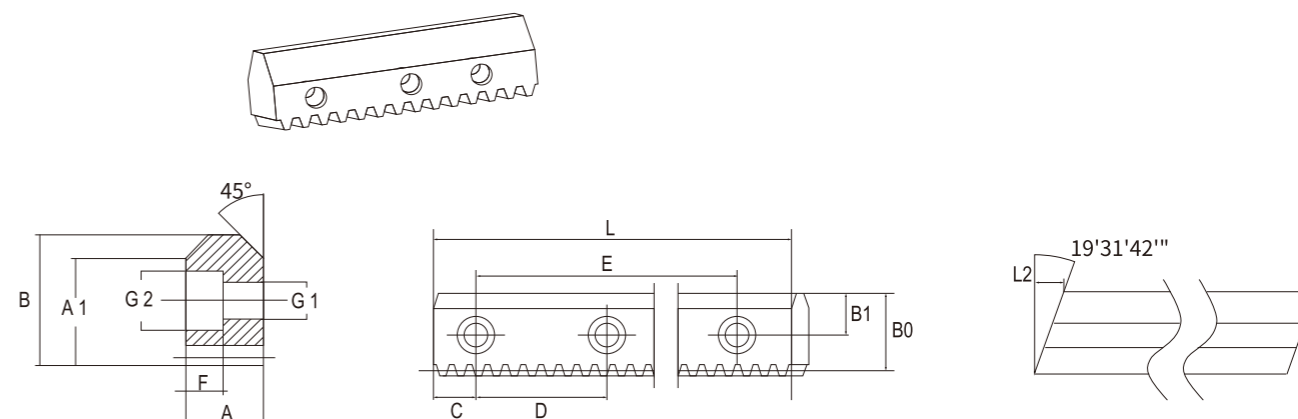
TECHNICAL REQUIREMENT

精度等级: DIN6e25
 材 料: S45C/42CrMo
 齿 型: 斜齿
 硬度处理: 高频淬火HRC48-52°/渗碳淬火HRC55-60°
 生产工艺: 四面研磨, 齿面研磨, V型导轨面研磨
 V型导轨硬度HRC48-55°/HRC55-60°

Accuracy level: DIN6e25
 Material: S45C/42CrMo
 Tooth type: helicaltooth.
 Hardness treatment: high frequency quenching HRC48-52carburizing quenching HRC55-60°
 Production process: four sides grinding, tooth surface grinding,Vrail surface grinding.
 Vrail hardness HRC48-52°/HRC55-60°

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前
 请与本公司联系确认。

The content of this document is subject to change without notice.
 Please contact us before ordering.



总齿距误差/Total pitch error GTF/1000<0.036mm

单位/Dimension: mm

型号 Code	模数 Module	Pt	L	L2	A	B	B0	C	D	B1	A1	G1	G2	F	E
VXX66315063	1.5	4.9999	630	5.143	14.5	24.5	22.9	65	100	13	20	7	11	7	500
VXX66315103	1.5	4.9999	1030	5.143	14.5	24.5	22.9	65	100	13	20	7	11	7	900
VXX66320063	1.5	4.9999	630	6.916	19.5	29.5	27.9	65	100	15.5	23.5	9	15	9	500
VXX66320103	1.5	4.9999	1030	6.916	19.5	29.5	27.9	65	100	15.5	23.5	9	15	9	900
VXX66325064	2	6.6666	630	8.76	24.7	33	30.61	70	100	18.5	25.2	9	15	9	500
VXX66325094	2	6.6666	930	8.76	24.7	33	30.61	70	100	18.5	25.2	9	15	9	800
VXX66325124	2	6.6666	1230	8.76	24.7	33	30.61	70	100	18.5	25.2	9	15	9	1100
VXX66335063	3	9.9999	630	12.272	34.6	46.6	43.41	65	100	28.6	36.7	11	18	11	500
VXX66335093	3	9.9999	930	12.272	34.6	46.6	43.41	65	100	28.6	36.7	11	18	11	800
VXX66335123	3	9.9999	1230	12.272	34.6	46.6	43.41	65	100	28.6	36.7	11	18	11	1100

零背隙齿条

ZERO-BACKLASH RACK

技术要求

TECHNICAL REQUIREMENT

材料: S45C
 硬度处理: 高频淬火HRC48-52°
 生产工艺: 四面平磨, 表面镀黑铬

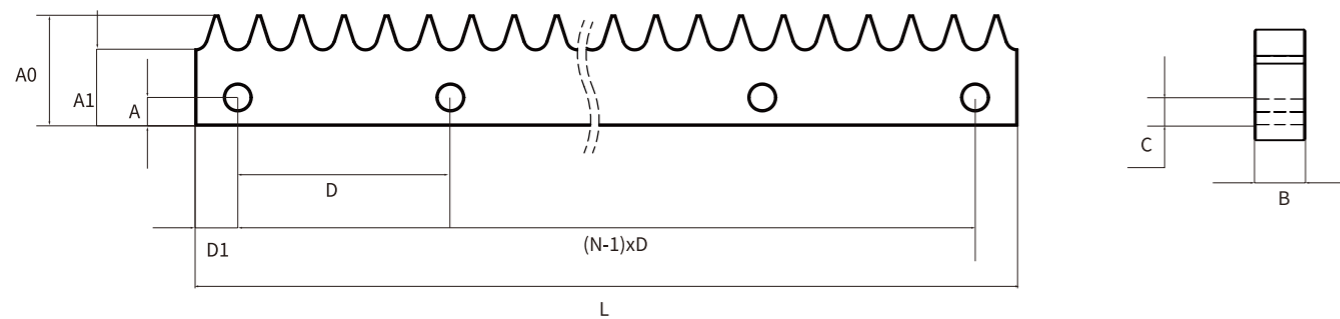
亦供应无钻孔的齿条, 请于型号后备注"N", 如STLBX1610-N。
 不同尺寸于材质又可依照图纸客制化。

