Your ideal partner in gear selection

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Greetings

Thank you for using KHK gear products.

We appreciate your patronage.

We have issued the Stock Gear Master Catalog "KHK2025".

Our latest products include laser-hardened racks, hardened spur gears and bevel gears, as well as an even wider range of semi-custom gears.

Make use of our new catalog for easy selection.

KHK's mission is to offer quality products that build Customer Trust and Satisfaction.

We look forward to serving you.

Kohara Gear Industry Co.,Ltd. Toshiharu Kohara, President

SRAF-HL/SRAFD-HL/SRAFK-HL Laser Hardened Square Racks



KWGDLS/AGDL Semi-Custom Duplex Worm Gears



SW/CG Semi-Custom Worms/Worm Wheels



SSY-H/SSAY-H Hardened Spur Gears



Hardened Helical Gears



SM-H Hardened Miter Gears



SB-H Hardened Bevel Gears



Product Index (Pages 6 to 9)

You can search for your desired gears by looking at product photos for each gear type. It also includes an overview of product specifications such as gear accuracy and material and heat treatment.

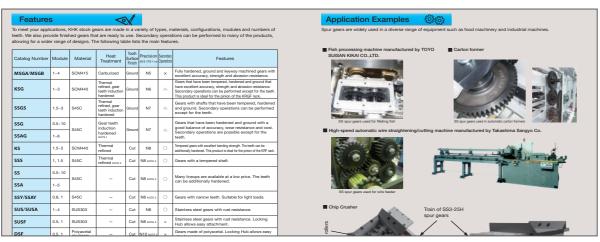


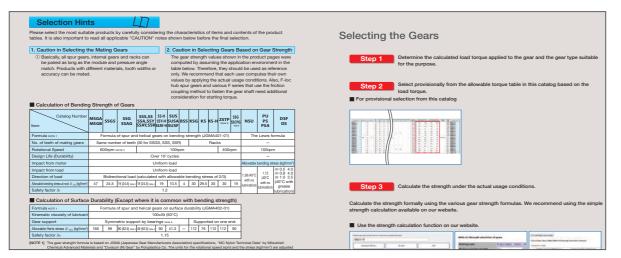


Product Technical Information

Technical Information is available for each gear type.

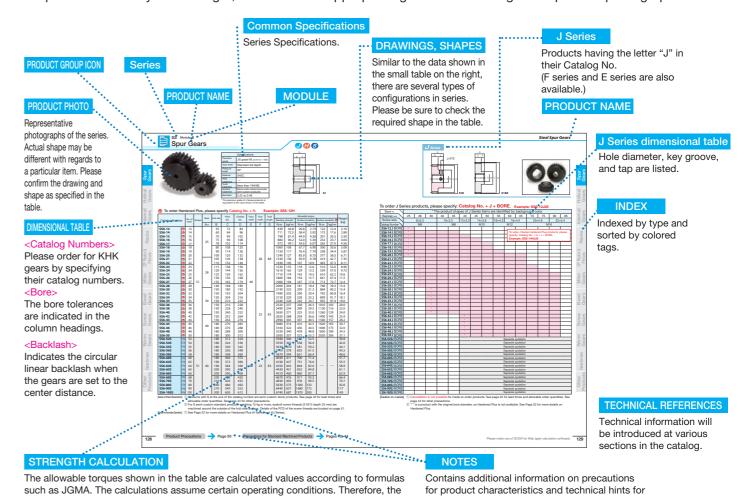
This documentation is essential for using the gears properly, including features of various products, examples of use and precautions on selection.





Dimensional Table Pages

Dimensional tables show the product specifications and performance for each gear type at a glance. Compare the accuracy and strength, and select the appropriate gears while looking at the product photographs.



secondary operations. Technical hints for J Series are

also provided in the J Series section. Please be sure to

read first before selecting products.

Selection Hints

When selecting KHK standard gears, glance over the Cautions on Product Characteristics and Cautions on Performing Secondary Operations in the product technical information and respective dimensional tables.

- Products not listed in this catalog or materials, modules, number of teeth and the like not listed in the dimensional tables can be manufactured as custom items. Please see Page 26 for more details about custom-made orders.
- The color and shape of the product images listed on the dimension table page of each product may differ from the actual product.

Be sure to confirm the shape in the dimension table before selection.

values should be used as a reference. The assumed conditions are shown on the first

page of each product group (for example, Page 48 for spur gears).

Because black oxide is formed through a chemical reaction, it may appear reddish-black in some cases.

- The details (specifications, dimensions, etc.) listed in the catalog may be changed without prior notice.
- All details recorded in this catalog are copyrighted. Replication without permission is strictly prohibited.
- Changes and corrections to the contents of the catalog are announced on the KHK website.

Website URL: https://khkgears.net/new/

Overseas Sales Department: Phone: +81-48-254-1744 Fax: +81-48-254-1765

E-mail: info@khkgears.net

New Product Information New Products



Series

Laser Hardened Square Racks

SRAF-HL/SRAFD-HL/ SRAFK-HL

Laser Hardened Helical Racks

SRHEF-HL



Series

Semi-Custom Ground Helical Gears

KHG

Semi-Custom Duplex Worm Gears

KWGDLS/AGDL





Semi-Custom Worms/ Worm Wheels

SW/CG

Hardened Spur Gears

Hardened Helical Gears

Hardened Helical Gears

SSY-H/SSAY-H

SH-H

SHE-H







Hardened Miter Gears

SM-H



Hardened Angular Miter Gears

SAM-H



Hardened Bevel Gears

Hardened Bevel Gears

Hardened Bevel Pinion Shafts

SB-H

SBY-H

SB-H







Product Index - LINEUP -



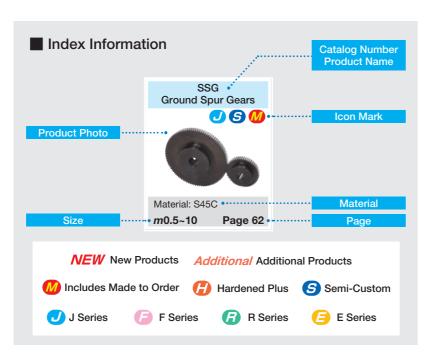












Racks



CP Racks & Pinions



Product Index - LINEUP -

Miter Gears



Bevel Gears





Screw Gears



Tolerant Sears







Other Products

SRT/SRT-C Ratchets & Pawls	SRTB/SRT-C Ratchets & Pawls	GC/GC-I Gear Couplings	SV/SVI Involute Spline Shafts, Spline Bushings	HEPCO Ring Rail Gears, Accessories	GCU Gear Assembly Kit	Rack & Pinion Lubrication System	Racks & Pinions Aluminum Frame Transport Device
					X	Additional	
Material: S45C	Material: S45C	Material: S45C	Material: S45C	Material: -	Material: -	Material: -	Material: -
P2.09~12.57 Page 474	P2.09~12.57 Page 476	m2, 2.5 Page 478	m1.667 Page 480	Page 482	Page 490	Page 492	Page 30

