

HUAWIN



CNC Gear Profile Grinding Machine
CNC Worm Milling Machine
CNC Thread Grinding Machine
CNC Internal/External Spline Grinding Machine
CNC Internal/External Cycloid Gear Grinding Machine
CNC 5-axis Gear Hobbing Machine



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Gear Profile Grinding Machine PG250/PG400



Workpiece



- Precision profile using rotary dresser.
- Highly rigid box-type bed.
- Equipped with HMI for increasing operational efficiently.
- Linear motor X & Z-axis with zero backlash.
- DD motor of C-axis with zero backlash.



Gear Profile Grinding Machine PG250/PG400

Specification

Workpiece	Spec		
	PG250	PG400	
Min. Gear major diameter	Φ20 mm	Φ30 mm	
Max. Gear outer diameter	Φ250 mm	Φ400 mm	
Max.Module	6	10	
Min.Module	0.5		
Number of teeth	1~999		
Stroke			
X-axis travel	170 mm	250 mm	
Y-axis travel	60 mm	100 mm	
Z-axis travel	450 mm	800 mm	
C-axis	±36°		
A-axis	±45°		
C-axis(DD motor)	500 N.m	1300 N.m	
Center distance	80/1000 mm		
Spindle power	17 kW		
Diameter of Spindle	170G	170G	220G
Outer diameter of grinding wheel	Φ50~Φ220	Φ50~Φ220	Φ210~Φ350
Max. speed of spindle	10000 rpm	10000rpm	4000rpm
Rotary dresser	Φ135 x 16W x R 0.3		
Air pressure source rated flow	30 L/min		
Air Pressure	0.5 Mpa		
Power capacity	< 20 KVA		
Machine dimension (L*W*H)	2600*2370*2155(mm)		
Machine weight	8000 kg		

Worm Milling Machine WM1560



Workpiece



- Milling, chamfering, keyway and dual lead processing are completed at one time.
- A full enclosed machine and cutting fluid backflow system facilitates daily maintenance and meet worming processing requirement.

Worm Milling Machine WM1560

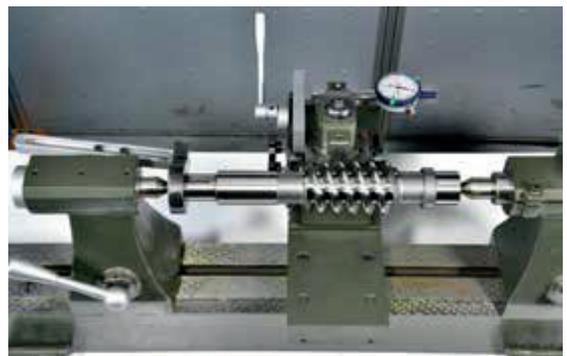
Specification

Workpiece		Spec	Unit
Max.Module		6	mm
Max.Diameter		Φ150	mm
Max.workpiece length		600	mm
Milling cutter			
Max.cutter diameter		Φ100, Φ135	mm
Cutter inside diameter		Φ25.4 , Φ31.75	mm
Stroke			
X-axis travel		120	mm
Y-axis (option) travel		100	mm
Z-axis travel		600	mm
A-axis swivel angel		-90 +35	degree
C-axis	Rated torque	1200	N.m
	Hydraulic chuck	6" (3-Jaw)	mm
	Max.speed	360	r/min
S1-axis	Power	7	kW
	Max. speed	360	rpm
Power capacity		<20	KVA
Air pressure source	Rated flow	30	L/min
	Pressure	0.5	MPa
Machine dimension (L*W*H)		2500 x 1700 x 2000	mm
Machine weight		5000	kg

Thread Grinding Machine WG 2000



Workpiece



- Highly rigid box-type bed.
- Equipped with HMI for upgraded performance and user-friendly operations.
- Precision profile using rotary dresser.
- DD motor of C-axis with zero backlash.
- Linear motor X & Z-axis with zero backlash.