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前请与本公司联系确认。

Material: S45C
 Heat treatment: High-frequency quenching, hardness HRC48-52°
 Processing technology: Four-side surface grinding, surface black chromium plating

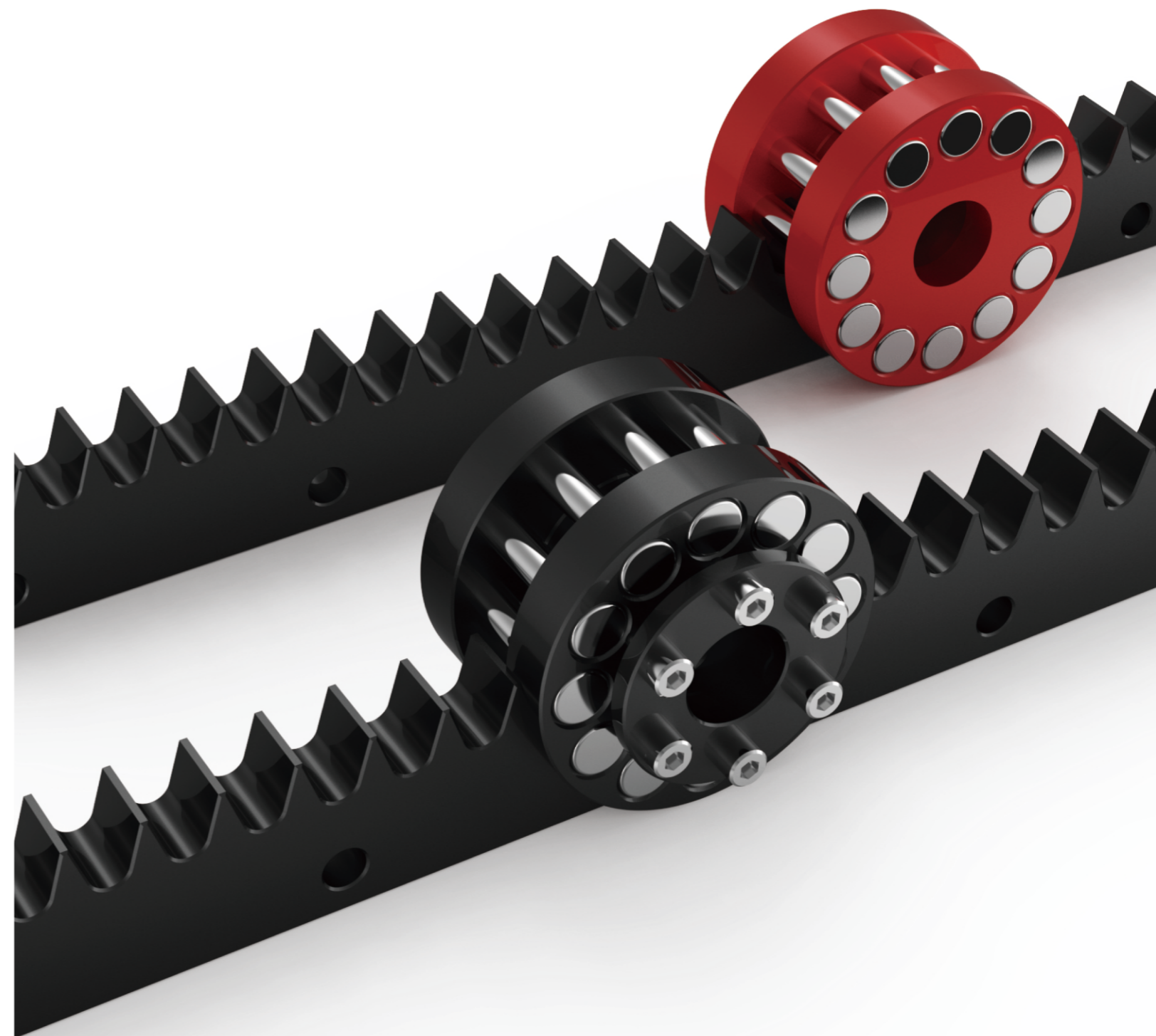
Non-drilled type available, add suffix "N" (e.g. STLBX1610-N).
 Custom size and material upon drawing.

All product models and specifications in this brochure are subject to change without prior notice. Please confirm with our company before ordering.



单位/Dimension: mm

型号 Code	节距 Module	L	齿数 Tooth No.	B	A0	A1	D	D1	孔数 Hole No.	A	C
STLBX 1610	16	992	62	12	30.5	20.2	96	16	11	7	7
STLBX 2010	20	1000	50	16	42	29	100	50	10	10	9
STLBX 2510	25	1000	40	19	48	31.5	100	50	10	12	11





