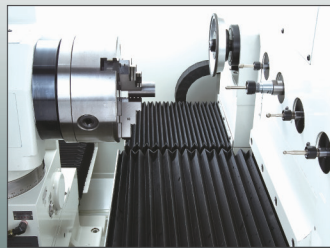
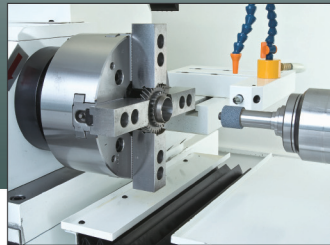


JAGULAR INDUSTRY LTD. has been established in 1986. Base on the excellent technologies and R&D capability, we manufacture and provide a wide range of high quality grinding machines for various grinding applications. In order to provide our customers' more selection and better services, we have been continuously enhancing our grinding technique and improving the mechanism design. In the beginning, we manufactured punch grinder and various internal and external grinding machines. After over 30 years' continuous effort, we now can manufacture full range of CNC internal and cylindrical grinding machines, CNC internal grinding machine, CNC cylindrical grinding machine, CNC centerless grinding machine, variety of precision micro internal and external grinding machine and precision knife grinder. The most variety of grinding machines can satisfy all our clients. We sell our grinding machine under the brand name "JAGURA" all over the world.



CNC INTERNAL & CYLINDRICAL GRINDER

- ICG-S200
- ICG-SL200
- ICG-SL210
- ICG-SL410
- ICG1512 SL11 SL20
- ICG2012 SL11 SL20
- ICG2512 SL11 SL20



CNC INTERNAL GRINDER

- IG06
- IG50
- IG80
- IG150
- IG35100
- IG35150
- IG35200



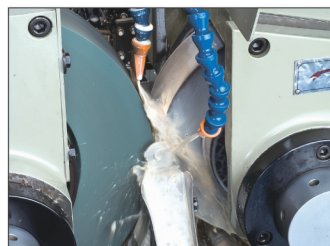
CNC CYLINDRICAL GRINDER

- CG175
- CG2535
- CG2550
- CG2575
- CG3240
- CG3250
- CG3260
- CG3275
- CG32100
- CG32120



CNC CYLINDRICAL GRINDER (ANGULAR TYPE)

- CGA2535
- CGA2550
- CGA3545
- CGA3565



CNC CENTERLESS GRINDER

- 12C
- 18C
- 1810C
- 1812C
- 20C
- 2010C
- 2012C
- 24C
- 2410C
- 2412C



INTERNAL & CYLINDRICAL GRINDING MACHINE CARBIDE DIE SERIES



JAGULAR INDUSTRY LTD.

400,Shin Hwa 1 Road, Tan-Tzu
Taichung, Taiwan, R.O.C.
Tel:886-4-25347465 · 25310646
Fax:886-4-25340191
E-mail:jagura@ms17.hinet.net
<http://www.jaguraweb.com>



Reaching you... Worldwide

JAGULAR INDUSTRY LTD.

Grinding Carbide Dies Let's Talk

The most important feature of Jagura CNC internal & cylindrical grinding machine is the grinding unit can be designed according to the customer's workpiece. Customized design ability is what we are most proud of. In the application of **profile grinding for tungsten carbide die inner hole**, Jagura supplies a series of CNC internal&cylindrical grinding machines for complex internal profile grinding. Such as external radius, inner radius, inner taper and inner slot, etc



CNC Carbide Die Series



Machine Features

Machine Bed:

The machine bed is constructed of high quality "MEEHANITE" cast iron and has been heat treated, normalized and precision ground for maximum stability and rigidity. Outstanding structural reinforcement assures distortion-free operation and long life.

Slide-ways:

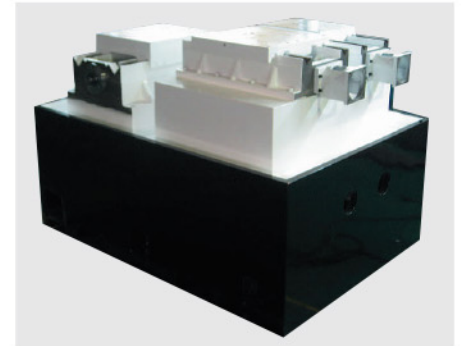
The slide-ways are also heat treated and precision ground to make this machine extremely smooth-running and accurate.