Thread Grinding Machine WG 2000

Specification

Workpiece	Spec	Unit
Max.Workpiece Outside diameter	Φ300	mm
Min.Workpiece Outside diameter	Φ10	mm
Max. Module	12.5	mm
Thread	1~99	
Pressure angle	5° ~45°	degree
Max. load (workpiece with fixture)	120	kg

Stroke

X-axis (Linear motor) travel		290	mm
Z-axis (Linear motor) travel		800	mm
A-axis (Helix angle)		±45°	degree
C-axis(DD motor)		360°	degree
C-axis (DD motor)	Max. torque	1300	N.m
	Center distance	50~1000	mm
Spindle	Power	16	kW
	Max. speed	4000	rpm
Power capacity		<20	KVA
Air pressure source	Rated flow	30	L/min
	Pressure	0.5	MPa
Machine dimension (L*W*H)		2200 x 2600 x 2000	mm
Machine weight		8000	kg

Internal Spline Grinding Machine IG20



Workpiece



- CBN(diamond) grinding wheel and high-accuracy spline.
- CBN grinding wheel with quick-change arbors fit different size splines.
- Renishaw probe is applied to position workpiece automatically.
- Internal grinding spindle (S2) is available to finish grinding chuck jaws.
- DD motor of C-axis with zero backlash.



Internal Spline Grinding Machine IG20

Specification

Workpiece	Spec	Unit
Min. spline minor diameter	Φ20	mm
Min. spline major diameter	Φ25	mm
Min. spline width	5	mm
Max.workpiece swing diameter	200	mm
Max. spline depth	5	mm
Max. spline width	15	mm
Max. spline length	100	mm
Number of spline	1~10	

Stroke

X-axis travel		150	mm
Y-axis travel		100	mm
Z-axis travel		600	mm
C-axis	Rated torque	480	N.m
	Penumatic chuck	Φ250 (3-Jaw)	mm
S1-axis	Power	0.3	kW
	Max. speed	16500	rpm
Power capacity		<20	KVA
Air pressure source	Rated flow	30	L/min
	Pressure	0.5	MPa
Machine dimension (L*W*H)		2250 x 1700 x 2200	mm
Machine weight		4500	kg

External Spline Grinding Machine EG1260



Workpiece



- Equipped with Interactive HMI for upgraded performance and user-friendly operations.
- Quick dressing process realized by moveable rotary dressing device.
- DD motor of C-axis with zero backlash.
- High precision applied to detect workpiece automatically.