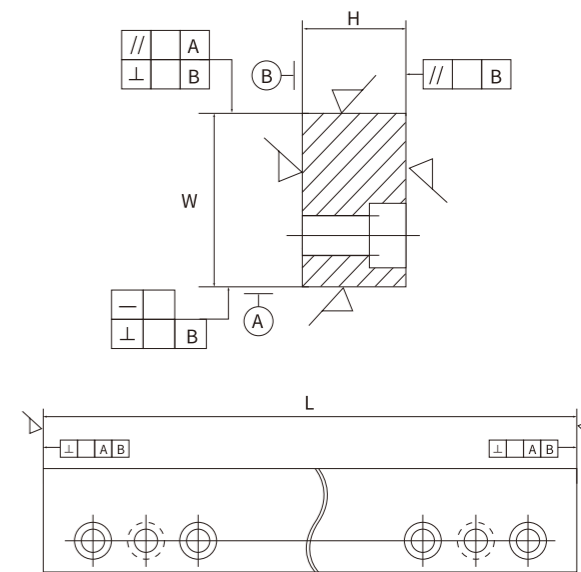
矩形导轨

RECTANGULAR GUIDE RAIL

精度参数

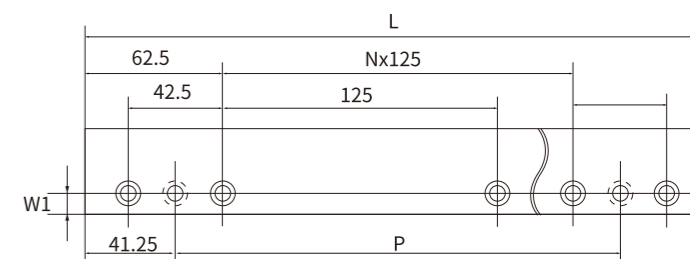
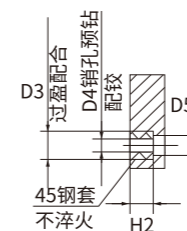
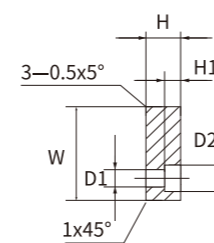
PRECISION PARAMETER

项目	单位	数值	
形位公差(在1m长上)	直线度(—)	mm	0.02
	平面度(□)	mm	0.02
	垂直度(⊥)	mm	0.02
	平行度(//)	mm	0.02
形位公差(∇)	mm	0.8	
外形尺寸一致性	mm	0.02	



技术参数

TECHNICAL SPECIFICATIONS



技术要求

TECHNICAL REQUIREMENT

材料: 42CrMo
 硬度处理: 导轨面高频淬火HRC55-60°
 生产工艺: 四面研磨

Material: 42CrMo
 High frequency quenching of guide rail surface HRC55-60°
 Production process: four side grinding

型号 Code	L	W	W1	H	H1	H2	N	P	D1	D2	D3	D4	D5	螺栓规格
STJ15-1000	1000	40	10	15	7	10	7	917.5	Φ7.5	Φ11	Φ12H7	Φ5.8	Φ8	M6x168.8级
STJ15-500	500	40	10	15	7	10	3	417.5	Φ7.5	Φ11	Φ12H7	Φ5.8	Φ8	M6x168.8级
STJ20-1000	1000	65	20	20	9	13	7	917.5	Φ9.5	Φ15	Φ12H7	Φ5.8	Φ8	M6x208.8级
STJ20-500	500	65	20	20	9	13	3	417.5	Φ9.5	Φ15	Φ12H7	Φ5.8	Φ8	M6x208.8级
STJ25-1000	1000	40	12	25	9	13	7	917.5	Φ9.5	Φ15	Φ14H7	Φ7.8	Φ10	M8x258.8级
STJ25-500	500	40	12	25	9	13	3	417.5	Φ9.5	Φ15	Φ14H7	Φ7.8	Φ10	M8x258.8级
STJ30-1000	1000	45	15	30	11	13	7	917.5	Φ11.5	Φ18	Φ14H7	Φ7.8	Φ10	M8x308.8级
STJ30-500	500	45	15	30	11	13	3	417.5	Φ11.5	Φ18	Φ14H7	Φ7.8	Φ10	M8x308.8级
STJ35-1000	1000	60	20	35	13	15	7	917.5	Φ13.5	Φ20	Φ16H7	Φ9.7	Φ12	M12x358.8级
STJ35-500	500	60	20	35	13	15	3	417.5	Φ13.5	Φ20	Φ16H7	Φ9.7	Φ12	M12x358.8级
STJ45-1000	1000	90	20	45	13	20	7	917.5	Φ13.5	Φ20	Φ16H7	Φ9.7	Φ12	M12x458.8级
STJ45-500	500	90	20	45	13	20	3	417.5	Φ13.5	Φ20	Φ16H7	Φ9.7	Φ12	M12x458.8级

V型研磨导轨

V GRINDING GUIDE

技术要求

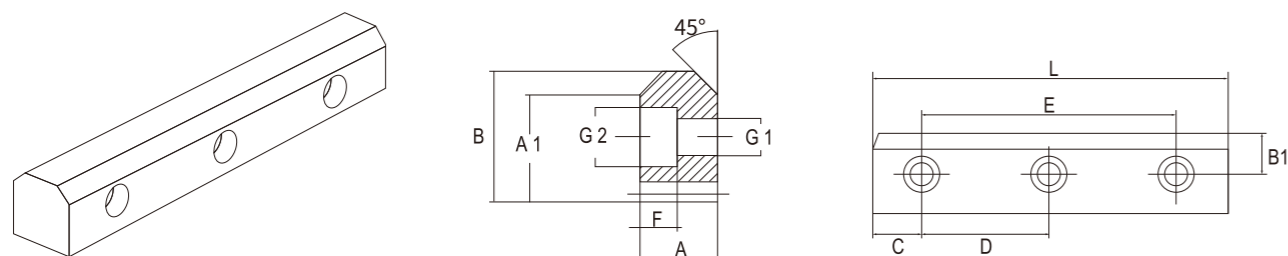
TECHNICAL REQUIREMENT

材料: S45C/42CrMo
 硬度处理: V型导轨面高频淬火HRC48-52°/HRC55-60°
 生产工艺: 四面研磨, V型导轨面研磨

Material: S45C/42CrMo
 Hardness treatment: Vrail surface hardness HRC48-52°/HRC55-60°
 Production process: four side grinding, Vrail surface grinding

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前请与本公司联系确认。

The content of this document is subject to change without notice. Please contact us before ordering.



