Technical Specifications

Application Area	Core Technology / Precision	Compatible Brands (Examples)
Passenger Car	$\pm 0.01mm$ / NVH Optimized	Global OEMs
Commercial	$20CrMnTi$ / Equidistant Tooth	Isuzu, Foton, etc.
Agricultural	High Impact Resistance	Shandong Shifeng, etc.
AWD	Gleason CNC / High Heat Dissipation	Advanced Drivetrain Systems

Comparison Table of Gear Precision Grade

Country	Standard	Precision Grade											
USA	ANSI					4	3	2	1				
USA	AGMA		16	15	14	13	12	11	10	9	8	7	6
Japan	JIS				0	1	2	3	4	5	6	7	8
International	ISO	1	2	3	4	5	6	7	8	9	10	11	12
China	GB			3	4	5	6	7	8	9			
Germany	DIN	1	2	3	4	5	6	7	8	9	10	11	12
UK	BS					A1	A1	B	C	D			
France	FN				A	B	C	D	E				

Brand	Applicable Models	Popular Ratios	Teeth Count	Material & Process
John Deere	5000 / 6000	11/41, 13/38	11:41 / 13:38	20CrMnTiH
Kubota	M9540, M7040	6:37, 7:39	6T/37T, 7T/39T	20CrMnTi
Massey Ferguson	MF 385 / MF 440	6:37, 9:33	6/37, 9/33	Heavy-Duty Alloy,
New Holland	TD5 / TD95 / TT75	12/37, 9/35	12:37, 9:35	Spiral Bevel
Case IH	Magnum / Puma	10/43, 11/45	10T/43T, 11T/45T	Forged Steel, Deep Carburized
Ford	6600, 6610	6:37, 7:37	6/37, 7/37	Classic Toughness

Comparison of Common Materials

Category	International	China	Corresponding Application Scenarios
Low Carbon Alloy Steel	SCM415 (SCr420H)	20CrMnTi, 40Cr	Low-torque gears, low-speed heavy-duty gears
Medium Carbon Alloy Steel	SCM440 (SCr440H)	42CrMo, 45CrMo	High-load gears, automotive gearboxes
High Carbon Steel / Quality Carbon Steel	S45C, S50C	No. 45 Steel, No. 50 Steel	Medium-low speed gears, general mechanical transmission
Structural Steel	SS400	Q235	Low strength, non-critical structural components
Engineering Plastics	MC Nylon, POM	MC Nylon, POM	Low speed, low load, high noise-reduction requirements