

## CNC GEAR HOBBING MACHINE



CNC gear hobbing machine general precision type two axis numerical control, two axis numerical control system (also according to customer orders can be imported or domestic other numerical control system), the radial feed movement of workbench (X axis) and axial feed movement of hob (z-axis) ac servo control, can easily achieve a clamping, many, many times square loop. According to the principle of generating method, adopt the method of c ontinuous points tooth gear hob can finish straight gear, helical gear, small taper gears, drum gear processing; At the same time, the spline hob can processing spline; The sprocket hob can processing chain wheel; With the worm gear hob, using the method of radial rolling cut worm gear.



## **CNC GEAR HOBBING MACHINE**



#### DETAILED IMAGES





#### Change Gear:

rs, such as SMTCL or other well-known manufacturers. will achieve the purpose of rolling out different gear for ms.

#### Hob carriage:

The gear is selected from domestic high-quality supplie. The hob holder is used to support the hob main shaft a nd drive the hob mounted on the main shaft to make ve In addition, the combination of different hanging wheels rtical feed motion. The internal bearing adopts domestic famous or imported bearings with long life.





#### Chip Coveyor:

Different types of chip conveyors are equipped with dra g chain chip conveyors. At the same time we also provi de spiral chip conveyors and magnetic chip conveyors. (The specific choice is determined by the material of th e workpiece processed by the customer)

#### Hobber:

The hob is a gear processing tool whose teeth are arra nged in a spiral line along a cylinder or a cone. It is us ed to process cylindrical gears, worm gears and other cylindrical workpieces with a gearing method.

# CNC GEAR HOBBING MACHINE



### **EQUIPMENT PARAMETERS**

		CNC Ty	oe Gear Hob	bing Machine			
ltem	Unit	YK3150	YK3180	YK31125	YK31160	YK31200	YK31250
CNC Control axis		2/3/4/5/6	2/3/4/5/6	2/3/4/5/6	2/3/4/5/6	2/3/4/5/6	2/3/4/5/6
Max. diameter of workpiece	mm	500	800	1250	1600	2000	2500
Max. module	mm	8	10	20	24	32	32
Max.helix angle	۰	±45	±45	±45	±45	±45	±45
Max speed of worktable	r/min	7.8	5.2	10	4	1.5	1.5
Speed of spindle	rpm	40~250	40~200	40~160(stepless)	16-220	25-120	25-120
Maxsize of hob D×L	mm	160×160	180×180	235×250	350x405	350x405	350x405
Hob shifting distance	mm	55/150	150	150	340	340	340
Main motor power	KM	4	5.5	18.5	35	35	35
Total motor power	KW	10.1/11.1	12.6	28.5	80	77	77

	H	eavy Duty C	NC Gear Ho	bbing Mach	nine		
ltem	Unit	YK31315	YK31400	YK31500	YK31630	YK31800	YK311000
CNC Control axis		2/3/4/5/6	2/3/4/5/6	2/3/4/5/6	2/3/4/5/6	2/3/4/5/6	2/3/4/5/6
Max. diameter of workpiece	mm	3150	4000	5000	6300	8000	10000
Max. module	mm	32	36	36	42	42	42
Max.helix angle	0	±45	±45	±45	±45	±45	±45
Max speed of worktable	r/min	1.5	3	1	1	0.58	0.58
Speed of spindle	rpm	25-120	12-120	12-120	12-120	10-100	10-100
Maxsize of hob DxL	mm	350x405	450x700	450x550	450x550	550x550	550x550
Hob shifting distance	mm	340	340	490	490	490	490
Main motor power	KM	35	115	75	75	115	115
Total motor power	KW	77	167	120	120	190	190



general type hobbing machine, gear hob used to generating method hobbing cylindrical spur gear, helical gear a nd spline, sprocket, etc. Can also adopt the method of manual radial feed to processing ordinary worm gear. Ord er according to the user's requirements, special parts, using tangential feed hobbing worm gear.