External Spline Grinding Machine EG1260

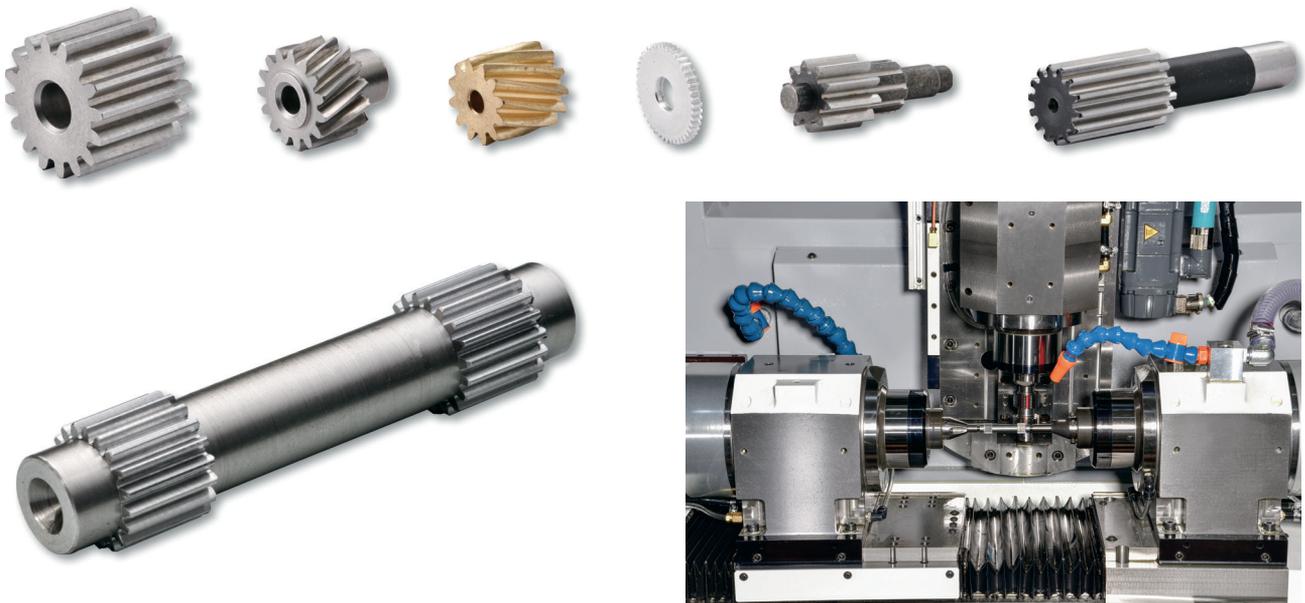
Specification

Workpiece		Spec	Unit
Min.spline major diameter		Φ20	mm
Min.spline width		4	mm
Max.spline diameter		120	mm
Max.spline width		20	mm
Number of spline		1~99	
Stroke			
X-axis travel		70	mm
Y-axis travel		150	mm
U-axis travel		40	mm
Z-axis travel		600	mm
C-axis (DD motor)	Rated torque	500	N.m
	center distance	800	mm
S1-axis	Power	7.5	kW
	Max. speed	10000	rpm
Power capacity		<20	KVA
Air pressure source	Rated flow	30	L/min
	Pressure	0.5	MPa
Machine dimension (L*W*H)		2200 x 1650 x 2000	mm
Machine weight		4500	kg

5-axis Gear Hobbing Machine HW110



Workpiece



5-axis Gear Hobbing Machine

HW110

Specification

Item	Spec.	Unit
Max. gear outside diameter	60	mm
Max. Module	1.5	M
Max. size of hob	Φ38L50	mm
Max. spindle rotation	10,000	rpm
Shifting	70	mm
A-axis swivel angle	±30°	Degree
C-axis Max. speed	6,000	rpm
X-axis radial travel	80	mm
Z-axis axial travel	90	mm
Z2 tailstock travel	110	mm
Power capacity	50	KVA
Air pressure source	4	bar
Machine size	1950 x 1250 x 2000	mm
Net weight	2500	kgf

Finished part of WM1560



Workpiece Spline



Finished part of WG 2000



Processing software for gear



Processing software for cycloid gear



Finished part of EG 1260





About Us

Huawin Precision Ltd. was established in 2014 and combined technologies from Swiss and Taiwan. Our R&D team came from the Industrial Technology Research Institute (ITRI), and cooperated with well-known Taiwan national universities through industry-academia collaboration to develop our brand. Our products include CNC ball screw grinding machine, CNC worm grinding machine, CNC gear form grinding machine, CNC internal/external cycloid gear grinding machine, CNC internal/external spline grinding machine, CNC hobbing machine and CNC worm milling machine, etc.



With expertise, technologies and manufacturing experience, we can produce custom-designed machine according to customer's needs. The development of grinding series machines is toward more optimal product design: the workpiece axis is designed with DD motor + RCN2000 series encoder without backlash. The important linear axis is equipped with a linear motor + THK precision linear guideway + HEIDENHAIN optical ruler to make the linear movement more precise and accurate. The internal/external cycloid gear grinding machine and the internal/external spline grinding machines are both equipped with Renishaw automatic tooth alignment and measurement functions to increase efficiency; and the final precision measurement can ensure stability of the machines. Siemens controller with intelligent human-machine interface input makes the operation more user-friendly. We believe that above-mentioned high-level functional design must be able to achieve high precision product development and production.

With expertise and enthusiasm, we supply machines with high quality, reliability and service support at reasonable price. Therefore, we have a large customer base from machinery/equipment manufacturers, gear processing factories, reducer manufacturers and other industries. Among customers, you will find Mirle group, Delta Electronics, Taiwan Industrial Machinery, Ta Tung Gear and SUNUS Tech, etc.

In the future, Huawin precision will work with global business partners to promote Huawin brand to the world, and supply our products & service according to customer's requirements.



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