 $\mathbf{S}_{\mathbf{S}}$

Gear Type

Duplex Worm Wheels

DR Rack Guide Rails

Sintered Metal Bushings 186, 338, 372

Injection Molded Bevel Gears 372-373

Injection Molded Miter Gears 336-337

Injection Molded Spur Gears 184-187

CP Metal Flexible Racks 304

Gear Couplings (Inner Hubs) 478-479

Gear Couplings (Outer Rings) 478-479

CP Thermal Refined Racks 292-293

CP Thermal Refined Racks 292-293

Thermal Refined Racks | 240-241

Thermal Refined Racks 240-241

Thermal Refined Ground Racks 228-229

CP Thermal Refined Ground Racks 284-285

CP Thermal Refined Ground Racks 284-285

CP Thermal Refined Ground Racks 284-285

CP Hardened Ground Racks 282-283

Thermal Refined Ground Racks 228-229

Thermal Refined Ground Racks 228-229

Hardened Ground Racks 226-227

Hardened Ground Racks 226-227

Ground Helical Racks

Ground Helical Racks

CP Hardened Ground Racks 282

Gear Lubricating Spray 496

Molded Flexible Racks

Worm Wheels

Worm Wheels

Worm Wheels

Spur Gears

Racks

HEPCO Bearings

Bevel Gearboxes

Worm Wheels

Plastic Racks

Plastic Racks

Plastic Racks

F-Loc Gears

Flex pump

Flex pump

Flex pump

Grease cartridge

Gear Assembly Kit

Ground Helical Gears

CP Hardened Racks

CP Hardened Racks

Hardened Racks

Hardened Racks

Bevel Gearboxes

Screw Gears

NEW New Product

Series

AGDL NEW

A AG

AGF

AN

ARL

BG

BHJ

BSR

BSS

CG NEW

C CBX

D DB

DM

DRF

DRFD

DRFK

DS

DSF

F FP400B

FP401

FP402

FRCP

GC-F01

GC-I

GJS

GCU

KHG NEW

KRCPF-H

KRCPFD

KRF

KRF-H

KRFD

KRG

KRFD-H

KRGCP

KRGCPF

KRGCPFD

KRGCPF-H

KRGCPFD-H

KRGF

KRGFD

KRGF-H

KRGFD-H

KRHG

KRHGF

KRCPFD-H

KRCPF

K KBX

G GC

ВВВ

Additional Additional Products

Features

SM

D

U

M

JS

M

US

W

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232-233

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Includes Made to Order

	Series	Gear Type	Page	Features
K	KRHGFD	Ground Helical Racks	258-259	O
	KS	Thermal Refined Spur Gears	104-105	M
	KSCPG	Ground Spur Gears	282-283	O
	KSG	Ground Spur Gears	58-59	
	KSP	Nissei Ground Spiral Bevel Gears	374-378	
	KSSCP	CP Thermal Refined Spur Gears	292-293	
	KTSCP	CP Tapered Pinions	278-279	
	KWG	Ground Worm Shafts	416-425	
	KWGDL	Duplex Worms	406-413	
	KWGDLS NEW	Duplex Worms	406-415	S
L	LB	HEPCO Lubricators	488-489	M
	LM	Sintered Metal Miter Gears	328-329	
M	MAR	Mounting Shaft for Lubricated Gears	495	M
	MAS	Mounting Shaft for Lubricated Gears	495	M
	MBSA	Finished Bore Spiral Bevel Gears	354-357	
	MBSB	Finished Bore Spiral Bevel Gears	354-357	
	MBSG	Ground Spiral Bevel Gears	350-351	
	МНР	High-Ratio Hypoid Gears	346-349	
	MM	Miter Gears	328-329	
	MMS	Spiral Miter Gears	322-323	
	MMSA	Finished Bore Spiral Miter Gears	320-321	
	MMSB	Finished Bore Spiral Miter Gears	320-321	
	MMSG	Ground Spiral Miter Gears	316-317	
	MMSGQ	Ground Spiral Miter Gears	314-315	
	MRGCPF	CP Hardened Ground Racks	280	
	MRGCPFD	CP Hardened Ground Racks	280-281	
	MRGF	Hardened Ground Racks	224-225	
	MRGFD	Hardened Ground Racks	224-225	
	MSCPG	CP Ground Spur Gears	280-281	M
	MSGA	Ground Spur Gears	54-57	
	MSGB	Ground Spur Gears	54-57	
N	NSU	Plastic Spur Gears with Steel Core	166-169	
P	РВ	Plastic Bevel Gears	370-371	
	PG	Worm Wheels	454-459	
	PM	Plastic Miter Gears	336-337	
	PN	Plastic Screw Gears	392-393	
	PR	Plastic Racks	252	
	PRF	Plastic Racks	252	
	PS	Plastic Spur Gears	172-181	0
	PSA	Plastic Spur Gears	176-181	0
	PSUKB	SUKB Assembled PSA Spur Gear		O
	PU	Plastic Spur Gears with Steel Core		O
	PUH	Lubricating Helical Gears		<u> </u>
	PUS	Lubricating spur gears	494	W
<u>_</u>	PUSCP	Lubricating spur gears	494	
R	R	HEPCO Ring Rail Gears	482-485	<u></u>
	RLJ	HEPCO Bearings	486-487	M
_	RSJ	HEPCO Bearings	486-487	M
S	SAM NEW	Angular Miter Gears	332-333	•
	SB NEW	Bevel Gears	362-367	(2)
	SB NEW	Steel Bevel Gears & Pinion Shafts	366-367	B

$\mathbf{I}H$	Hardened

S









Features

M

066

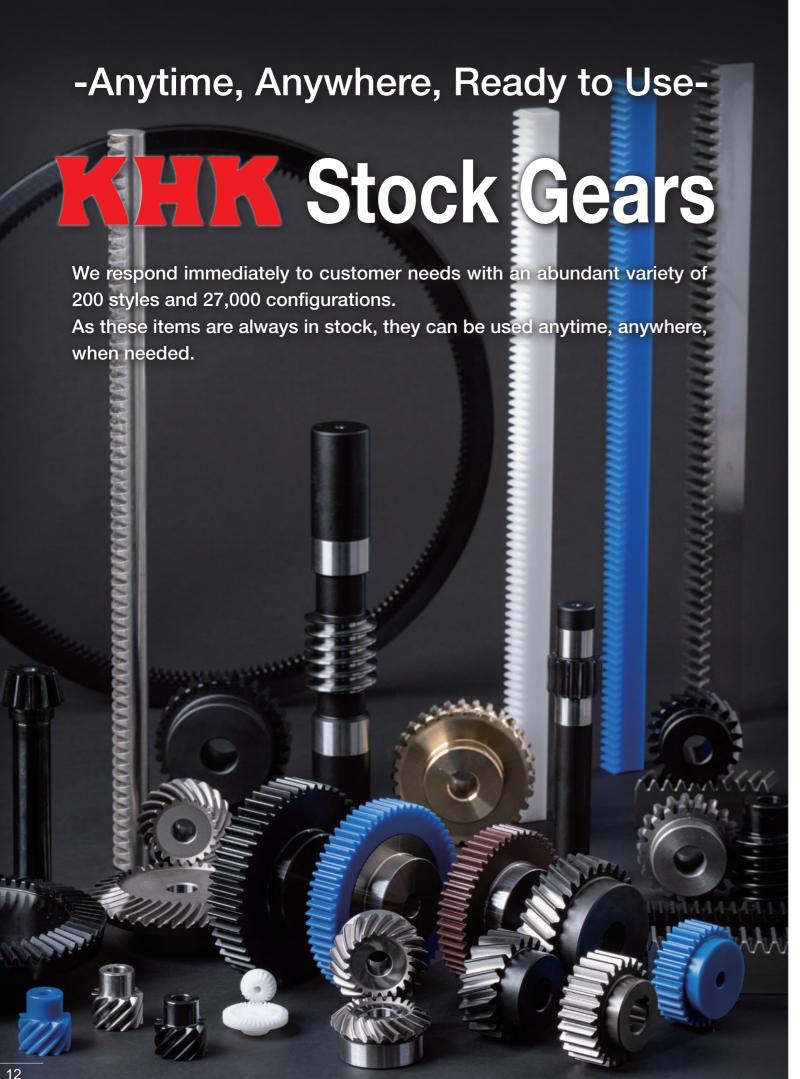
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JS**M**

Harden	ed Plus Semi-C	ustom	JS	eri	es	F Ser	ries 🕜 RS
Series	Gear Type	Page	Features			Series	Gear Typ
SBS	Spiral Bevel Gears	358-361			S	SRS	DR Rack Clamp
SBSG	Ground Spiral Bevel Gears	352-353				SRT	Ratchets
SBY NEW	Bevel Gears	362-367	(SRTB	Ratchets
SH NEW	Helical Gears	204-205	B			SRT-C	Ratchet Pawls
SHE NEW	Helical Gears	264-265	(SS Additional	Spur Gears
SI	Internal Ring Gears	210				SSA	Spur Gears
SIR	Steel Ring Gears (Spur Gears)	212				SSAG	Ground Spur Go
SM <i>NEW</i>	Miter Gears	330-331	00			SSAY NEW	Spur Gears
SMA	Finished Bore Miter Gears	326-327				SSCP	CP Spur Gears
SMB	Finished Bore Miter Gears	326-327				SSCPG	CP Ground Spi
SMC	Finished Bore Miter Gears	326-327				SSCPGS	CP Ground Spur P

Series	Gear Type	Page	Features		Series	Gear Type	Page	J
SBS	Spiral Bevel Gears	358-361	rodiaroo	S	SRS	DR Rack Clamps	256	
SBSG	Ground Spiral Bevel Gears			3	SRT	Ratchets	474-475	ł
SBY NEW	Bevel Gears	362-367	(2)		SRTB	Ratchets	476-477	ł
SH NEW	Helical Gears	204-205	6		SRT-C	Ratchet Pawls	474-477	t
SHE NEW	Helical Gears	264-265	6		SS Additional	Spur Gears	108-141	t
SI SI	Internal Ring Gears	210			SSA	Spur Gears	142-151	+
SIR	Steel Ring Gears (Spur Gears)	-			SSAG	Ground Spur Gears	100-103	$\frac{1}{1}$
SM NEW	Miter Gears	330-331			SSAY NEW	Spur Gears	154-155	ł
SMA	Finished Bore Miter Gears			-	SSCP	CP Spur Gears	294-295	$\frac{1}{1}$
SMB	Finished Bore Miter Gears				SSCPG	CP Ground Spur Gears	286-287	ł
SMC	Finished Bore Miter Gears				SSCPGS	CP Ground Spur Pinion Shafts		1
SMS						DR Pinions		$\frac{1}{1}$
	Spiral Miter Gears	324-325	O		SSDR		256-257	+
SMSG	Ground Spiral Miter Gears				SSG	Ground Spur Gears	62-99	
SR	Screw Gears	384-387			SSGS	Ground Spur Pinion Shafts	60-61	Ī
SRAF	Racks	244			SSR	Steel Ring Gears (Spur Gears)	190	Ī
	Square Racks	242-243			SSS	Spur Pinion Shafts	106-107	Ī
SRAFD	Square Racks	242-243	O		SSY NEW	Spur Gears	152-153	1
SRAFK	Square Racks	242-243	O		STRCPF	CP Tapered Racks	278-279	1
	Laser Hardened Square Racks				STRCPFD	CP Tapered Racks	278-279	1
	Laser Hardened Square Racks		O		SUB	Stainless Steel Bevel Gears	368-369	1
	Laser Hardened Square Racks				SUKB	Stainless Steel Hubs	182	İ
SRCP	CP Racks	300			SUM	Stainless Steel Miter Gears	334-335	1
SRCPF	CP Racks	300			SUMA	Finished Bore Stainless Steel Miter Gears	334-335	İ
SRCPFD	CP Racks	300-301	0		SUN	Stainless Steel Screw Gears	388-389	İ
SRCPFK	CP Racks	300-301	O		SUR	Stainless Steel Racks	248-249	İ
SRCPF-H	CP Hardened Racks	296-297			SURCPF	CP Stainless Steel Racks	302-303	İ
SRCPF-HL	CP Laser Hardened Racks				SURCPFD	CP Stainless Steel Racks	302-303	1
SRCPFD-H	CP Hardened Racks	296-297	0		SURF	Stainless Steel Racks	248-249	İ
SRCPFD-HL	CP Laser Hardened Racks		O		SURFD	Stainless Steel Racks	248-249	İ
SRF	Steel Racks with Machined Ends				SURO	Stainless Steel Round Racks	255	1
SRFD	Steel Racks with Bolt Holes		O		sus	Stainless Steel Spur Gears	156-161	İ
SRFK	Steel Racks with Bolt Holes		O		SUSA	Stainless Steel Spur Gears		İ
SRF-H	Hardened Racks	234-235			SUSF	F-Loc Gears	162-163	İ
SRFD-H	Hardened Racks	234-235	O		SUSCP	CP Stainless Steel Spur Gears	302-303	İ
SRF-HL	Laser Hardened Racks	236			suw	Stainless Steel Worms	454-459	İ
SRFD-HL	Laser Hardened Racks	236-237	U		sv	Involute Spline Shafts	480-481	1
SRG	Hardened Ground Racks		M		SVI	Involute Spline Bushings		1
SRGCP	CP Hardened Ground Racks				SW <i>NEW</i>	Worms	434-453	†
SRGCPF	CP Hardened Ground Racks				SWG	Ground Worms	426-433	t
SRGCPFD	CP Hardened Ground Racks		O	T	T-6×4-5	Tube	492-493	t
SRGF	Hardened Ground Racks		M		T-6×4-10	Tube	492-493	1
SRGFD	Hardened Ground Racks				TCR Additional	Tube connector	492-493	t
SRGFK	Hardened Ground Racks		O		TCS Additional	Tube connector	492-493	1
SRH	Helical Racks	262		Z	ZST	Hardened Ground Helical Racks		+
SRHEF	Helical Racks	264-265		_	ZSTD	Hardened Ground Helical Racks		1
SRHEF-HL NEW					ZSTP	Ground Helical Gears	266-267	1
SRHF	Helical Racks	262-263			ZST-GL	Assembly Gauges	268	1
SRHFD	Helical Racks	262-263		-		ons Transport Device	30-31	†
SRO	Round Racks	254			1		1	1
SROCP	CP Round Racks	304						
SROS	Round Racks	254						



Abundant variety of gears











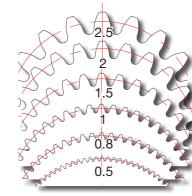


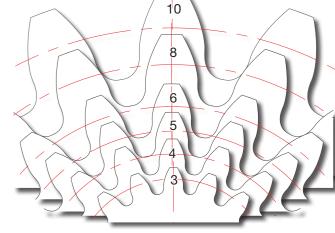


Large variety of sizes and numbers of teeth

Lineup from m0.5 to m10 (spur gears)

m	Minimum No. of teeth	Maximum No. of teeth
0.5	12	120
8.0	12	56
1	10	200
1.5	10	200
2	10	200
2.5	10	200
3	10	160
4	12	120
5	12	120
6	12	100
8	12	60
10	15	50





Full-scale drawing of teeth (spur gear)

Available in many materials

Choose based on your application.

