

Integrated machining of
large diameter and large module gears
into one machine

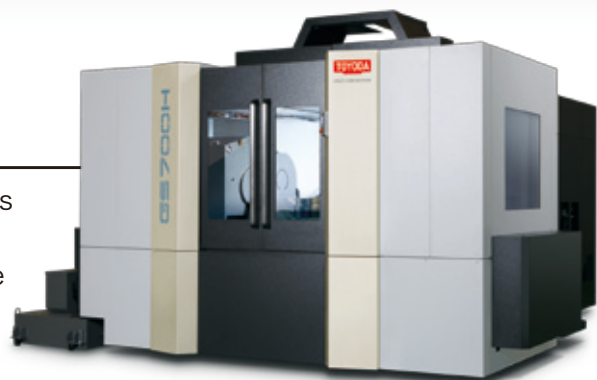
TOYODA

GEAR SKIVING CENTER

Gear skiving centers

GS700H

- Sliding guideway (box slide) which emphasizes rigidity and achieves high-speed machining
- High-rigidity, high-speed trunnion rotary table
- #50 Heavy duty spindle: 6,000 min⁻¹



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■Main features of gear skiving center GS700H5

Basic specifications of GS700H

	Item	Unit	Basic specifications
Feed unit	Travel amount (X, Y, Z)	mm	900, 850, 900
	Tilt axis (A axis) swivel angle	°	100 (+5 ~ -95)
	Rapid feed rate	m/min	20 (X) , 36 (Y, Z)
	Tilt axis (A axis) rotating speed	min ⁻¹	6
Spindle (Tool axis)	Spindle nose shape		BBT No.50 [OP: HSK-A100]
	Spindle speed	min ⁻¹	50 ~ 6,000
	Spindle motor, 30 min. rating/continuous	kW	30/22
Workpiece axis (B-axis)	Rotating speed	min ⁻¹	1,000
	Rated output	kW	50/17.5
	Torque (max./continuous)	N·m	1,500/960
	Max. workpiece dia.	mm	φ 700
	Max. workpiece width	mm	500
	Max. workpiece mass	kg	550 (chuck: 200, workpiece: 350)
	Workpiece clamp		Manual type [OP: hydraulic type, No. of ports: 8]
ATC	Tool holding capacity	tools	40 [OP: 60, 120]
	Max. tool dia. × Max. tool height	mm	φ 120 × 600
	Tool mass	kg	27
Control	CNC		TOYOPUC-GC70
Floor space	Width × depth	mm	5,200 × 6,200

Workpiece to be machined

	Outer gear	Internal gear
Type of gears	Spur gear, internal gear, helical gear, spline	
Workpiece size	φ 250 ~ φ 700mm	
	Total length 500 mm or less	
Max. module	6	
Workpiece material	Iron type material (before hardening)	
Machining accuracy (reference)	JIS N7 class or equivalent	

Please contact our sales staff for more information.

■Original technology supported by JTEKT's achievements in mass production

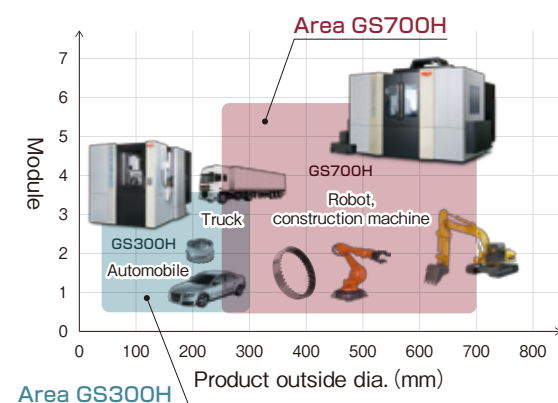
Simple programming, visualized engineering and machining technology

Elemental engineering High-speed/high-rigidity workpiece axis <ul style="list-style-type: none"> 1,000 min⁻¹ specification Size reduction due to built-in motor Supports automatic hydraulic fixtures 	Controls engineering High-speed/highly accurate gear-cutting control TOYOPUC-GC70 <ul style="list-style-type: none"> High-accuracy skiving control using high-speed synchronization Simple programming function
Machining technology Optimum machining conditions <ul style="list-style-type: none"> The optimum machining conditions are selected to suit customer products 	Tool engineering Low-resistance tool design <ul style="list-style-type: none"> Tool design based on original JTEKT gear creation theory

CNC unit TOYOPUC-GC70 ●: Standard / □: Optional

Division	Name	Accessories
Axis control	Min. input increment (0.001mm)	●
	Absolute position detection	●
	Inch/metric switch	□
Operation	Single block	●
	Manual handle feed 1 unit	●
	Machine lock	□
	Dry run	□
Interpolation function	Manual handle interrupt	□
	Positioning (G00)	●
	Tapping mode (G63)	●
	Cutting mode (G64)	●
	Exact stop (G09)	●
	Linear interpolation (G01)	●
	Arc interpolation (G02,G03)	●
	Dwell (G04)	●
	Reference point return (G28)	●
	Second reference point return (G30)	●
	Third and fourth reference point return (G30)	●
Program entry	Machine coordinate system (G53)	●
	Workpiece coordinate system (G54 ~ G59)	●
	Custom macro	●
	Fixed drilling cycle (G74,G84,G98,G99)	●
	Optional stop	●
	Optional block skip (9 pieces)	□
Spindle function	Rigid tap	●
Tool function	Tool corrections (40)	●
Tool correction function	Tool diameter compensation	●
	Tool length compensation (G43,G44,G49)	●
Editing operation	Program storage capacity (1,024Kbyte)	●
	Number of registered programs (1,000)	●
	Background editing	●
Data entry/display	Touch panel control	●
Communication function	Ethernet function	●
Others	12.1" color LCD	●

■GS700H, GS300H applicable range



<http://www.jtekt.co.jp>

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Type of Machinery: Machining Center
Model Number: GS700H