Feed axes:

X-axis and Z-axis are equipped with precision ball screws and servo motors. A servo motor drives the ball screw directly guaranteeing positioning accuracy and feeding stability.

Workhead / C Axis:

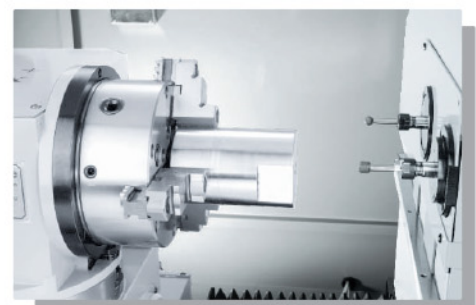
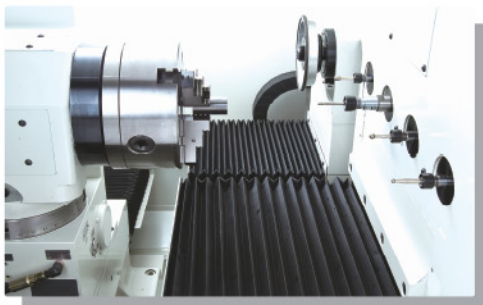
The workhead spindle runs on high precision roller bearings featuring high accuracy, rigidity and silent running. C axis can perform 0.001 deg.indexing.



Machine Bed / Slide-ways / Feed axes



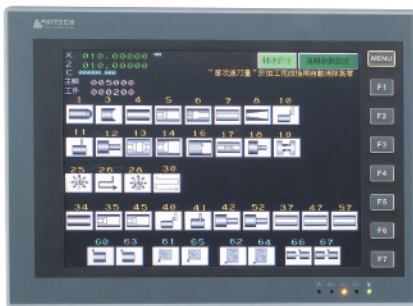
Workhead / C Axis



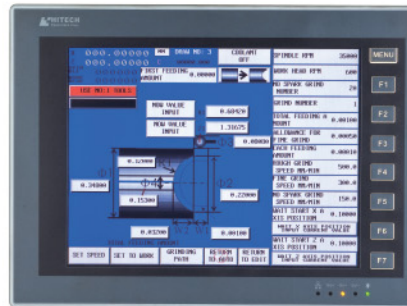
CNC Carbide die series control panel and display

(Human Machine Interface)

The CNC control is an unique Jagura design, which permits self-teaching and is extremely operator friendly. Various profile I.D. may be selected from a standard menu on the touch screen: straight, angle, radius, slots and facing all combined in any pattern. This user friendly software is just one of the reasons that this machine is of such great value - it eclipses all competition in the industry; in fact, it has no competition.



Main Menu

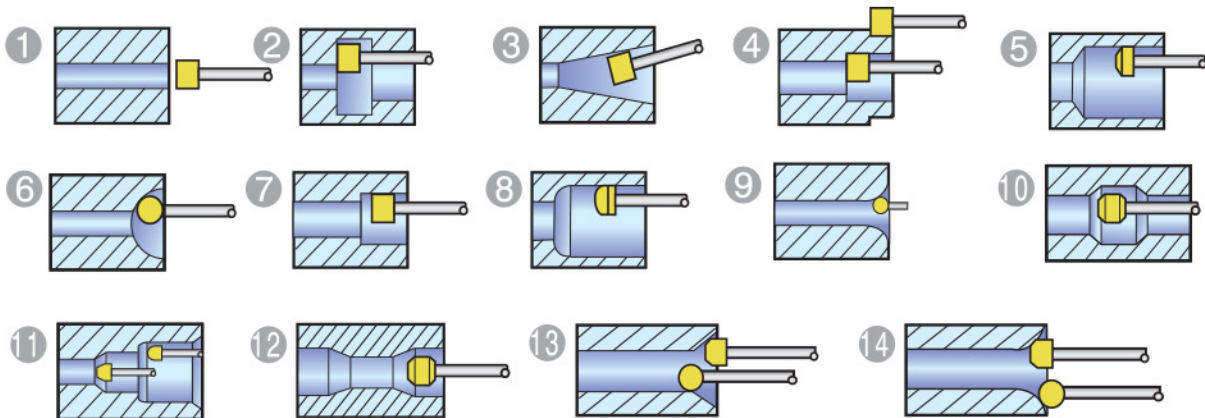


Grinding Rates



Link Cycle

ID:



OD:



* All specifications and design are subject to change without notice.