#### **DETAILED IMAGES**





#### Hob carriage:

The hob holder is used to support the hob main shaft a nd drive the hob mounted on the main shaft to make ve rtical feed motion. The internal bearing adopts domesti c famous or imported bearings with long life.

#### Change Gear:

The gear is selected from domestic high-quality supplie rs, such as SMTCL or other well-known manufacturers. In addition, the combination of different hanging wheels will achieve the purpose of rolling out different gear for ms.





#### **Electrical and Operation**

Behind the machine electrical appliances mainly concentrated in a column on the electrical box. Control station are set in the

front of the post, the machine manipulation, the operati on of hydraulic, cooling, lighting, focus on the positive operation board.

#### Worktable/Workbench:

Base on workbench institutions by the workbench, spin dle unit. Workbench including: stop, inching and variable speed function. The workbench to withstand vertical load. Machine tool under the condition of environment temper ature 0 to 40 degrees can work normally.



#### **DETAILED IMAGES**





### Hydraulic lubrication system

Hydraulic lubrication system include: hydraulic system after post

inder system, automatic lubrication system.

#### Rear Column

Column is installed on the workbench shell, after stents of hydraulic station, hydraulic balance system, tool post installed in the column on the guide rail, lifting oil cylind er, mounted on the post after the support with three han lifting oil cylinder system, workbench fast moving oil cyl d control hydraulic valve control and parking of rise and fall

Hot Sale Model						
Item	Unit	Y3150	Y3180			
Max machining diameter	mm	550	620/800			
Max modulus	mm	8	8,10			
Max width of teeth	mm	250	300			
Max hob diameter/length	mm	160/160	180/175			
Diameter of Worktable	mm	510	625			
Spindle Speed/steps	rpm	40-250/9	40-250/9			
Max hob shift axial	mm	55	55			
Main Motor	kw/rpm	5.5/1500	5.5/1500			
Worktable bore diameter	mm	80	80			
Max hob swivelling angle	degree	240	240			
Diameter of hob arbor	mm	22,27,32	22,27,32,40			



### **EQUIPMENT PARAMETERS**

	Middle	e-Duty Size Gear H	obbing Macl	nine		
Item	Unit	Y31125	Y31160	Y31180	Y31200	
Max machining diameter	mm	1000/1250	1300/1600	1800	2000	
		(without column)				
Max modulus	mm	16/18	16/20	24	24	
Max width of teeth	mm	450	450	1100	1100	
Max hob diameter/length	mm	245/220	280/320	325/360	325/360	
Diameter of Worktable	mm	950	1100	1450	1650	
Spindle Speed/steps	rpm	16-125/7	19-124/7	10-92	10-92	
Max hob shift axial	mm	100	100	140	140	
Main Motor	kw/rpm	15/1500	15/1500	22/1500	22/1500	
Worktable bore diameter	mm	200	260	260	260	
Max hob swivelling angle	degree	±60	±60	±45	±45	
Diameter of hob arbor	mm	27,32,40,50	32,40,50	32,40,50,60,80	32,40,50,60,80	

Hea	avy Duty 9	Sie Gear Hobb	ing Machine		
Item	Unit	Y31260	Y31315	Y31500	Y31630
Max machining diameter	mm	1600/2600	3150	5000	1300/1600
Max modulus	mm	30	30	36	36
Max width of teeth	mm	900	1250	1200	1200
Max hob diameter/length	mm	350/380	400/400	450/480	450/480
Diameter of Worktable	mm	1875	2600	3750	3750
Spindle Speed/steps	rpm	6.5-80	6-80	6.5-51	6.5-51
Max vertical travel of tool	mm			1300	1300
Main Motor	kw/rpm	30/1500	30/1500	37/1500	37/1500
Worktable bore diameter	mm	400	750	950	950
Max hob swivelling angle	degree	±45	±45	±45	±45
Diameter of hob arbor	mm	40,50,60,80	40,50,60,80	50,60,80	50,60,80