单位/Dimension: mm

型号 Code	L	A	B	C	D	B1	A1	G1	G2	F	E
VX55315063	630	14.5	24.5	15	100	13	20	7	11	7	600
VX55315103	1030	14.5	24.5	15	100	13	20	7	11	7	1000
VX55320063	630	19.5	29.5	15	100	15.5	23.5	9	15	9	600
VX55320103	1030	19.5	29.5	15	100	15.5	23.5	9	15	9	1000
VX55325063	630	24.7	33	15	100	18.5	25.2	9	15	9	600
VX55325093	930	24.7	33	15	100	18.5	25.2	9	15	9	900
VX55325123	1230	24.7	33	15	100	18.5	25.2	9	15	9	1200
VX55335063	630	34.6	46.6	15	100	28.6	36.7	11	18	11	600
VX55335093	930	34.6	46.6	15	100	28.6	36.7	11	18	11	900
VX55335123	1230	34.6	46.6	15	100	28.6	36.7	11	18	11	1200

研磨斜齿轮

GROUND HELICAL GEAR

技术要求

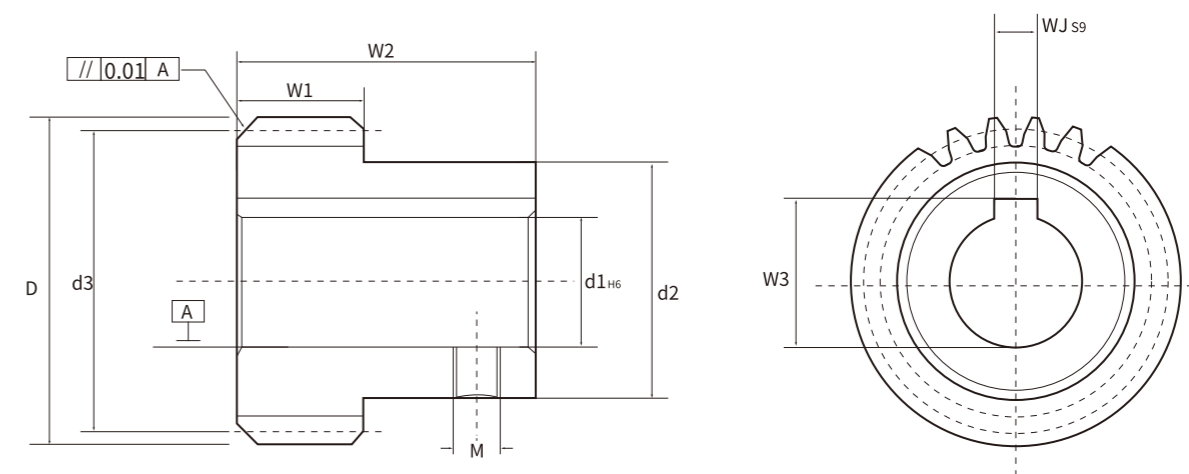
TECHNICAL REQUIREMENT

精度等级: DIN6国际5级
 材料: 40Cr/20CrMnTi
 齿型: 斜齿
 右旋角: 19°31'42"
 硬度处理: 高频淬火HRC48-52°/整体渗碳淬火HRC50-55°
 生产工艺: 齿面研磨

Accuracy level: DIN6international 5 level.
 Material: 40Cr/20CrMnTi
 Tooth profile: helical teeth
 Left angle: 19°31'42"
 Hardness treatment: high frequency quenching HRC45-50°
 whole carburizing quenching HRC55-60°
 Production process: gear grinding

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前请与本公司联系确认。

The content of this document is subject to change without notice. Please contact us before ordering.



单位/Dimension: mm

型号 Code	模数 Module	齿数 Tooth No.	d1H6	d2	d3	D	W1	W2	W3	WJS9	M
YMCL151433	1.5	25	14	Φ26	Φ39.97	Φ42.97	19	33	16.3	5	4
YMCL151635	1.5	24	16	Φ28	Φ38.20	Φ41.20	15	35.5	18.3	5	6
YMCL151935	1.5	24	19	Φ28	Φ38.20	Φ41.20	15	35.5	21.8	6	6
YMCL152250	1.5	30	22	Φ38	Φ47.74	Φ50.74	25	50	24.8	6	6
YMCL152035	1.5	24	20	Φ28	Φ38.20	Φ41.20	15	35.5	22.8	6	6
YMCL152555	1.5	42	25	Φ47	Φ66.84	Φ69.84	25	55	28.3	6	6
YMCL152043	1.5	26	20	Φ32	Φ41.38	Φ44.38	22	43	22.8	6	6
YMCL152045	1.5	30	20	Φ38	Φ47.74	Φ50.74	25	45	22.8	6	6
YMCL152055	1.5	30	20	Φ38	Φ47.74	Φ50.74	25	55	22.8	6	6
YMCL152065	1.5	30	20	Φ38	Φ47.74	Φ50.74	25	65	22.8	6	6
YMCL152265	1.5	30	22	Φ38	Φ47.74	Φ50.74	25	65	24.8	6	6
YMCL152555	1.5	30	25	Φ38	Φ47.74	Φ50.74	25	55	27.8	6	6

研磨斜齿轮

GROUND HELICAL GEAR

技术要求

TECHNICAL REQUIREMENT

精度等级: DIN6国际5级

材料: 40Cr/20CrMnTi

齿型: 斜齿

右旋角: 19°31'42"

硬度处理: 高频淬火HRC48-52°/整体渗碳淬火HRC50-55°

生产工艺: 齿面研磨

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前请与本公司联系确认。

Accuracy level: DIN6international 5 level.