We have a wide variety of standardized stainless steel and plastic products that can be used in places where rust and oil must be avoided, as well as metal products with increased gear strength.













Abundant inventory

We stock 3,700 configurations of product at all times in order to deliver them to you quickly.









Stock Gear Fastening Series

Key and screw fastening have been standardized.





If you require finished bore gears with keyways and tapped holes, please order the J Series products. Product bore size, keyway dimensions and tap sizes have all been standardized.



Gears can be installed in flexible positions. Gear teeth can be easily aligned.





To install using locking hub parts, select from the F and E series to place your order. Locking Hub and bore sizes have been standardized.



Fits perfectly as the speed reducer pinion for servomotor.





If you require a flange type reducer pinion, please order R Series.

These products have standardized mounting hole specifications for flange.



Can be easily installed in 19 seconds using a single bolt





To install using locking hub parts, select from the F and E series to place your order. These products are standardized highprecision ground spur gears with hydrofastening.



The J Series have keyways, the F & E Series have locking hubs, and the R Series have holes for Speed reducers. These 74 styles contain 15,600 configurations of gears that can be used immediately due to their standardized bore and keyway sizes.

Catalog m0.5 00 m1 m1.5 0 05 m3 m4 m5 m6 0 46

Fastening Series / Semi-custom Lineup

Se	ries	Туре	Catalog Number	m0.5 (CP2.5)	m0.8	m1 (m1.25)	m1.5 (CP5)	m2	m2.5	m3 (CP10)	m4 (m3.5)	m5 (CP15)	m6 (CP20)	m8	m10
			KSG												
			SSG												
			SSAG												
			SS												
			SSA												
		Spur	SUS												
		Gears	SUSA												
			NSU												
			PU PS												
			PSA												
			PSUKB												
	Helical Gear	Helical Gears	KHG												
			MRGFD												
			KRGFD-H												
			KRGFD												
			SRGFD(K)												
			KRFD-H												
			SRFD-H												
		Racks &	SRFD-HL												
		Pinions	SRAFD(K)-HL KRFD												
			SRAFD(K)												
			SRFD(K)												
			DRFD(K)												
			KRHGFD												
			ZSTP												
			ZSTD												
			MRGCPFD												
			KSCPG												
J Se	eries		KRGCPFD-H KRGCPFD												
			SSCPG												
			SRGCPFD												
			KRCPFD-H												
		CP Racks & Pinions	KSSCP												
		a i illions	KRCPFD												
			SSCP												
			SRCPFD-H												
			SRCPFD-HL SRCPFD(K)												
			SUSCP												
			SURCPFD												
			MMSGQ												
			MMSG												
		Miter	SMSG												
		Gears	SMS												
			MM												
			SM SN												
		Screw	SUN												
		Gears	AN												
			PN												
			SWG												
			SW												
		Worm	SUW												
		Gears	AG BG												
			CG												
			PG												
		Other	SRT												
		Products	GC												
		Spur	SSG												
F Se	eries	Gears	SS												
			SSA SSG												
RS	eries	Spur Gears	SSCPG												
11.0	CiiCo	Helical Gears	ZSTP												
ES	eries	Spur Gears	SSG												
		Spur	SSG												
	mi- stom	Gears	SS												
Julia		Helical Gears	KHG												

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Definitively shortens the installation time





Can be easily installed in 19 seconds using a single bolt

Time to mount a gear is reduced to 1/15



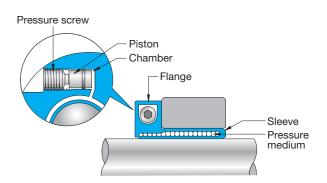
Solves the problems of gear fastening.

- · Desire to reduce the time to mount gears.
- When using the conventional wedge method, mounting a gear takes about 5 minutes (according to research by KHK), whereas these products can be easily mounted using one bolt in 19 seconds.
- · Desire to reduce the assembly runout of the gears.
- · Desire to reduce the backlash between the gear and shaft.
- Desire to lower the decrease in shaft strength due to fretting wear (worn or seized shaft).
- · Desire to simplify the phase matching and positioning.

How the ETP-E Plus works

The pressure medium in the chamber is compressed as a result of tightening the screw.

The resulting pressure causes the hub side to expand into the hub and the bore side to expand onto the shaft. Thus allowing the shaft and the hub to be securely fastened.

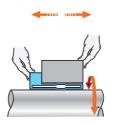


Effects of ETP-E Plus

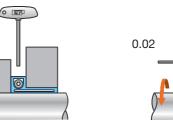
Easy and accurate positioning

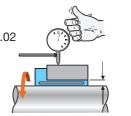
Secure and speedy installation

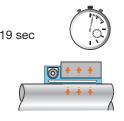












KHK Lineup

See Page 86



6 styles, 2,000 configurations

Limited release on the Japanese website



Allowable Order Sizes

1 to 20 units for module 3 (CP10) or under and 1 to 4 units for module 4 (CP15) or higher. For orders exceeding the supported quantities, please request a price and delivery quote.

- Ordering Method
 - Catalog Number + E + Bore Size (Example: SSG2-25E + BORE)
- Production is completed in 2 working days excluding the day ordered.

As available-on-request products, these require a lead-time for shipping of 2 working days (excludes the day ordered), after placing an order.

Products with module 4 (CP15) or higher require a lead-time for shipping within 7 working days from the order (excludes the day ordered).



available at KHK Quick-Mod Gears.

Superior compatibility with servos for speed reducers





■ Pinion gear applicability table for Nabtesco GH Series Nabtesco + —

Corresponding speed reducer size and pinion gears

See Page 98 for more details

Nabtesco		KHK target products	
GH Series	Module Type	CP Type	Helical Type
7	SSG3-30RGH7	SSCPG10-30RGH7	ZSTP3-30LRGH7
17	SSG3-40RGH17	SSCPG10-40RGH17	ZSTP3-30LRGH17
24	SSG4-30RGH24	SSCPG15-30RGH24	ZSTP4-30LRGH24
40	SSG5-30RGH40	SSCPG15-30RGH40	ZSTP5-24LRGH40
100	SSG6-30RGH100	SSCPG20-30RGH100	

Series for flange output speed reducers



Rack and pinion for corresponding flange output speed reducers

See Page 96 for more details

Mounting hub dia. H (Common to all speed reducers)	NIDEC DRIVE TECHNOLOGY VRG Series	Sumitomo Heavy Industries IB Series	Harmonic Drive Systems HPG Series	R Series Catalog Number	S	KHK recommended mating rack
24	C90	P120	20		R24	KRGFSeries
32	D120	P130	32	CCC Madula No of tooth	R32	SRGFSeries
47	E170	_	50	SSG Module - No. of teeth	R47	SRFSeries
60	_	_	65		R60	See Page 213

R series catalog numbers are composed as follows:

(Base SSG ground spur gear catalog number) + R + (mounting hub diameter)

Series for shaft output speed reducers (with key)

KSG3-25J22



Pinion gears corresponding to speed reducer sizes

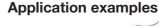
See Page 68 for more details See Page 58 for more details KHK target products KHK target products APG · AFC Series APG · AFC Series Capacity Frame No. Frame No Catalog Number Capacity SSG2-19J12 750W 22 12 15 1000W 22 SSG2.5-19J15 18 1500W 22 SSG2.5-24J18

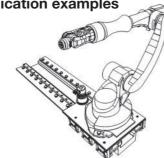
2000W

When a key is not needed, try Catalog Number the locking hub KSG3-25J22 KSG3-25J22 KSG3-25J22 22 KSG3-25J22 Series

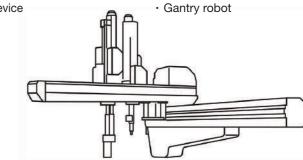
100W 12 SSG2-19J12 200W 15 SSG2.5-19J15 22 KSG3-25J22 12 SSG2-19J12 15 400W SSG2.5-19J15

Be sure to calculate the strength under actual usage conditions before use.









Fastening Series Comparison

[Comparison of Features]

Series	Series	Fseries	Eseries
Fastening Method	Key	Friction	Friction
Price*			\triangle
Work Time	\bigcirc	\triangle	
Concentricity			
Phase Matching	×		
Allowable torque			\triangle
Installation Freedom			\triangle
Туре		\triangle	
Hardening + available	\bigcirc	×	×

*Note on price issues: Prices change according to processes (work time). Find details here ↓

F series and E series comparison video



For details, see here

https://www.khkgears. co.jp/movie/movie_ conclusion_e_f.mp4





Induction Hardening Service



Hardened Plus

Hardening is provided as an additional service to standard products when ordered. Products with | at the end of the Catalog No. support Hardened Plus.

Quick delivery, hardening completed in 4 working days



Induction hardening specification

Area: Tooth surface hardened Hardness: HRC50 to 60

Hardness and depth of gear-teeth induction hardening

The hardening method and the state of the hardened teeth area vary depending on the size of gears.

Note that hardening specifications of Hardening Plus above will be near the standard pitch diameter of the gear.

Note: The gear precision decreases after hardening. The original bore dimension tolerance H7 will also be degraded.

What does Hardened Plus mean?

- Induction hardening improves wear resistance.
- Secondary operations are possible in locations unaffected by heat.
- Coils supporting the entire lineup of products are available. Stable supply is enabled by our extensive track record of treatment.



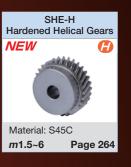
Delivered with bores, keyways, and tapping provided.

