

WAIDA

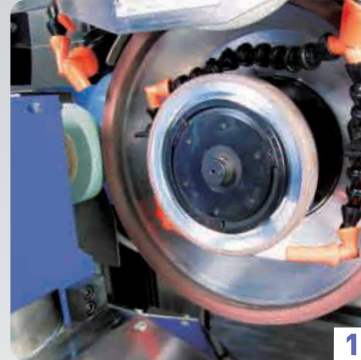
Fully Automatic Grooving Insert Grinder

GIG-202



Multifunction and high quality groove

Breaker grinding Option



1. Dressing for periphery part
2. Sub wheel stocker [Option]
3. Robot hand [Option]
4. Work measurement
5. In-process cleaning device[Option]



AWC Loading Option



MAIN FEATURES

- 1 High precision grinding by higher rigidity and stability of wheel angle varying axis.
- 2 Wheel edge grinding for formed shape by function of front and periphery part of grinding wheel.
- 3 Customer can create and edit any grinding program by interactive software, GIG ToolLab.
- 4 Reduction of trial grinding and improvement of grinding stability by several measuring functions (CNC).
- 5 Breaker grinding and combined grinding by robot hand (Option).
- 6 Various options (Sub wheel spindle (Manual clamping/AWC loading), In-process cleaning device, Lay down pallet, Pallet changer).

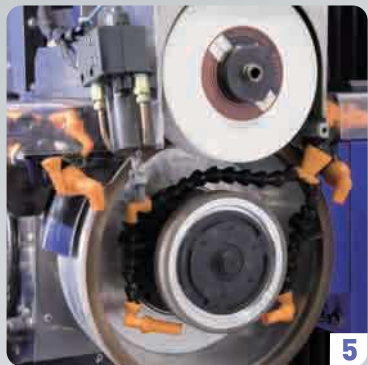
oving insert grinder

Fully Automatic Grooving Insert Grinder

GIG-202



3



5

Axis struture

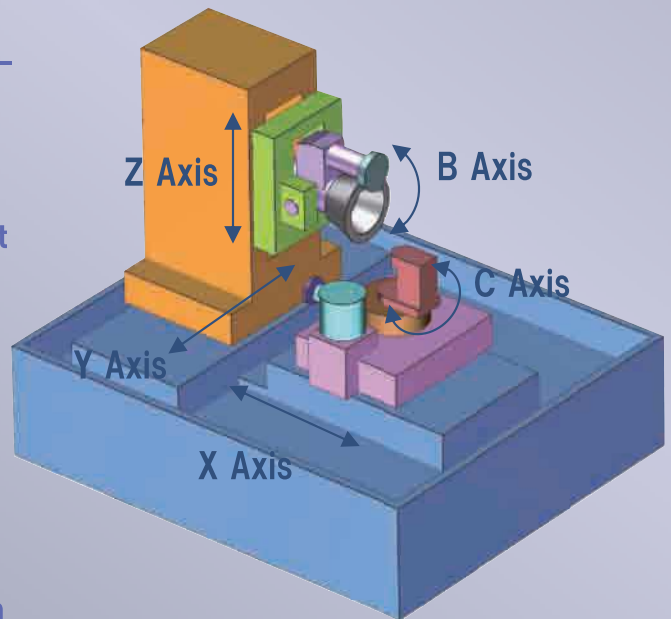
X-axis Work table back /forward

Y-axis Grinding wheel left /right

Z-axis Grinding wheel up /down

B-axis Grinding wheel angle varying

C-axis Work table horizontal rotation



and followability

y dressing
inding wheel.