Material: 40Cr/20CrMnTi

Tooth profile: helical teeth

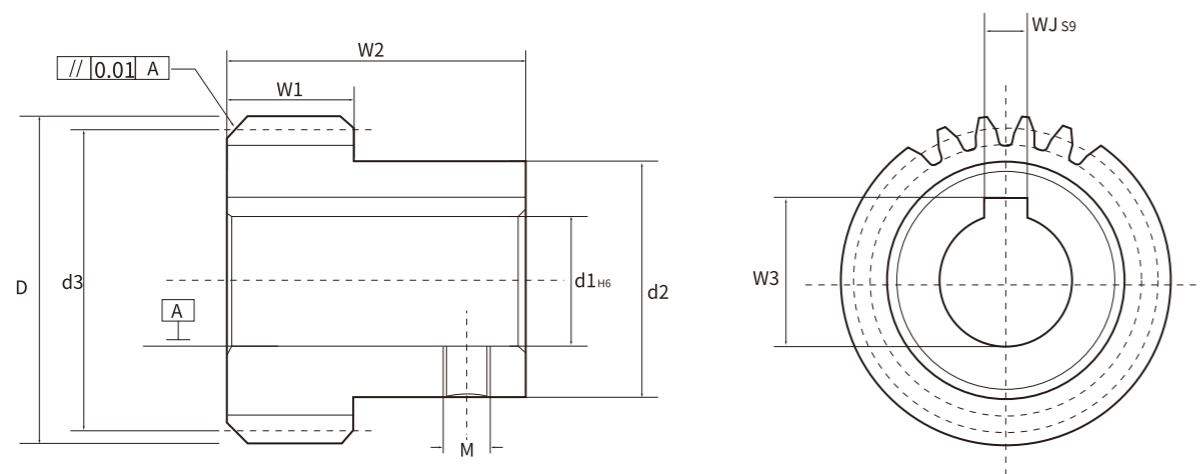
Left angle: 19°31'42"

Hardness treatment: high frequency quenching HRC45-50°

whole carburizing quenching HRC55-60°

Production process: gear grinding

The content of this document is subject to change without notice. Please contact us before ordering.



单位/Dimension: mm

型号 Code	模数 Module	齿数 Tooth No.	d1H6	d2	d3	D	W1	W2	W3	WJS9	M
YMCL201438	2	21	14	Φ30	Φ44.56	Φ48.56	20	38	16.3	5	6
YMCL201936	2	25	19	Φ35	Φ53.05	Φ57.05	21	36	21.8	6	6
YMCL202034	2	21	20	Φ36	Φ44.56	Φ48.56	20	34	22.8	6	5
YMCL202058	2	25	20	Φ45	Φ53.29	Φ57.29	25	58	22.8	6	6
YMCL202054	2	27	20	Φ40	Φ57.29	Φ61.29	25	54	22.8	6	6
YMCL202242	2	20	22	Φ35	Φ42.44	Φ46.44	24	42	24.8	6	6
YMCL202250	2	25	22	Φ40	Φ53.29	Φ57.29	25	50	24.8	6	6
YMCL202243	2	30	22	Φ50	Φ63.66	Φ67.66	28	43	24.8	6	6
YMCL202250	2	30	22	Φ50	Φ63.66	Φ67.66	28	50	24.8	6	6
YMCL202555	2	30	25	Φ45	Φ63.66	Φ67.66	25	55	27.8	8	6
YMCL203255	2	32	32	Φ50	Φ67.9	Φ71.9	24	55	35.3	10	8
YMCL203258	2	36	32	Φ50	Φ76.39	Φ80.39	24	58	35.3	10	8

研磨斜齿轮

GROUND HELICAL GEAR

技术要求

TECHNICAL REQUIREMENT

精度等级: DIN6国际5级

材料: 40Cr/20CrMnTi

齿型: 斜齿

右旋角: 19°31'42"

硬度处理: 高频淬火HRC48-52°/整体渗碳淬火HRC50-55°

生产工艺: 齿面研磨

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前请与本公司联系确认。

Accuracy level: DIN6international 5 level.

Material: 40Cr/20CrMnTi

Tooth profile: helical teeth

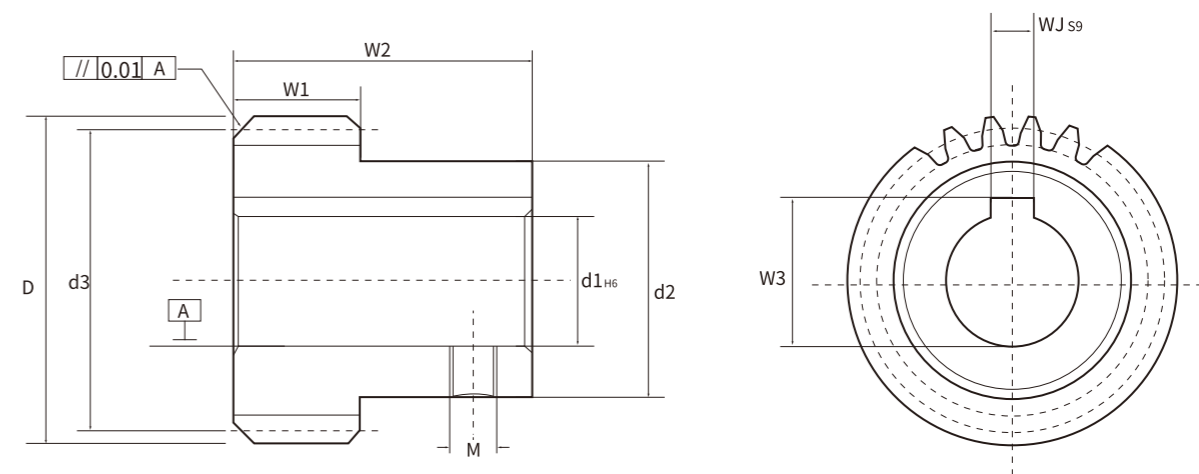
Left angle: 19°31'42"