New Product Lineup



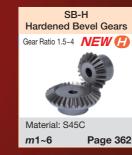


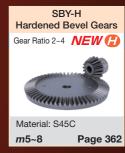














Target Products

Various Standard Product / J Series

Additional SS/SSA/SSCP/NEW SSY/NEW SSAY Spur Gears **KS/KSSCP** Thermal Refined Spur Gears **NEW SB/NEW SBY Bevel Gears**

NEW SH/NEW SHE Helical Gears NEW SM/NEW SAM Miter Gears SN Screw Gears

Ordering Method and Delivery Date

Standard Product

Please specify: Catalog No. + H.

Example: Catalog No.: SS3-30, when hardening is added ⇒ SS3-30H Production is completed by the manufacturer in 4 working days excluding the day ordered

Please specify: Catalog No. + H + J + BORE. Example: Catalog No.: SS4-15, when hardening is added ⇒ SS4-15HJ25

m1 to 3 Production is completed by the manufacturer in 6 working days excluding the day ordered

Production is completed by the manufacturer in

11 working days excluding the day ordered

Precautions

- 1) Because machining starts immediately, we cannot accept cancellations.
- (2) The bore diameter distorts due to hardening. (H Series only)
- 3 Black oxide treatment cannot be performed after hardening.
- (4) The surface durability values shown in the table are calculated values according to the assumed usage conditions. Please calculate the actual surface durability on the KHK website.

KHK Quick-Mod Gears

Trusted secondary operations guaranteed by KHK

KHK Quick-Mod Gears is a KHK original custom system which modifies standard gears according to customers' requirements and delivers them as finished products.



Three benefits of using the KHK Quick-Mod Gears

Wide range of secondary operations

We accept various machining including bore and mounting hole machining, Helisert machining, stepped hole machining and hub removal.







Holes, Hubs, Keyway Machining



Fast delivery available

We use high-precision machines to quickly machine in-stock "stock gears" on the JIT production line and deliver them with a short turnaround.









Inspection and Packaging

Surface Treatments Offered

We accept requests for various types of plating. We offer platings that are suitable for rust prevention and various other surface treatments.

Electro-galvanizing



■ Black chromate



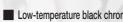
■ Phosphate treatment

Unichromate



A typical plating method for the purpose of preventing Black or slightly reddish plating. An iron phosphate chemical conversion rust on iron, with plating thickness of about 2 to 25 μ m. Black trivalent chromate is RoHS compliant. treatment that forms a thin iron amorphous film. Trivalent chromate is RoHS compliant.

with uniform film thickness



unlikely to peel away.





Chemical change due to a strongly alkaline treatment liquid forms a ferrosoferric oxide film (3 μ m or less).

Note: Dimensions change by the amount of the plating thickness. Machining dimensions are controlled pre-plating.

When Placing Orders

Plating with thickness of 3 to 10 μ m A black chromium film (1 to 2 μ m)

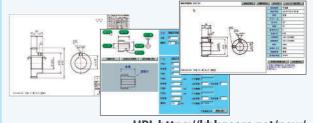
For quotation of secondary operations on standard products (KHK Quick-Mod Gears), please prepare a drawing with desired specifications. We will manufacture to the drawing after discussing prices and lead times.

<Cautions regarding Manufacturing>

- Please note that we do not perform black oxide processing after additional machining.
- Gear precision may be reduced, depending on the additional machining specifications. Please contact us when requesting a quote for information about post-machining gear precision.

Please include a drawing with your request.

Use the Drawing Creation Tool from the Website to create



URL https://khkgears.net/new/

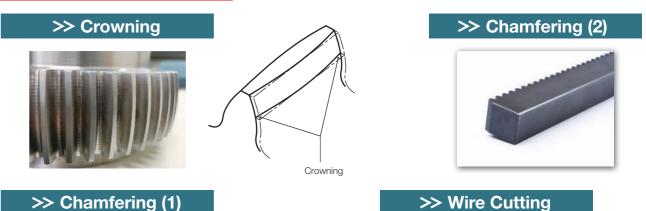


Available Machining Range

* CP/DP sizes are also supported. Inquire as needed.



Machining Example





Gear	Specifications				
Shape	Spur Gears				
Pitch	m2				
Effective No. of teeth	21				
Material	S45C				
Outside dia.	φ104				
Remarks	Teeth Wire Cut				

When Placing Orders

Please prepare your own drawings.

Quotations for made-to-print gears are limited to the "Available Machining Range" above. When ordering, please prepare a drawing with the details of the "Items described in the product specifications" clearly stated. We will manufacture to the drawing after quoting cost and lead time.

<Cautions regarding Manufacturing>

- Even if an order is within the manufacturing range, it may not be manufacturable depending on the specifications such as accuracy, shape and heat treatment.
- Gears for which we have the technological capacity may be unavailable due to the circumstances of our production processes and capabilities.
- We may provide a quotation with the customer's accuracy requirements changed according to our manufacturing capacity. Please check your quotation before placing an order.
- Designs with no product specifications listed on the drawing or details of quality requirements are manufactured in accordance with KHK stock gears.
- We do not conduct any design work for custom ordered gears. We manufacture only to customer drawings.

Items described in the product sp	ecificatio	ons •	Requir	ement () As red	quired /	Contact ∴ Contact … Contact ∴ Contact … Contact … Contact … Contact … Contact … Contact … … Contact …	ct us – No	t required
	ø	v Gears	ırs	ears		(S	ç	ears	ဟ

Gear Type Listed Details	Spur Gears	Helical Gears / Screw Gears	Internal Gears	Helical Inner Gears	Racks	Helical Racks	Bevel Gears	Spiral Bevel Gears	Worm Gears
Gear Accuracy	•	•	•	•	•	•	•	•	•
Pitch (m, CP, DP)	•	•	•	•	•	•	•	•	•
Pressure angle	•	•	•	•	•	•	•	•	•
Material	•	•	•	•	•	•	•	•	•
Shape dimensions / dimensional tolerance	•	•	•	•	•	•	•	•	•
Number of teeth / number of rows	•	•	•	•	•	•	•	•	•
Spiral angle / spiral direction	-	•	-	•	-	•	-	•	•
Teeth depth / backlash	0	0	0	0	0	0	0	0	0
Heat treatment / surface treatment	0	0	0	0	0	0	0	0	0
Surface roughness	Δ	Δ	Δ	Δ	Δ	\triangle	\triangle	\triangle	Δ
Geometric tolerance	Δ	\triangle	\triangle	Δ	Δ	\triangle	\triangle	\triangle	Δ
Number of teeth/rows of the partner, mounting distance	-	-	-	-	-	-	•	•	•

Note: Tooth thickness or backlash that is not specified will be produced in accordance with KHK stock gears.

If prior discussion is not possible, they will be detailed in the quotation

J Series supported

Semi-Custom Stock Gears



Standardized Coarse Pitch gears now in the Catalog Streamlining design and selection to shorten lead times

Semi-custom stock gears

- No effort spent on design Simply select the gears you need from the catalog, eliminating design costs.
- Fast delivery available Products are delivered with short lead times via our consistent production system.
- Reliable quality

The mark of trust "KHK" guarantees the quality of products listed in the catalog.

◆ Target Products ◆

SSG Ground Spur Gears **O** SS Spur Gears **O**

m4/5/6/8/10 / No. of Teeth 20 to 120 m4/5/6/8/10 / No. of Teeth 26 to 120

KHG Ground Spur Gears **J** NEW m4/5/6 / No. of Teeth 18 to 60

KWGDLS Duplex Worms NEW m5/6

AGDL Duplex Worm Wheels **NEW**

SW Worms NEW m4/5/6/8/10

m5/6 / No. of Teeth 20 to 60

CG Worm Wheels NEW

m4/5/6/8/10 / No. of Teeth 20 to 60

Ordering Method

Please specify the model number below

 Semi-Custom Stock Gears Semi-Custom Stock Gears Catalog No.

 Semi-Custom Stock Gear J Series Semi-Custom Stock Gears Catalog No. + J + Bore

Example of SS Spur Gears **⇒** SS5-80S Example of KHG Ground Helical Gears ⇒ KHG5-30RS Example of KHG Ground Helical Gears ⇒ KHG5-30RSJ40 ... Bore Φ40

Example of SS Spur Gears

⇒ SS5-80SJ40 ... Bore Φ40

*For dimensions, refer to the catalog listed page

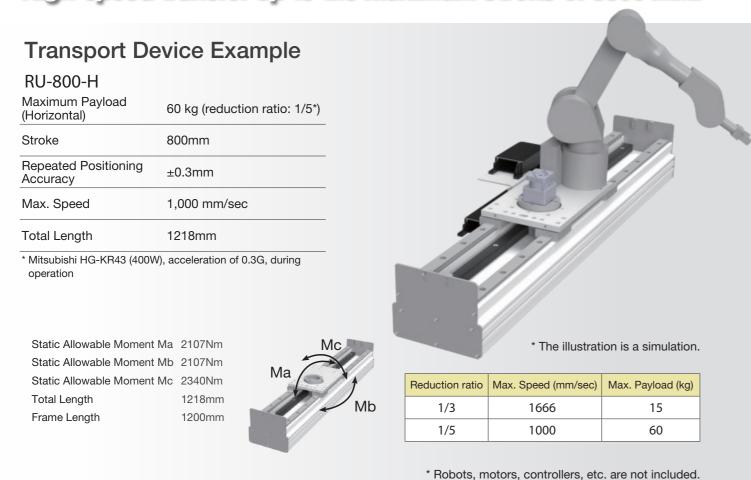
Semi-custom stock gears are made to order based on catalog products. The price and delivery date will be estimated separately. For details, please see Page 42~44.

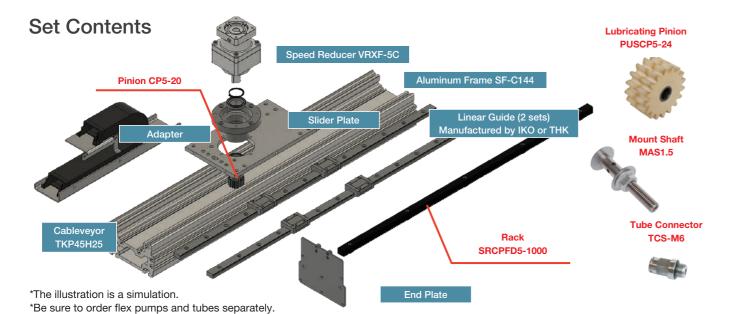
Non-standard secondary operations are available at "KHK Quick-Mod Gears". If there are no standards for the semi-custom J Series, the order will be machined separately according to the specifications.