CNC Internal & Cylindrical Grinding Machine

Carbide die series



ICG-SL410 Carbide Die Master

ICG-SL410 Carbide Die Master is equipped with 4 internal grinding spindles. It is able to install different profile grinding bars on different spindles for complex internal profile grinding, or to install same profile grinding bar with different grit sizes on different spindles. That can ensure die accuracy and make surface roughness approximate to mirror surface. Z2 axis of ICG-SL410 is equipped with 1 external grinding spindle for end face grinding. Both internal grinding and end face grinding can be completed in one loading. That can ensure the die has high concentricity. As to the control system, it is equipped with our own user-friendly dialog human-machine interface. Operator only to select the required built-in grinding program, set operation parameters and key in required grinding sizes, and then the machine will perform grinding processes. Operator is not necessary to edit G code and M code. It is very easy for operation. This model is very useful and suitable for grinding screw molds, can dies, drawing die, powder metallurgy die and lost wax die.

CNC Internal & Cylindrical Grinding Machine

Carbide die series



Model	ICG-SL210	
Clamping diameters	200mm	
Max. clamped unit length	150mm	
Max. travel	X axis	500mm
	Z1 axis	260mm
	Z2 axis	260mm
Min. feeding unit	X axis	0.001mm
	Z1 axis	0.001mm
	Z2 axis	0.001mm
Table speed	X axis	0- 6 m/min
	Z1 axis	0- 6 m/min
	Z2 axis	0- 6 m/min
Workhead speed	0~600rpm	
Spindle speed	ID	0~5500rpmx2
	OD	0~3400rpm x1
Distance between spindles' center	150mm	
Motor	Workhead	1HP
	Spindle	1HPx2 1.5HPx1
	X axis	1KW
	Z1 axis	1KW
	Z2 axis	1KW
C axis	500W	
Machine dimensions(LxWxH)	2250x1950x2000	
Weight	5200kgs	
Working range(inner hole)	φ 1.5~ φ 80mm	

Standard accessories:
 1. φ 3mm Collet x 2 pcs. 2. φ 6mm Collet x 2 pcs.
 3. Nut(M14xP0.75) x 2 pcs. 4. Tool box and accessories x 1set.

* All specifications and design are subject to change without notice.



3 Axis



CNC Internal & Cylindrical Grinding Machine

Carbide die series



Model		ICG-SL200
Clamping diameters		200mm
Max. clamped unit length		120mm
Max. trave	X axis	220mm
	Z axis	260mm
Min. feeding unit	X axis	0.001 mm
	Z axis	0.001 mm
Table speed	X axis	0-6m/min
	Z axis	0-6m/min
Workhead speed		0-550rpm
Spindle speed	ID	0-55000rpm x2
Distance between two spindles' center		150mm
Motor	Workhead	1HP
	Spindle	1HP x 2
	X axis	1kw
	Z axis	1kw
	C axis	500w
Machine dimensions(LxWxH)		2150x1700x2000
Weight		About 2900 kgs
Working range(inner hole)		φ 1.5- φ 80mm

Standard accessories:

1. φ 3mm Collet x 2pcs.
2. φ 6mm Collet x 2pcs.
3. Nut(M14xP0.75) x 2pcs.
4. Tool box and accessories x 1set.

* All specifications and design are subject to change without notice.