Hardness treatment: high frequency quenching HRC45-50°

whole carburizing quenching HRC55-60°

Production process: gear grinding

The content of this document is subject to change without notice. Please contact us before ordering.



单位/Dimension: mm

型号 Code	模数 Module	齿数 Tooth No.	d1H6	d2	d3	D	W1	W2	W3	WJS9	M
YMCL302555	3	20	25	Φ50	Φ63.66	Φ69.66	30	55	28.3	8	8
YMCL302580	3	20	25	Φ50	Φ63.66	Φ69.66	30	80	28.3	8	8
YMCL30260	3	20	32	Φ55	Φ63.66	Φ69.66	28	60	35.3	10	8
YMCL303255	3	25	32	Φ66	Φ79.57	Φ85.57	30	55	35.3	10	8
YMCL303565	3	25	35	Φ55	Φ79.57	Φ85.57	28	65	38.8	10	8
YMCL304080	3	25	40	Φ70	Φ79.58	Φ85.58	39	80	43.3	12	12
YMCL303282	3	25	32	Φ66	Φ79.57	Φ85.57	30	82	35.3	10	8
YMCL304084	3	30	40	Φ68	Φ95.49	Φ101.5	29	82	43.3	12	8
YMCL404550	4	22	45	Φ65	Φ93.37	Φ101.4	40	50	38.3	10	8
YMCL403575	4	24	35	Φ55	Φ101.86	Φ109.9	40	75	38.3	10	8
YMCL404075	4	24	40	Φ62	Φ101.86	Φ109.9	40	75	43.3	12	10
YMCL404080	4	25	40	Φ80	Φ106.103	Φ114.103	42	80	43.3	12	10



技术要求

TECHNICAL REQUIREMENT

- 精度等级: DIN6国际5级
- 材料: 20CrMnTi
- 齿型: 斜齿
- 右旋角: 19°31'42"
- 硬度处理: 整体渗碳HRC55-60°
- 生产工艺: 齿面研磨

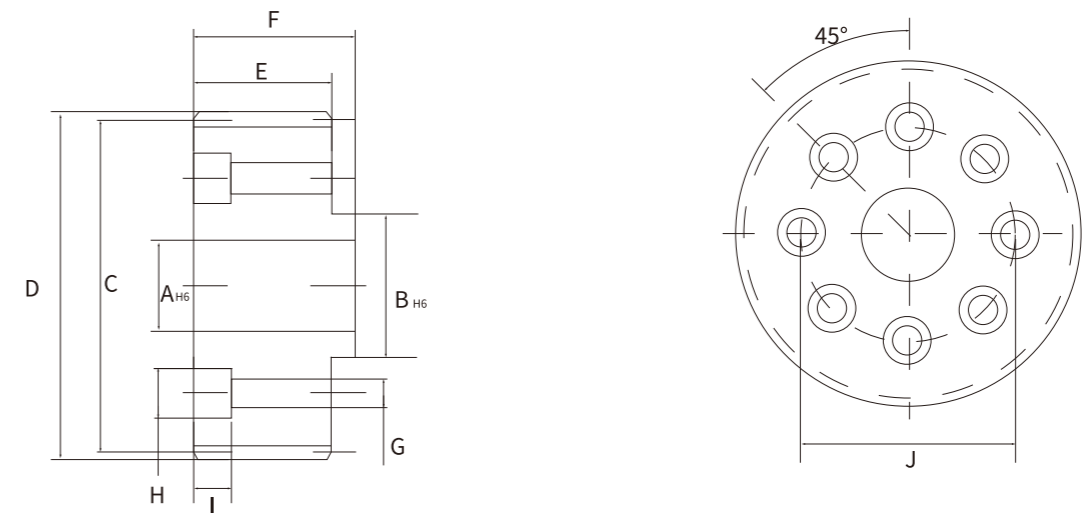
此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前请与本公司联系确认。

- Accuracy level: DIN6international 5 level.
- Material: 20CrMnTi
- Tooth profile: helical teeth
- Left angle: 19°31'42"
- Hardness treatment: overall carburizing HRC55-60°
- Production process: gear grinding

The content of this document is subject to change without notice.
Please contact us before ordering.