SUS X KHK

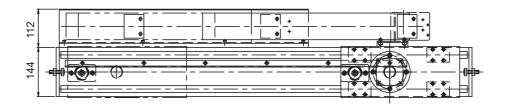
With design support. Easy installation. Labor-saving.

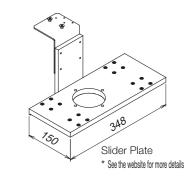
High-speed transfer up to the maximum stroke of 3800 mm.

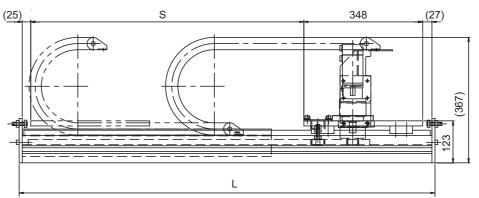


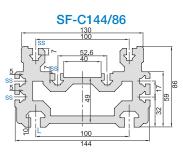


- Product Features
- 1) The maximum stroke can be freely set within 3800 mm.
- 2 Capable of transporting a wide range of light to heavy objects
- ③ Delivery time for the transport device in the example is 30 business days (discussion required when changing specifications)







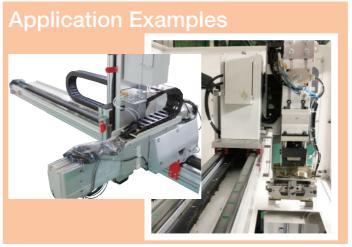


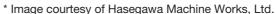
Standard specifications

Model	Stroke: S (mm)	Total length: L (mm)			
RU-800- 🗌	800	1218			
RU-1300- 🗌	1300	1718			
RU-1800- 🗌	1800	2218			
RU-3800- 🗌	3800	4218			

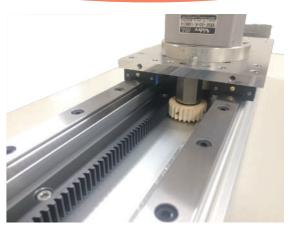
^{*} Can be manufactured within the stroke range of 500 mm to 3,800 mm. The length is adjusted in 100 mm increments.

^{*}contains "S" for reduction ratio of 1/3, and "H" for reduction ratio of 1/5.





Standard equipment includes lubricating pinion

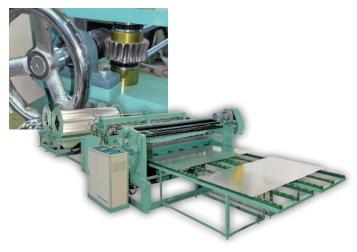


J 3

○ FUKΛGΛWΛ 株式会社フカガワ様

Automatic Size Cutting Device NAHC-F10

3-Roll for Square Elbow FBR-2000M



Gears Used

Uses SW worms and CG worm wheels for rib roll feeding

Machine Application

This device provides materials while correcting the bending of coiled material.

Features

Cn automatically perform standard-length straight pipes cutting, stain removal and ribbing simply by entering the duct size



Uses SMA miter gears for bending moving steel plates

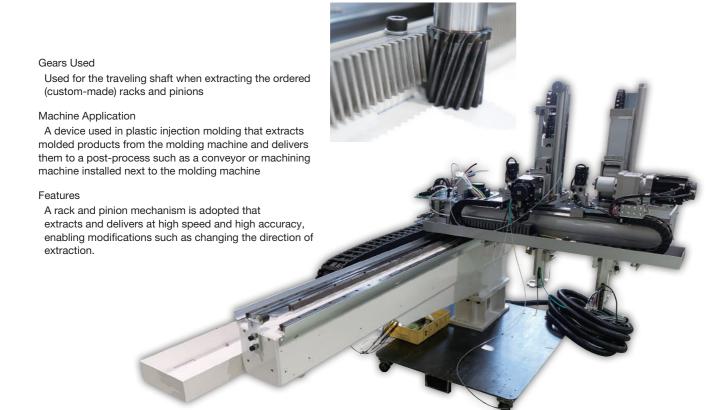
Machine Application

A square elbow forming machine that rolls and bends three iron plates

It has a repeat function that sets the forming roll in the same position

SAILOR セーラー万年筆株式会社様

Injection Molded Product Automatic Extractor sigma5



.....



MM, SM and SMB miters change the motion from the horizontal-shaft drive to the vertical-shaft drive, which is then transmitted to the filling device, and combined with SW worms and CG worm wheels to be used for adjusting the timing of filling while operating the filling

Machine Application

- Makes and fills bags at ultra-high speeds of 300 to 1300 bags per minute
- \cdot A top-level automatic filling and packaging machine

Ultra-high-speed filling and packaging is achieved by the use of rotary methods that make, fill and seal bags in the horizontal direction. In addition, the filling time can be extended to reduce the occurrence of biting into the seal, and the sealing time can be extended to achieving stable seal strength. Also, by combining with an integration device, the unit can be connected to carton making machines, horizontal pillow machines, banding machines, bag-feeding packaging machines,



Pipe Coaster HID-400MA,650MA, 1000MA,1500MA



Dimensional cutting, shape cutting (branch cutting / hole cutting), groove cutting and marking of pipes and steel pipe members used in industries such as shipbuilding, pressure vessels, water supply and sewage, steel structures, construction machinery and heavy electric machinery

- · Supports small-diameter pipes down to 25A to large-diameter pipes up to 1500A. · Supports various cut shapes and has a groove which enables speedy and highly accurate cutting.
- · Can be use to cut not only steel pipes but also square steel pipes and other materials. · Facilitates data creation with the adoption of an interactive data input system.

Hataly 株式会社 ハタリー 様

Short Column Groove Machining Machine SCB-1000 II

H-section Steel Groove Machining Machine HQB-1055NL



Uses SS Series within machining drive

Machine Application

Short column material, groove machining on both ends

.....

Features

- \cdot Machining speed is the fastest in the industry
- · Significantly simplifies the setup
- Supports corners of 250 to 1000 mm and a maximum plate thickness of 50 mm



Gears Used

Uses SWG worms and AG worm wheels in machining drive gearboxes

Machine Application

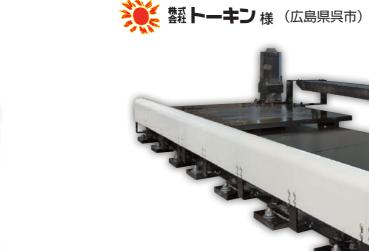
Secondary operations of H-section steel grooves, scallops and driving

Features

- · Supports non-scallop machining
- · Automated 3 shafts
- · High-rigidity frame

Lifter for switchboard

· Reliable long-run model



Robot Slider RS1S



Gears Used

SRCPF racks and custom-order CP spur gears are used for the traveling shaft

Machine Application

As a traveling device for various robots

Features

- · Can be extended by 1.2m by combining 3 types of frames
- · Allows additional extension to be made to existing devices
- · Achieved the maximum track record of 40.8 m

不二産業株式会社様





Gears Used

Use custom-made spur gears to raise and lower the lifter

Machine Application

Pulls out and stores devices such as circuit breakers and lightning arresters from the switchboard.

Features

Allows raising and lowering heavy luggage with human power.



増幸産業株式会社様

Super Mass-Colloider MKZA10-15JIV

.....



Gears Used

Use custom-made spline shafts and spline hubs for the attrition shaft, and SB bevel gears for the manual grinding shaft

Machine Application

Food, spices, industrial raw materials, pharmaceuticals, cosmetics, etc.

Features

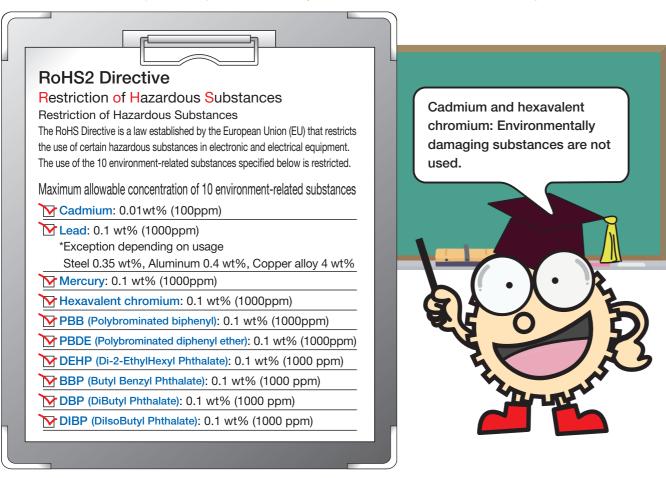
Ultra-fine grain grinder. A stone mill type grinder that's capable of ultra-fine granulation that feels like melting.



35

All KHK stock gears conform to the RoHS2*1 Directive.

*1 The RoHS2 Directive (2011/65/EU) was revised on July 22, 2019 to a total of 10 substances with 4 phthalates added



SDGs

SDGs Initiatives

KHK is working to contribute to the realization of the SDGs.

KHK Environmental Practices

Treatment after use of KHK stock gears and packaging materials

■ Steel Products



Recycle metal products as scrap metal according to the

■ Nylon Gears

Nylon gears are plastic waste. Treat the cardboard used in Please dispose of as reusable the packaging as recycled





Treat the cardboard used in the packaging as recycled



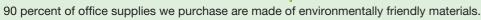
Packing materials like foamed polyethylene sheets and plastic boxes are plastic waste. Please dispose of as

SDS Activities

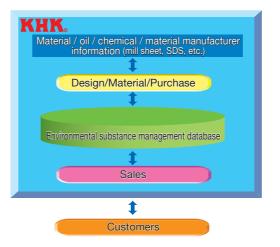
36

The materials and products used for KHK stock gears, the rust preventive oil and packaging materials, and the auxiliary materials used in the manufacturing process are managed in the safety data sheet for chemical substances, etc., in consideration of the global environment.

Green Purchasing Activities



The material components of KHK stock gears are managed in a database.



- * The mill sheet is an attached document that guarantees the
- * SDS refers to safety data sheets.

We have created a database of materials used in KHK stock gears, black dye, rust preventive oil used in products, mill sheets and SDS for packaging materials in effort to create environmentally friendly products.

