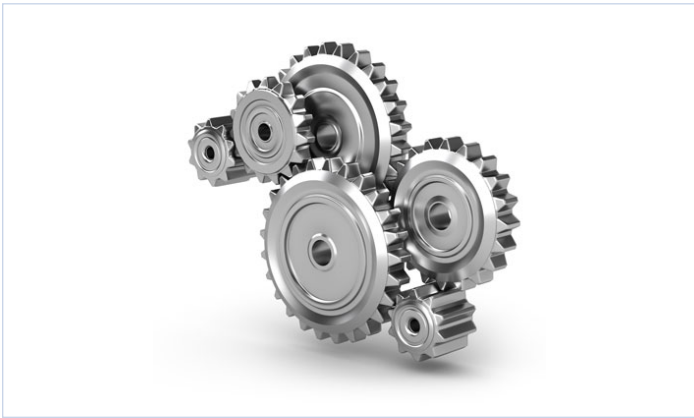


PRECISION GEAR SOLUTIONS

Spur, Helical, Bevel, Worm, Rack and Custom Gears | CNC Manufactured



Every Tooth. Every Application.

Whether you need a standard spur gear or a spiral bevel for a gearbox rebuild, we machine it right the first time.

- **Gear Types**
Spur, Helical, Bevel, Worm, Rack, Internal, Chain, Custom
- **Module Range**
Module 0.5 to 20 | Custom on drawing
- **Materials**
C45, 42CrMo4, 16MnCr5, Cast Iron, Stainless, Nylon







Key Specifications

Module Range 0.5 to 20	Outer Diameter up to 1500 mm	Face Width up to 500 mm
Materials Steel / CI / SS / Nylon	Heat Treatment Case Harden / Induction / Through	Delivery Time 1 to 6 Weeks

Application Areas

- Heavy Machinery
- Agriculture
- Construction
- Mining
- Automotive
- Gearboxes
- Defense
- Material Handling

Product Range

 <p>Spur Gears Straight teeth / Parallel shafts</p>	 <p>Helical Gears Angled teeth / Smooth operation</p>	 <p>Bevel Gears Intersecting shafts / 90 deg</p>
 <p>Worm Gears High ratio / Low-speed drives</p>	 <p>Rack and Pinion Linear motion / CNC machines</p>	 <p>Internal Ring Gears Planetary systems / Slewing rings</p>

About trigontek

From precision components to engineering design, consultation and metal works, trigontek helps industrial customers worldwide turn complex requirements into reliable, ready-to-install solutions. Established in 2023, our team members each bring over 15 years of experience from leading international organizations.

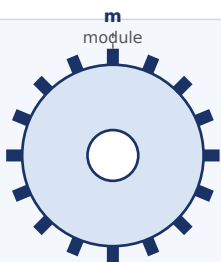
Product Series Overview

Series	Type	Material	Module	Max Dia.	Heat Treat	Best Application
SG	Spur Gear	C45 / 42CrMo4	0.5-20	up to 1500 mm	Through / Case	Gearboxes, machinery, agriculture
HG	Helical Gear	C45 / 16MnCr5	0.5-16	up to 1200 mm	Case Harden	Reducers, automotive, high-speed drives
BG	Bevel Gear	42CrMo4 / Steel	1-12	up to 800 mm	Induction	Differential, right-angle drives
SBG	Spiral Bevel	42CrMo4 / Steel	1-10	up to 600 mm	Case Harden	Trucks, construction, marine
WG	Worm Gear	Bronze / Steel	1-16	up to 700 mm	Through	Winches, hoists, slow-speed drives
RK	Rack and Pinion	C45 / 42CrMo4	1-20	Custom length	Case Harden	Linear motion, CNC, conveyors
IG	Internal Ring Gear	C45 / 42CrMo4	1-12	up to 1500 mm	Induction	Planetary systems, slewing rings
CG	Chain Sprocket	C45 / Cast Iron	ISO std	up to 500 mm	Optional	Conveyor, chain drive, agriculture
CX	Custom Gear	Any grade / Nylon	On drw	On drawing	Per spec	Special OEM, reverse engineering

Material / Grade Selection Guide

Material / Grade	Tensile Strength	Key Property	Best Use Case
C45 Carbon Steel	700-900 MPa	Versatile, machinable	General industrial, low to medium load gears
42CrMo4 Alloy Steel	900-1200 MPa	High strength, wear resistant	Heavy-duty gearboxes, high-torque applications
16MnCr5 Case Hard.	800-1000 MPa	Tough core, hard surface	Automotive, helical gears, planetary sets
Phosphor Bronze	350-500 MPa	Low friction, non-sparking	Worm wheel pairs, marine, food industry
Cast Iron GG25	250 MPa	Vibration damping, economical	Low-speed drives, machine tools
Stainless 304 / 316	520-700 MPa	Corrosion resistant	Food processing, chemical, offshore
Eng. Nylon PA6	80 MPa	Lightweight, silent running	Light-duty, noise-critical applications

Standard Dimensions



Module (m)
0.5 to 20

Outer Dia. (D)
up to 1500 mm

Bore Dia.
Per drawing

Face Width (b)
up to 500 mm

Available Configurations



SG
Spur
Straight Tooth



HG
Helical
Angled Tooth



BV
Bevel
90 deg Shaft



CST
Custom
On Drawing

How to Order: Part Number Builder

TK

Brand

SG

Series

C45

Material

CH

Heat Trt

0080

O.D. mm

Example: TK-SG-C45-CH-0200 = Spur Gear, C45 Steel, Case Hardened, 200 mm Outer Diameter

Request a Sample or Technical Datasheet

Custom gear configurations, reverse engineering and prototype batches available on request.

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