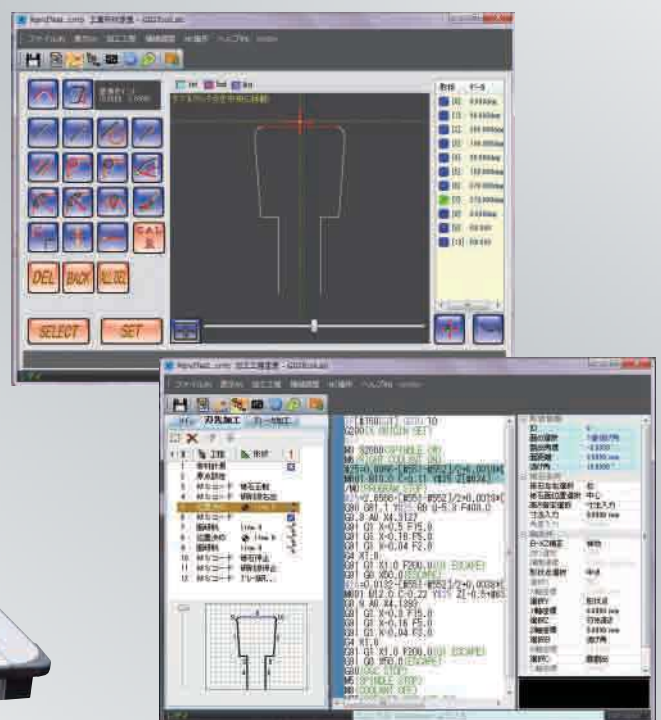
g programs by

ent of accuracy
(Option).

by sub wheel

C specification),
et specification,

Operation panel • GIG ToolLab



Fully Automatic Grooving Insert Grinder

GIG-202

STANDARD SPECIFICATIONS

Workpiece	Objects of grinding	Standard grooving insert with horizontal indexing 2 corner / Vertical indexing 2 corner / Equilateral triangle shape
	Material	Carbide, Cermet, Ceramics, CBN, PCD
	Grinding part	Standard tool edge (Including front and side relief)
Spindle	Wheel size	Grinding wheel outside diameter Φ 250 mm Sub wheel outside diameter Φ 125 mm (Option)
	Rotation speed	800~5,000 min ⁻¹
	Motor output	AC3.0 kW
	Grinding unit Grinding wheel up/down axis (Z axis)	Maximum rapid feed rate
Grinding unit Grinding wheel angle varying axis (B axis)	Travel	50 deg (-20 deg~+30 deg)
	Maximum rapid feed rate	2,000 deg/min
Grinding unit Grinding wheel left/right axis (Y axis)	Maximum rapid feed rate	15,000 mm/min
Work table horizontal rotation axis (C axis)	Travel	270° (-135 deg~+135 deg)
	Maximum rapid feed rate	18,000 deg/min
Work table back/forward axis (X axis)	Maximum rapid feed rate	10,000 mm/min
Dressing device	Wheel size	Outside diameter Φ 100 mm
	Rotation speed	800~1,500 min ⁻¹
Measuring device	Thermal displacement, Blank, Finished product measurement	
Oil cooling unit	Cooling for spindle, C axis	
Hydraulic unit	Driving for tool rest	

OPTION

All axes feed back scale specification	XYZBC axis with scale	
Grinding wheel measuring device	Contact type measuring by probe Front and periphery part of grinding wheel Contact type measuring by probe Front part of sub wheel	
In-process cleaning device	Wheel size	Outside diameter Φ 150 mm
	Rotation speed	600 min ⁻¹ (Variable speed 300~1,000)
Loading device	Robot	FANUC articulated robot
	No. of pallet	2 pallets (Pallet changer specification: 1 pallet)
	Vertical pallet type	Standard type (240×300 mm) T-type (190×370 mm)
	Work indexing device	Indexing angle each 30 deg
	Work presence sensor	Non-contact type
Manual clamping spindle specification	Spindle	Manual attaching/detaching HSK spindle
AWC spindle specification	Spindle	Automatic attaching/detaching HSK spindle
	Hand changer	Work loading hand/Sub wheel loading hand, Hand stocker
Sub wheel flange	Sub wheel stocker	No. of sub wheel stocker: 3
		For manual clamping For AWC
Lay down pallet specification	Work turning device	1 pc
	Lay down hand	Magnet attraction hand
	Lay down hand	Vacuum suction hand
	Lay down hand	Inner hole chucking hand
Camera for lay down pallet	For lay down pallet Work position/phase	
Pallet changer	No. of pallet	10 pallets
Grinding wheel balancer	For Φ 250 grinding wheel	
Balance measuring device	1 set	

NC STANDARD SPECIFICATIONS

NC unit	FANUC Series 31i-Model B5
Control axis	5 axes X,Y,Z,B,C
Maximum simultaneous control axis	5 axes

DRIVE SOURCE

Total electric capacity	11 kVA AC200 V (50/60 Hz)
Compressed air Required air pressure	0.45~0.55 MPa
Air consumption	500 N ℓ /min (Loading device specification)
	Vertical pallet specification: another dry air more than 300 N ℓ /min(ANR) is required.