2 Axis

SL 200
 Spindle | ID | C Axis
 8" | OD

CNC Internal & Cylindrical Grinding Machine

Carbide die series

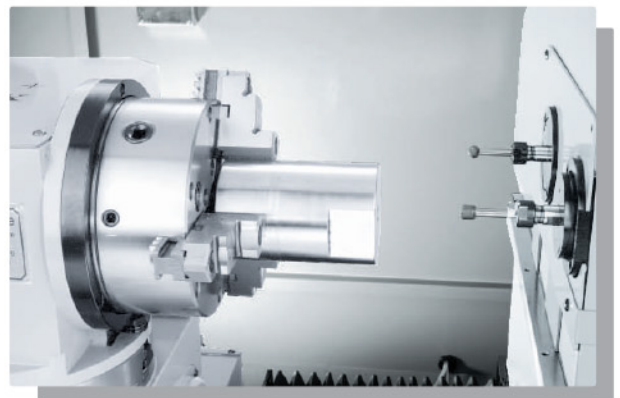


Model		ICG-S200
Clamping diameters		150 mm
Max. clamped unit length		120mm
Max. trave	X axis	220mm
	Z axis	260mm
Min. feeding unit	X axis	0.001mm
	Z axis	0.001mm
Table speed	X axis	0-6m/min
	Z axis	0-6m/min
Workhead speed		0-550rpm
Spindle speed	ID	0-55 000rpm x2
Distance between two spindles' center		150mm
Motor	Workhead	1HP
	Spindle	1HP x 2
	X axis	1kw
	Z axis	1kw
	C axis	500w
Machine dimensions(LxWxH)		2050x1550x2000
Weight		About 2200 kgs
Working range(inner hole)		φ 1.5- φ 80mm

Standard accessories:

1. φ 3mm Collet x 2pcs.
2. φ 6mm Collet x 2pcs.
3. Nut(M14xP0.75) x 2pcs.
4. Tool box and accessories x 1set.

* All specifications and design are subject to change without notice.



2 Axis

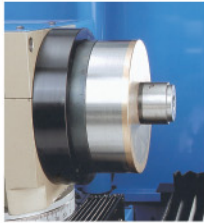
S 200
 Spindle — | ID — C Axis
 — OD

CNC Internal & Cylindrical Grinding Machine

Carbide die series optional attachment

1. Linear Scale Feedback

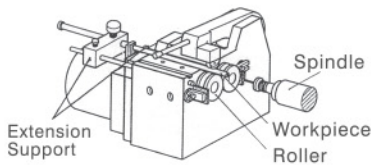
2. Magnetic Table Workhead



3. Collet Workhead



4. Roller Workhead

5. Hydraulic Chuck 6", 8"
(Hollow Rotary/Solid Rotary)

6. Diaphragm Chuck

7. Sinebar Attachment

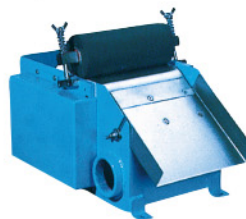


8. Touch Probe Gauge

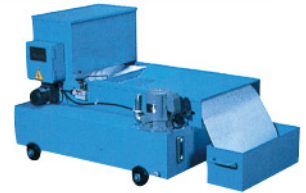
9. Vacuum Dust Collector



10. Magnetic Filter



11. Paper Filter



12. Magnetic & Paper Filter



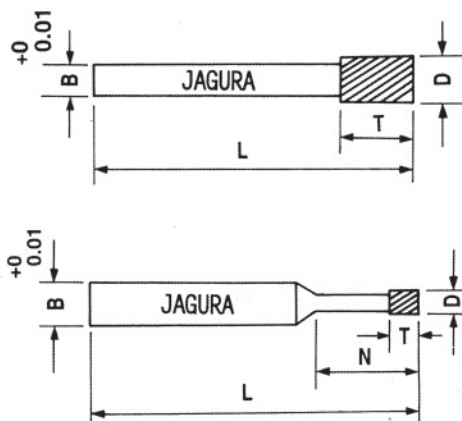
13. Enlarge-type Internal Grinding Spindle