株式番号 KSOM1822 三管理部署別		環境							
		■使用製品別		三種類別		■取引終了		≕審査中	
PINOS									
安徽: 福田	#17	180	W25-6	形状构体	waxe.	粉光業者	使用先	MSDSPLASE	AMMER
建 甲基苯酚	N .				-				
*40) (E	to the publishment of the	A1127 - 20010				10-00-0		
	# ZZ-006	三価要鉛単例プロメート	パワーコーナ9128	けっプリング	0.188	MALE.	小原常書	10/05/00	10/05/20
	# 22-1	34(2	SETTLETTUP NO		CARDON	#085	NAME .	09/04/21	06/04/21
	# ZZ-10	メカヒピ ター#325	メカモビター#305	7		MOUNTH.	\$550	13/03/19	13/03/19
	# 22-2	万能がリス	TRUSCO 99747	5	MINER	8811	SHOW.	09/04/21	14/01/16
	# ZZ-4	こうロチェック る本セット	F305x+7		0.012.000	MORE.	品質管理	09/04/21	14/01/08
	# 22-6	春竹	養与25500		MOTO	#1000	\$5,00	09/04/21	14/01/06
	# ZZ-8	ORC 5-58	KURE/ORC 5-56		A.T. SHAROLD IN	8080	35/20年	09/12/10	14/01/06
	# 22-9	WC-12	NO-12		お客がたたちの	PART BUILDING	36/203	19/09/19	13/03/19
- 18k	H/A				-				
	F G0-1	#-84~260FG10	1-55-30FG10		MEANURAL PARTY	METCA .	\$600	00/11/17	14/01/09
*E	品工品				12.		Marie -		
	F M-025	意識の271-1社内使用	73-77-A		M1-516	8183	\$6.00	09/04/21	14/01/09
	M-026	裏染のスフレー:社内使用・	MET RIFFIT KILL		COLD Briss	#0#E	\$1/50X	09/10/29	14/01/09
	# M-027	GCU1上的企業307萬朵的	美杂的	止の宝具も1		#10M3	小便故事	10/05/20	10/05/20
	M−028	GCU1止めむ/集争め	BLACKER9696	元角穴付止	日本ディース	#10 M.E.	小孫索章	10/06/14	14/01/08
- 346	iletti .								
	# Z-076	GCU:3HP	ポリカーエース 日	コレーム	信架ペークライ	7.000	小侠宝章	12/03/27	12/00/27
	# Z-076	90017-r/a	オイレス#80	オイレスブッ	(単4)、3.2.(金)・単	A PLEME	小侠由章	10/05/20	14/01/08
	# Z-077	GCU:金馬	SUM22L	止の金具	169	WORKS.	小便由車	10/05/20	10/05/20
	₹ Z-080	GOUTHOU'S	アルミニューム50	りついわり	自州東外(10)	CENTR	小原菌車	10/05/31	10/05/31
	₹ Z-081	GOU! EBW/	SCM435	方角穴付出	18/75/00TH	BURS	小原雷車	10/06/14	10/06/14
	# Z-082	GOU:正的金具1/	SCM495	止の全員わり	relati	#0#4	小原菌車	10/05/20	10/05/20
	# 2-2	804	CAC406C		JUREAU - PERM	1,1000-17007	(\$6±#)	09/06/17	14/01/00
- t/36	(la								
	€ 00-1	PEC HF-1569H	FEC. HF-1560H		N/DRINGSRY	NORMALISM:	BI-BUR	08/11/11	14/01/00

Improving environmental (quality, safety, cost) aspects through design, manufacturing and sales activities of KHK stock gears

Press ahead with employing "dry-cut" gear cutting methods.



Results

Preventing air pollution due to oil smoke, not using cutting oil (resourcesaving), shortening machining time by highspeed gear cutting (saves energy, shortens manufacturing lead time)

■ The choice of hybrid cars and idling stop cars



Results

We are working to reduce the environmental burden by using hybrid and idling-stop vehicles.



Results

It blocks heat from the outside during summer and insulates heat inside during winter, reducing the amount of electricity used by the air conditioner.

Solar panels placed on the roof of our building (10kW-Rated)

Adiabatic films covering windows and adiabatic paint applied on the roof of our building



Results

60 solar panels on the roof reduced 1.89 tons of CO2 emission per year. CO2 emissions are known to be contributors to global warming.

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ISO14001 environmental management system certification acquired

KHK has established an integrated management system not only to provide quality assurance to our customers but also to conduct environmentally conscious corporate activities and continuous improvement activities that involve all our employees in order to increase stakeholder satisfaction, as well as to establish and promote a system that provides highly economic results.



At KHK, we strive to fulfill our motto "to provide quality products that are trusted by customers," acquiring the international standard quality management system ISO9001 certification and the environmental management system ISO14001 certification. Also, in order to increase customer satisfaction, we have established an integrated management system of "Vision, Plan, Do, Check and Action" cycles to continuously improve the work structure and offer safer and better products speedily and cheaply. We also work hard to further improve our service so that our customers can use KHK products with peace of mind.

Racks & Pinions Selection Software

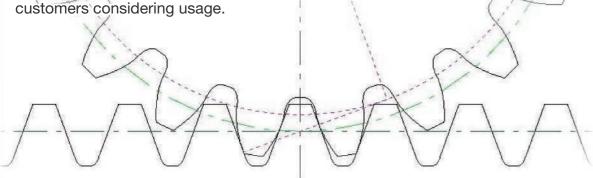
GRSW

Limited release on the Japanese website

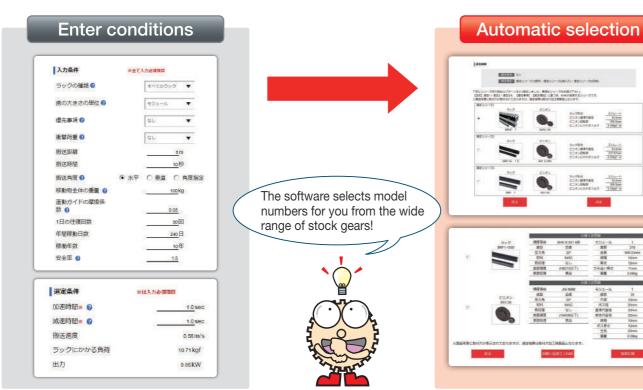
Supporting you through the complex rack & pinion selection process!

Just enter the usage conditions for simple, speedy selection.

This selection software is designed for customers who have struggled with rack & pinion selection before, those hoping to streamline the selection process, and new customers considering usage



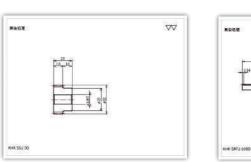
Select the desired rack & pinion from standard products

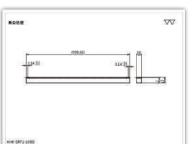


Drawings and strength calculations for the selected rack & pinion can be viewed immediately!

Calculation results

Stock gear drawings

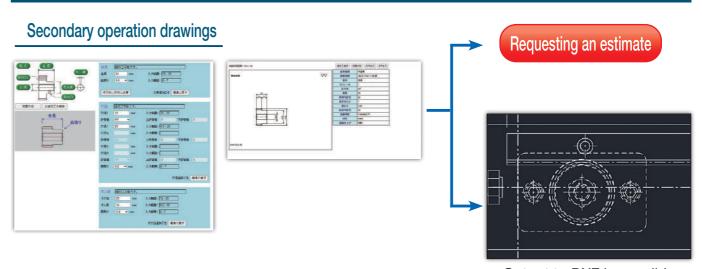




CAD data for standard products can be downloaded from the website



You can also create secondary operation drawings for the selected rack & pinion, incorporating them into the assembly drawings or requesting an estimate as is



Output to DXF is possible

Usage

Please register as a user.

KHK software can be used for free, but registration is required. Log in with your GCSW/GDSW ID and password if you have one already.

* We carefully manage customer data based on our personal information protection policy

<Cautions regarding Manufacturing>

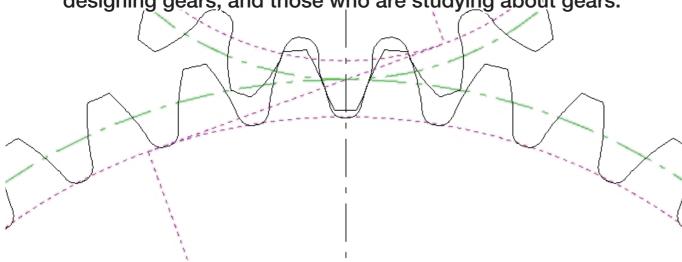
- Software contents and terms of use are subject to change without notice.
- No compensation will be provided for any loss which might be caused by bugs in the software.
- The gear strength formula is based on JGMA (Japanese Gear Manufacturers Association) specifications.
- Drawings drawn may not be manufacturable due to our production capacity.

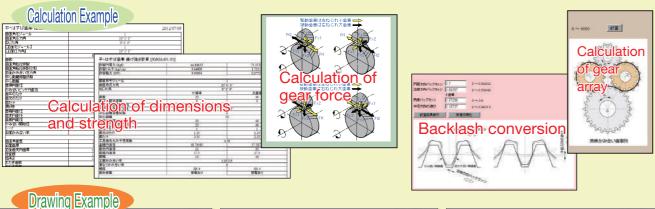
Gear calculation software GCSW Free

& Gear drawing software GDSW for Web

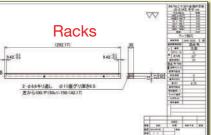
Powerful support for onsite design.

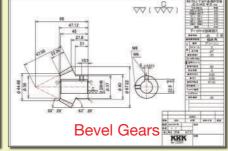
Gear calculation and drawing software that can be used by those who are experienced in gear calculation, those who are considering improving the efficiency and simplification in designing gears, and those who are studying about gears.











Gear calculation software GCSW

Reduce the cost of designing gears with GCSW.



Calculation functions of GCSW						
Gear Type	Parallel axes: Spur/helical gears, internal gears, racks & pinions Intersecting axes: Miters, bevel gears Skewed axes: Screw gears, worms & wheels					
Calculation details	Various dimensional calculations (profile shift, tooth thickness, center distance) Strength calculation (bending strength, surface strength) Calculation of gear force (radial direction, thrust direction, radial direction) Gear tooth profile calculation (tooth profile drawing, creation drawing, meshing drawing) Backlash conversion, constraint meshing gear array calculation					
Output Details	Printing various calculation results Printing tooth profile drawing, creation drawing and meshing drawing CAD data output of tooth profile drawing					

Difficult calculations for gears such as gear shape, strength and tooth profile can be instantly made. In addition, it can simulate the dimensions and strength of desired gears, allowing the designing cost to be drastically reduced.

Gear drawing software GDSW

Basic gear drawings can be easily made using GDSW.