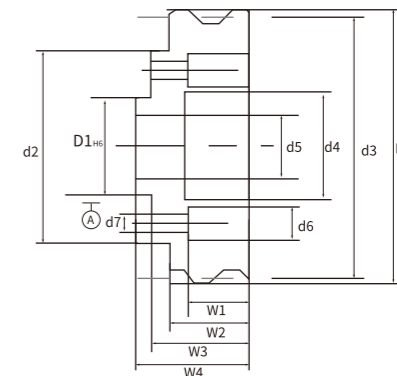
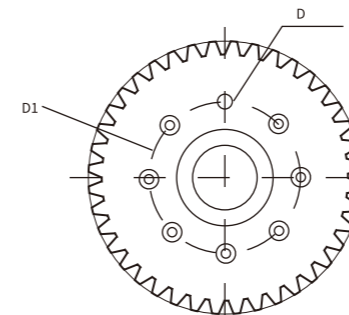
法兰研磨斜齿轮

FLANGE GROUND HELICAL GEAR



单位/Dimension: mm

型号 Code	模数 Module	齿数 Tooth No.	A _{H6}	B _{H6}	C	D	E	F	G	H	I	J
YMCLK26	2	26	15	20	55.174	60.800	26	29.0	5.5	10	12	31.5
YMCLK27	2	27	15	20	57.296	61.296	30	33.5	5.5	10	11	31.5
YMCLK29	2	29	15	20	61.540	67.200	26	29.0	5.5	10	12	31.5
YMCLK35	2	35	15	20	74.272	79.800	26	29.0	5.5	10	12	31.5
YMCLK29-20	2	29	20	25	61.540	67.200	26	30.0	6.6	11	14	40
YMCLK33	2	33	20	31.5	70.028	75.599	26	30.0	6.6	11	14	50
YMCLK35	2	35	20	31.5	74.300	79.500	26	30	6.6	11	14	50
YMCLK36	2	36	20	31.5	76.394	80.394	30	34.0	6.6	11	8	50
YMCLK37	2	37	20	31.5	78.517	84.200	26	30.0	6.6	11	14	50



单位/Dimension: mm

型号 Code	模数 Module	齿数 Tooth No.	d1 _{H6}	d2	d3	d4	d5	d6	d7	W1	W2	W3	W4	DH6	D1
YMCL37	2	37	31.500	63	78.52	35	20	1.1	6.6	14	24	34	40	6	50
YMCL40	2	40	31.500	63	84.88	35	21	1.1	6.4	14	26	31	37	6	50



技术要求

TECHNICAL REQUIREMENT

精度等级: DIN5
 材料: S45C/42CrMo
 齿型: 斜齿
 右旋角: 19°31'42"
 硬度处理: 高频淬火HRC48-52°/渗碳淬火HRC50-55°
 生产工艺: 硬齿面处理后四面平磨, 齿面研磨

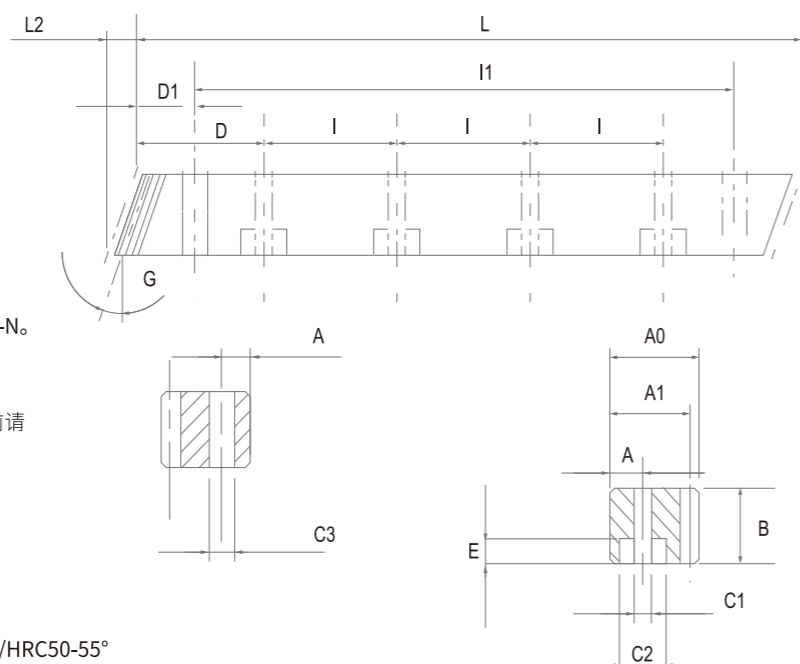
亦供应无钻孔的齿条, 请与型号后备注"N", 如AMX325020100-N。
 不同尺寸与材质以可依照图面客制化。

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前请与本公司联系确认。

Accuracy level: DIN5
 Material: S45C/42CrMo
 Tooth profile: helical teeth
 Right angle: 19°31'42"
 Hardness treatment: high frequency quenching HRC48-52°/HRC50-55°
 Production process: four side grinding after hard tooth surface treatment, tooth surface grinding.

Racks without holes are also available. Note "N" in the end of code number. I.e. AMX325020100-N.
 Other Dimensions/ Materials could be customized by drawings.

The content of this document is subject to change without notice.
 Please contact us before ordering.



技术要求

TECHNICAL REQUIREMENT

精度等级: DIN6
 材料: S45C/42CrMo
 齿型: 斜齿
 右旋角: 19°31'42"
 硬度处理: 高频淬火HRC48-52°/渗碳淬火HRC50-55°
 生产工艺: 硬齿面处理后四面平磨, 齿面研磨