14. Oil Mist Separator



Grinding bar

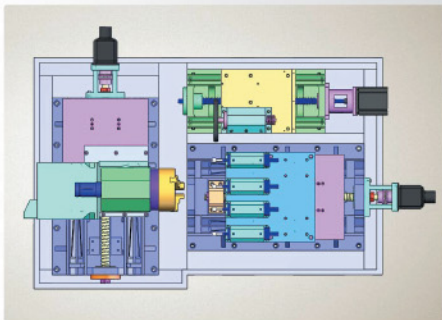
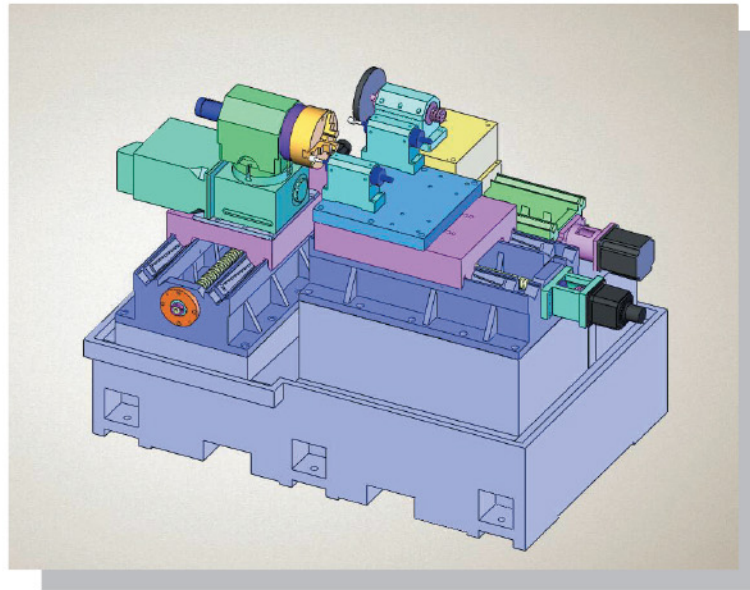


Model	B	L	N	T	D		Grit Size(Mesh)	
							General Grinding	Precision Grinding
JAG-ID01	3	40	8	4	0.8	1.0	200	400 600
			8	5	1.0	2.0		
			12	5	1.5	3.0		
JAG-ID02		45	15	5	4.0	3.0	200	
JAG-ID03	6	80	22	10	4.0	6.0	200	400 600
			22	10	7			
JAG-ID04	10	70		10	7.0	8.0	200	400 600
				10	9.0	9.0		
				10	11.0	10.0		
JAG-ID05	10	70		10	12.0	13.0	200	400 600
				10	14.0	15.0		
				10	11			

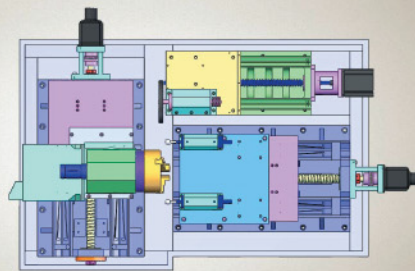
* All specifications and design are subject to change without notice.

CNC Internal & Cylindrical Grinding Machine Carbide die series

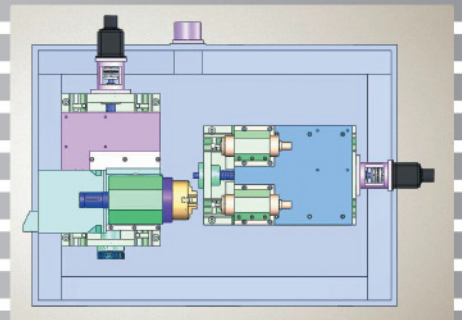
spindle arrangements example



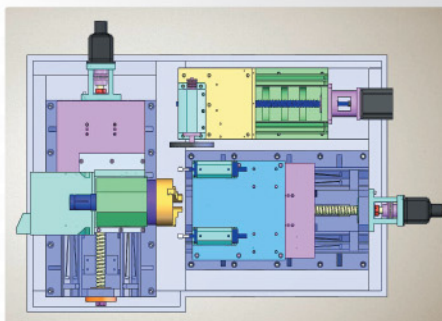
ICG SL410



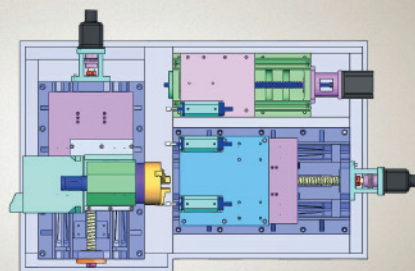
ICG SL210



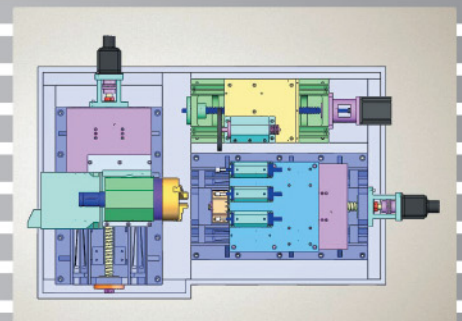
ICG SL200/ICG S200



Customized Machine



Customized Machine



Customized Machine