GDSW drawing functions					
Gear Type	Parallel axes: Spur/helical gears, internal gears, racks & pinions Intersecting axes: Miters, bevel gears Skewed axes: Screw gears, worms & wheels				
Drawing contents	Gear specifications (pitch, pressure angle, number of teeth, gear accuracy, material, heat treatment, etc.) Basic shape of various gears Shapes with/without hubs (2-step hub supported) Hole shape (3-step hole supported) Key groove shape (JIS key, optional key supported) Mounting hole shape (tap, drilled hole, counterbored hole)				
Output Details	Printing gear drawings CAD data output of drawn gears (ZIP supported)				

It can be used to make drawings with basic gear shapes without needing CAD software.

Drawings of spur gears, bevel gears, worm gears and the like can be printed and CAD data can be created.

Usage

Please register as a user.

KHK software can be used for free, but registration is required.

When user registration is completed, "KHK My Page" is created and GCSW and GDSW become available. For details, please see our web site.

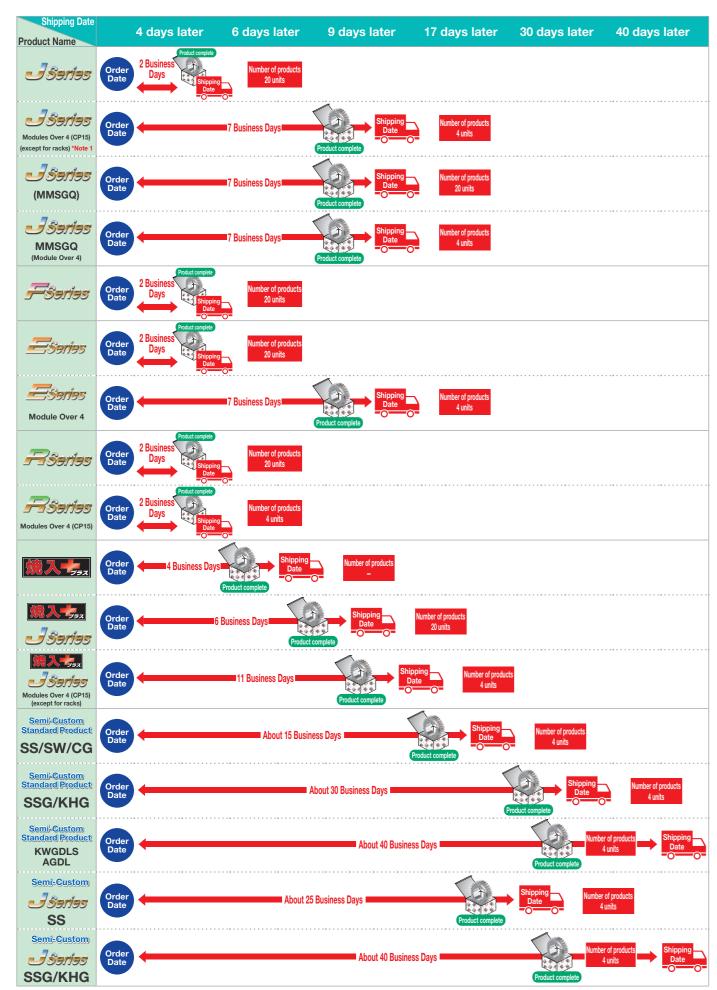
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<Cautions regarding Manufacturing>

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- No compensation will be provided for any loss which might be caused by bugs in the software.
- The gear strength formula of GCSW is based on JGMA (Japanese Gear Manufacturers Association) specifications.
- Drawings drawn by GDSW may not be manufacturable due to our production capacity.

Product Delivery



*The delivery date excludes the day ordered, and shipping takes place on the next business day. Because machining starts immediately, we cannot accept cancellations for the products above.

*Note 1 Allowable order sizes for module 4 (CP15) or higher are up to 4 units; for racks of module 4 or higher, up to 20 units.

Series Common

(1) For allowable order sizes, see the table on the lefthand page. Cancellation is not possible for made-to-order products. Please allow additional shipping time to get to your local distributor.

J Series

[J Series lead time]

- (1) As available-on-request products, these require a lead-time for shipping of 2 working days (excludes the day ordered), after placing an order.
- (2) Products with module 4 (CP15) or higher require a lead-time for shipping within 7 working days (excludes the day ordered).
- (3) Racks, regardless of module, require a lead-time for shipping within 2 working days (excludes the day ordered).
- (4) MMSGQ J Series, regardless of module, require a lead-time for shipping within 7 working days (excludes the day ordered).

F Series

[F Series lead time]

(1) As available-on-request products, these require a lead-time for shipping of 2 working days (excludes the day ordered), after placing an order.

E Series

[E Series lead time]

- (1) As available-on-request products, these require a lead-time for shipping of 2 working days (excludes the day ordered), after placing an order.
- (2) Products with module 4 or higher require a lead-time for shipping within 7 working days (excludes the day ordered).

R Series

[R Series lead time]

(1) As available-on-request products, these require a lead-time for shipping of 2 working days (excludes the day ordered), after placing an order.

Hardened Plus (H Series)/Hardened Plus J Series (HJ Series)

[Hardened Plus (H Series) lead time]

(1) As available-on-request products, these require a lead-time for shipping of 4 working days (excludes the day ordered), after placing an order.

[Hardened Plus J Series (HJ Series) lead time]

- (1) As available-on-request products, these require a lead-time for shipping of 6 working days (excludes the day ordered), after placing an order.
- (2) Products with module 4 (CP15) or higher require a lead-time for shipping within 11 working days (excludes the day ordered).

Semi-custom order / Semi-custom order J series

[Semi-custom lead time]

- (1) In the SS/SW/CG Series, products with S at the end of the Catalog No. are semi-custom stock products. The delivery will take about 15 business days after the order is received.
- (2) In the SSG/KHG Series, products with S at the end of the Catalog No. are semi-custom stock products. The delivery will take about 30 business days after the order is received.
- (3) In the KWGDLS/AGDL Series, products with S at the end of the Catalog No. are semi-custom stock products. The delivery will take about 40 business days after the order is received.

[Semi-custom J Series lead time]

- (1) SS type semi-custom J series products take about 25 working days after the order is received.
- (2) SSG/KHG type semi-custom J series products take about 40 working days after the order is received.

- ① Made-to-order products, semi-custom orders, and semi-custom order J Series products are estimated separately. Contact
- ② Since the prices are per unit (excluding SRS), the total unit price of miters and the like is the set price.
- 3 Product prices may be changed without prior notice.

Changes and Cancellations

[Standard Machined Products 'Note 1, Made to Order Products, Semi-custom Products, Semi-custom J Series Products] Because production begins upon ordering, cancellations and changes cannot be made.

[KHK Quick-Mod Products, Custom Gears]

Because production begins upon ordering, cancellations and changes are difficult.

Changes may be possible in some cases, depending on modification status, but a further estimate will be required. Contact

As the product is manufactured to customer-specified dimensions, it cannot be used elsewhere; therefore, returns are not possible.

Out of Stock

[Standard Gears (gears in stock), Standard Machined Products 'Note 1, KHK Quick-Mod Gears]

Production takes place according to stock status, so there may not be sufficient quantities available as ordered.

Some time may be required for production after orders.

Lead times may be longer depending on material acquisition status and modification processes.

*Note 1 Standard machined products: J Series, F Series, R Series, E Series, Hardened Plus, Hardened Plus J Series





Includes Made to Order

Catalog Number of KHK Stock Gears

The Catalog Number for KHK stock gears is based on the simple formula listed below. Please order KHK gears by specifying the Catalog Numbers. (Example) Spur Gears



Kohara Gear Industry Co.,Ltd.





KHK Group

Kohara Gear Industry Co.,Ltd.

Design, manufacture and sales of KHK stock gears Order and manufacture of various order-made gears

KHK Noda Co.,Ltd.

Manufacture/sales of gears and stock gears

KHK CO., LTD.

Purchase/sales of gears and variable speed reducers Trade in transmission items

Sales Overseas

KHK's global network is built throughout the world. See the website for details on each country and region.



Factory Introduction







JIT Line

Lathe

Tooth Cutting







Grinding Operations

Machining

Wire Cutting



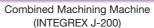




Warehouse of KHK Stock Gears

Production Equipment







Vertical Machining Center (SVC2000)



Inner Surface Combined Grinding Machine (IGH-2NT)



CNC Hobbing Machine (KN-152)



Hobbing Board (KL-451)



Gear Grinding Machine (VIPER500W)



Wire Electric Discharge Machine (C-600iA)



Combined Machining Machine (DMU 85 FD monoBLOCK)

KHK Noda Co., Ltd.







KHK Noda Co., Ltd. 143 Nakazato, Noda-shi, Chiba, 270-0237

Quality Assurance



Carl Zeiss 3D Coordinate Measuring Machine (ACCURA)



Gear Measuring System (350GMS)

Hardening Equipment



Induction Hardener (MK16A STAT300-50)

Laser Hardener (LDF4000-40)

Production Equipment









CNC Bevel Gear Grinding Machine (PH-280HG) Vertical Machining Center (VCN-530C) CNC Screw Grinding Machine (TE-LM200)



Packaging Machine (EPK-S)