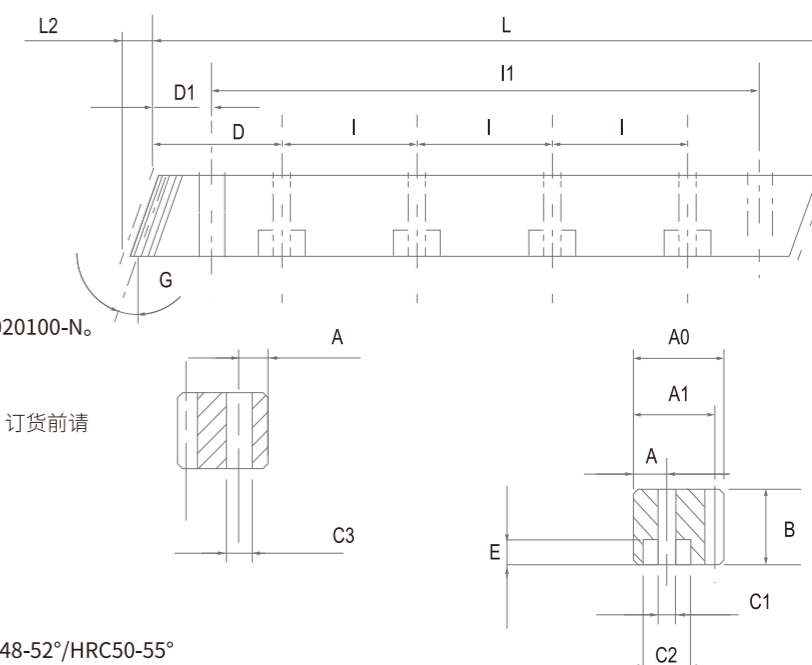
亦供应无钻孔的齿条, 请与型号后备注"N", 如AMX326020100-N。
 不同尺寸与材质以可依照图面客制化。

此样本中的所有产品型号及参数如有变更恕不另行通告, 订货前请与本公司联系确认。

Accuracy level: DIN6
 Material: S45C/42CrMo
 Tooth profile: helical teeth
 Right angle: 19°31'42"
 Hardness treatment: high frequency quenching HRC48-52°/HRC50-55°
 Production process: four side grinding after hard tooth surface treatment, tooth surface grinding.

Racks without holes are also available. Note "N" in the end of code number. I.e. AMX326020100-N.
 Other Dimensions/ Materials could be customized by drawings.

The content of this document is subject to change without notice.
 Please contact us before ordering.



端面距 $P_e = \text{模数} \times \pi / \cos(19^\circ 31' 42'')$ $F_p = \text{总距误差}$

单位/Dimension: mm

型号 Code	模数 Module	Pt	L	L2	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3	Fp
AMX325 015 050	1.5	4.9999	500.00	6.74	100	19	19	17.5	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.021
AMX325 015 100	1.5	4.9999	1000.00	6.74	200	19	19	17.5	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.024
AMX325 020 050	2	6.6666	500.00	8.5	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.021
AMX325 020 100	2	6.6666	1000.00	8.5	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.024
AMX325 030 050	3	9.9999	500.00	10.3	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7	0.023
AMX325 030 100	3	9.9999	1000.00	10.3	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	0.026
AMX325 040 050	4	13.3333	506.67	13.8	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7	0.025
AMX325 040 100	4	13.3333	1000.00	13.8	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	0.028
AMX325 050 050	5	16.6666	500.00	17.4	30	49	39	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7	0.028
AMX325 050 100	5	16.6666	1000.00	17.4	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	0.030
AMX325 060 050	6	19.9999	500.00	20.9	25	59	49	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7	0.028
AMX325 060 100	6	19.9999	1000.00	20.9	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	0.035
AMX325 080 050	8	26.6667	480.00	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120	240.0	19.7	0.030
AMX325 080 100	8	26.6667	960.00	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120	720.0	19.7	0.038

端面距 $P_e = \text{模数} \times \pi / \cos(19^\circ 31' 42'')$ $F_p = \text{总距误差}$

单位/Dimension: mm

型号 Code	模数 Module	Pt	L	L2	齿数 Tooth No.	B	A0	A1	D	I	孔数 Hole No.	A	C1	C2	E	D1	I1	C3	Fp
AMX326 015 050	1.5	4.9999	500.00	6.74	100	19	19	17.5	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.029
AMX326 015 100	1.5	4.9999	1000.00	6.74	200	19	19	17.5	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.033
AMX326 020 050	2	6.6666	500.00	8.5	75	24	24	22	62.5	125	4	8	7	11	7	31.7	436.6	5.7	0.029
AMX326 020 100	2	6.6666	1000.00	8.5	150	24	24	22	62.5	125	8	8	7	11	7	31.7	936.6	5.7	0.034
AMX326 030 050	3	9.9999	500.00	10.3	50	29	29	26	62.5	125	4	9	10	15	9	35.0	430.0	7.7	0.032
AMX326 030 100	3	9.9999	1000.00	10.3	100	29	29	26	62.5	125	8	9	10	15	9	35.0	930.0	7.7	0.037
AMX326 040 050	4	13.3333	506.67	13.8	38	39	39	35	62.5	125	4	12	10	15	9	33.3	433.0	7.7	0.034
AMX326 040 100	4	13.3333	1000.00	13.8	75	39	39	35	62.5	125	8	12	10	15	9	33.3	933.4	7.7	0.04
AMX326 050 050	5	16.6666	500.00	17.4	30	49	39	34	62.5	125	4	12	14	20	13	37.5	425.0	11.7	0.034
AMX326 050 100	5	16.6666	1000.00	17.4	60	49	39	34	62.5	125	8	12	14	20	13	37.5	925.0	11.7	0.04
AMX326 060 050	6	19.9999	500.00	20.9	25	59	49	43	62.5	125	4	16	18	26	17	37.5	425.0	15.7	0.034
AMX326 060 100	6	19.9999	1000.00	20.9	50	59	49	43	62.5	125	8	16	18	26	17	37.5	925.0	15.7	0.04
AMX326 080 050	8	26.6667	480.00	28.0	18	79	79	71	60.0	120	4	25	22	33	21	120	240.0	19.7	0.037
AMX326 080 100	8	26.6667	960.00	28.0	36	79	79	71	60.0	120	8	25	22	33	21	120	720.0	19.7	0.043