MACHINE SIZE

W×D×H	2,735×2,100×2,370 mm
Machine weight	6,500 kg

Grinding fluid supply device	Sedimentation type 300 ℓ
Mist collector	
Work washing device	Tank circulation type
Splash gun / Air gun	
Oil grinding specification	
Coolant temperature controller	
Automatic fire extinguisher	
Tool rest	Triangular, Dog bone, Top notch, Pin type
	For lay down pallet, according with work

JIGS OPTION

Grinding wheel
Dressing wheel
In-process cleaning wheel
Indexing chip holder
Robot finger
Tool rest jig
Work pallet

NOTE

- * This product may be regulated by the Foreign Exchange and Foreign Trade Control Law.
- * Be sure to consult us before exporting the product to a foreign country.
- * Specifications in this catalog may be changed without notice due to improvement of the product, etc.

WAIDA 株式会社 和井田製作所

本社・本社工場
岐阜工場
東京支店
中部営業所
大阪営業所
上海代表所
ジャパン・イーエム(株)
和井田友嘉精機股份有限公司

〒506-0824 岐阜県高山市片野町 2121
〒504-0957 岐阜県各務原市金属団地 191
〒105-0003 東京都港区西新橋 2-18-2 新橋 NKKビル 3F
〒504-0957 岐阜県各務原市金属団地 191
〒532-0011 大阪府大阪市淀川区西中島 4-11-21 新大阪コーパビル 7F
〒200041 中華人民共和国上海市南京西路 819 号中創大廈 1015 室
〒433-8103 静岡県浜松市北区豊岡町 300 番地 1
〒40755 中華民国台中市台中工業區 1 路 133 號

TEL (0577) 32-0390 (代) FAX (0577) 37-0020
TEL (058) 382-3218 (代) FAX (058) 380-0030
TEL (03) 3459-4100 (代) FAX (03) 3459-4101
TEL (058) 382-2911 (代) FAX (058) 389-4409
TEL (06) 6305-6461 (代) FAX (06) 6307-2338
TEL +86-21-6255-6035 FAX +86-21-6215-1389
TEL (053) 523-6711 FAX (053) 523-6712
TEL +886-4-23594075 FAX +886-4-23509822

WAIDA MFG.CO.,LTD.

Head Office and Factory
Gifu Factory
Tokyo Branch Office
Chubu Office
Osaka Office
Shanghai Representative Office
JAPAN E.M. CO., LTD.
WAIDA FEELER PRECISION MACHINERY CO., LTD.

2121, Katano-machi, Takayama City, Gifu 506-0824 Japan
191, Kinzoku Danchi, Kakamigahara City, Gifu 504-0957 Japan
3F Shinbashi NKK Bldg., 18-2, 2 Chome, Minato-ku, Tokyo 105-0003 Japan
191, Kinzoku Danchi, Kakamigahara City, Gifu, 504-0957 Japan
7F, 11-21, Nishi Nakajima 4-Chome, Yodogawa-ku, Osaka 5320011 Japan
Rm 1015, Zhongchuang Bldg., 819 West Nanjing Road, Shanghai 200041 China
300-1, Toyooka-cho, Kita-ku, Hamamatsu City, Shizuoka 4338103 Japan
3F., NO.133, Gongyequ 1st Rd., Xitun Dist., Taichung City 40755, Taiwan (ROC)

TEL +81-577-32-0390 FAX +81-577-37-0020
TEL +81-58-382-3218 FAX +81-58-380-0030
TEL +81-3-3459-4100 FAX +81-3-3459-4101
TEL +81-58-382-2911 FAX +81-58-389-4409
TEL +81-6-6305-6461 FAX +81-6-6307-2338
TEL +86-21-6255-6035 FAX +86-21-6215-1389
TEL +81-53-523-6711 FAX +81-53-523-6712
TEL +886-4-23594075 FAX +886-4-23509822