		Discontinued Products	Specifica	Alternative		
Category	Item	Range	Characteristics	Material	Item	Sales Period
		Some products of module 1,1.5, 2, 2.5, 3, 4		SCM415	Custom order	1978~2024
	KSG	Some products of module 1, 1.5, 2, 2.5, 3			Custom order	2018~2024
	SSGS	Some products of module 1.5, 2, 2.5, 3		S45C	Custom order	1984~2024
	SSG	Some products of module 0.5, 0.8, 1, 1.5, 2.5, 3		S45C	Custom/Made to Order	2008~2024
	SSAG	Some products of module 1, 2.5, 3, 4	Finished	S45C	Custom order	2016~2024
	KS	All	Thermal refined	SCM440	Made to Order	2018~2024
	SSS	Some products of module 0.5, 0.8, 1, 1.5, 2, 2.5, 3		S45C	Custom order	2008~2024
	SS	Some products of module 0.5~6	Finished	S45C	Made to Order / Secondary Operations	1974~2024
	SSA	Module 1.5, 2.5	Finished	S45C	Custom order	1974~2024
	SSY	Some products of module 0.8, 1, 1.25		S45C	Custom order	1984~2024
	SSAY	Module 1.25	Hubless	S45C	Custom order	1988~2008
	SSAY/K	All	K clamp (patented)	S45C	No production	2002~2017
	SSH	All	Honing treatment on Tooth Surface	S45C	SSG	1973~1975
	LS	m0.5-25,40 m0.8-25,40,60,70,80	Sintered item	SMF5040	SS	2000~2014
	CS	All	Molded	FC200	SS	1973~1984
	SUSL	All	F-loc	SUS303	SUSF	1975~1964
	DSL	All	F-loc		DSF	
Spur Goors				Acetal (SUS303)	Custom order	2000~2016
Spur Gears	SUS/SUSA SUSF		Finished F-loc	SUS303	Custom order Custom order	1978~2024
	DSF	Module 0.5, 1 Module 0.5, 1	F-loc	SUS303 Polyacetal (SUS303)		2016~2024
		·				
	NSU	Some products of module 1,1.5, 2, 2.5, 3		MC602ST (S45C)	Custom order	1988~2024
	PSU	All	With core hub	MC901 (FC200)	PU	1988~1996
	PU PC/PCA	Some products of module 1.5	With core hub	MC901 (SUS303)	Custom order	1996~2024
	PS/PSA	Some products of module 1, 1.5, 2.5, 3		MC901	Custom order	1975~2024
	DS	Some products of module 0.5, 0.8, 1	Molded item	Duracon (R) (M90-44)	Custom order	1988~2024
	BSS	Some products of module 0.5, 0.8, 1	Finished	C3604	Made to Order / Secondary Operations	2008~2020
	MSCPG	All	Carburized	SCM415	Made to Order	2014~2020
	KSCPG	Some products of CP 5, 10	Thermal refined, gear teeth induction hardened		Custom order	2018~2024
	SSCPGS	Some products of CP 5	Thermal refined, gear teeth induction hardened		Custom order	1992~2024
	SSCPG	Some products of CP 15.20	Gear teeth induction hardened		Custom order	1984~2024
	KSCP	All	Thermal refined, gear teeth induction hardened		KSSCP Hardened Plus	2014~2019
	KTSCP	Some products of CP 5, 10	CP, Thermal Refined	SCM440	Custom order	2000~2024
	KSSCP	Some products of CP 5, 10	CP, Thermal Refined	SCM440	Custom order	2018~2024
	SSCP	Some products of CP 2.5	CP	S45C	Custom order	1978~2024
	SUSCP	Some products of CP 10	CP Constant	SUS303	Custom order	1989~2024
11.5.10	KHCPG	All	CP, Ground	SCM440	Custom order	1992~1992
Helical Gears	KHG	Some products of module 1,1.5, 2, 2.5, 3		SCM440	Custom order	1989~2024
	SH	Some products of module 2	Normal module	S45C	Custom order	1974~2024
Internal Ring Gears	CI	All	Molded	FCD55	SI	1973~1978
	SI	Some products of module 1.5, 2, 2.5, 3		S45C	Custom order	1978~2024
	KRG	All 500mm	Thermal Refined, Ground		KRGF	1984~2020
	KRGD	All	Thermal Refined, Ground		KRGFD-HJ	1984~2019
	SR SDC/SDCF	Lengths over 1000 mm	Common Type	S45C	SRF	1973~2008
		Module 0.5, 0.8	Gear teeth induction hardened	S45C	Made to Order	1996~2022
	SUR	Lengths over 1000 mm	Stainless Steel	SUS304	SURF	1978~2020
	DRF	Some products of module 1.5, 2, 2.5, 3	,	Polyacetal	PRF	2014~2024
Racks	PR	Lengths over 1000 mm	Plastic	MC901	PRF	1984~2020
	BSR	Module 1.25	Contains Brass	C3604	Custom order	1984~2008
	SRO	SRO6-1000	Round Racks	S45C	Custom order	1975~2019
	CR	All	Molded	FC200	SRF	1973~1978
	SRH	Some products of module 2.3	Common Type	S45C	Custom order	1974~2024
	KRGCP	All 500mm	Thermal Refined, Ground	SCM440	KRGCPF	1986~2020
	SRGCPF	Some products of CP 15.20	Gear teeth induction hardened		Made to Order / Secondary Operations	1996~2024
	KRGCPD	All	CP, Thermal Refined, Ground	SCM440	KRGCPFD-HJ	1984~2019

Category		Discontinued Products	Specifica	Alternative	Sales Period	
Category	Item	Range	Characteristics Material		Item	Sales Fellou
5 -	SRCP	Lengths over 1000 mm	СР	S45C	SRCPF	1978~2008
Racks	SRCPF	Some products of CP 15.20	СР	S45C	Made to Order / Secondary Operations	1978~2024
	KRHG	Some products of module 2, 2.5, 3	Thermal Refined, Ground	SCM440	Custom order	1992~2022
Helical Racks	KRHGCPF	All	CP, Ground	SCM440	Custom order	1992~1992
	SMS	Some products of module 1, 1.25, 1.5	Common Type	S45C	Custom order	1975~2024
0 : 114"	SMSG	Some products of module 1, 1.5, 2, 2.5, 3, 3.5, 4, 5	Gear teeth induction hardened	S45C	Custom order	1996~2024
Spiral Miter Gears	KSP	F Type (Finished Products with Key Groove) All Products, Parts of m1.5 to 6	Finished	SCM415	Made to Order / Secondary Operations	2004~2022
	MMS	Some products of module 2, 2.5, 3	Finished	SCM415	Custom order	1984~2024
	CM	All	Molded	FC20	SM	1973~1978
	FM	All	Precision Molded	S45C	SM	1973~1978
Otroi obt Miter Ocean	SMA/B/C	Some products of module 3.5, 6, 8	Finished	S45C	Custom order	1973~2022
Straight Miter Gears	SM	Some products of module 4.5	Common Type	S45C	Custom order	1973~2024
	SUM	Some products of module 1, 1.5	Finished	SUS303	Custom order	1978~2024
	PM	Some products of module 1, 1.25, 1.5, 2, 2.5, 3	Plastic	MC901	Custom order	1975~2024
Ground Zerol Miter Gears	SMZG	All	Thermal refined, gear teeth induction hardened	S45C	Custom order	2010~2020
High-Ratio Hypoid Gears	МНР	Reduction ratios 90, 120, 180, 200, 20 (m1), 30 (m1.5)	High reduction ratio with a pair of gears	SCM415	No production	2000~2016
	MBSA	Some products of module 1.5 or less, 2, 2.5, 3, 4, 5, 6	Finished	SCM415	Custom order	1978~2020
0.1	MBSB	Some products of module 1.5 or less, 2, 2.5, 3, 4, 5, 6	Finished	SCM415	Custom order	1978~2020
Spiral Bevel Gears	KSP	F Type (Finished Products with Key Groove) All Products, Parts of m1.5 to 6	Finished	SCM415	Custom order	2004~2022
	SBS	Some products of module 2.5	Common Type	S45C	Custom order	1973~2024
	FB	All	Precision Molded	S45C	SB	1973~1978
	SB	CB gear mating pinions with module over m5/some of m1.25	Common Type	S45C	SBY	1973~2024
Straight Bevel Gears	СВ	All items having SB	Molded	FC200	SB, SBY	1973~2000
	СВ	SB mating gears with module over m5	Molded	FC200	SB, SBY	1973~2006
	РВ	Some products of module 2.5, 3	Plastic	MC901	Custom order	1978~2024
Ground Zerol Bevel Gears	SBZG	All	High reduction ratio with a pair of gears	S45C	Custom order	2010~2020
	SN	Some products of module 1, 4	Common Type	S45C	Custom order	1973~2024
0	SUN	Some products of module 1, 2.5, 3	Stainless Steel	SUS303	Custom order	1989~2024
Screw Gears	AN	Module 2.5, 3,4	Contains Aluminum Bronze	CAC702 (AIBC2)	Made to Order	1979~2022
	PN	Some products of module 2.5, 3	Plastic	MC901	Custom order	1984~2024
	KWGDL	Module Over 5	Duplex, Ground	SCM440	Custom order	1988~2002
	KWGDLS	Module Over 5	Duplex, Ground Shaft	SCM440	Custom order	1992~2002
	KWG	Right-hand helix with double threads with module over m5 (R2)	Ground Shaft	SCM440	Custom order	1978~2002
Worms	SWG	Some products of module 3, 4, 6	Gear teeth induction hardened	S45C	Custom/Made to Order	1973~2024
	SW	Some products of module 4 or more	Common Type	S45C	Custom/Made to Order	1975~2024
	SUW	Module 2.5	Stainless Steel	SUS303	Custom order	1996~2024
	AG	Some products of module 0.5, 3, 4, 6	Contains Aluminum Bronze	CAC702 (AIBC2)	Custom/Made to Order	1973~2024
	AGDL	Some products of module 1.5, 2, 2.5, 3, 3.5, 4	Duplex	CAC702 (AIBC2)	Custom order	1988~2024
	AGF	Some products of module 2, 2.5, 3	Contains Aluminum Bronze	CAC702 (AIBC2)	Custom order	1978~2024
Worm Wheels	BG	Some products of module 1.25, 4, 5, 6	Contains Phosphor Bronze	CAC502 (PBC2)	Custom/Made to Order	1975~2024
	CG	Some products of module 1.5, 2.5, 3, 4, 5	Molded	FC200	Custom/Made to Order	1975~2024
	PG	Module 2.5	Plastic	MC901	Custom order	1975~2024
	DG	Module 0.5, 0.8	Polyacetal	Polyacetal	Custom order	2008~2022
Gearboxes	PBX	All	Bevel Gearboxes	-	No production	2004~2022
	SRT	Some products of module 2/3	Gear teeth induction hardened	S45C	Custom order	1973~2024
Oth ou Duo du oto	SRTB	Some products of modules 2/3~4	Gear teeth induction hardened	S45C	Made to Order	1992~2022
Other Products	GC	All TK	Gear Couplings	S45C	GC-J	1975~2020
	HEPCO	Some RSJ, RLJ, BHJ, LB, and R products	HEPCO	-	Made to Order	2004~2022
	F	All	Without motor		No production	1973~1980
One-cycle-clutch type geared motor	IM	All	With motor		No production	1973~1980
type geared motor	М	All	With motor		No production	1973~1980
	GCSW	All	General gear calculation		Online GCSW	1988~2009
Gear calculation software	GC2AA					
Gear calculation software Electronic catalog	30XX	All	Product information for KHK stock		Website	1992~2011

Customer Trust and Satisfaction



KHK CO., LTD.

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URL https://khkgears.net/new/ E-mail info@khkgears.net

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KHK Catalog - Product Guide

First Published 20.April. 1972 Published by KHK Co., Ltd.

2025 First Printing (EN) 1.June 2025 13-15 Naka-cho, Kawaguchi-shi, Saitama-ken,

332-0022 Japan

Publisher Toshiharu Kohara