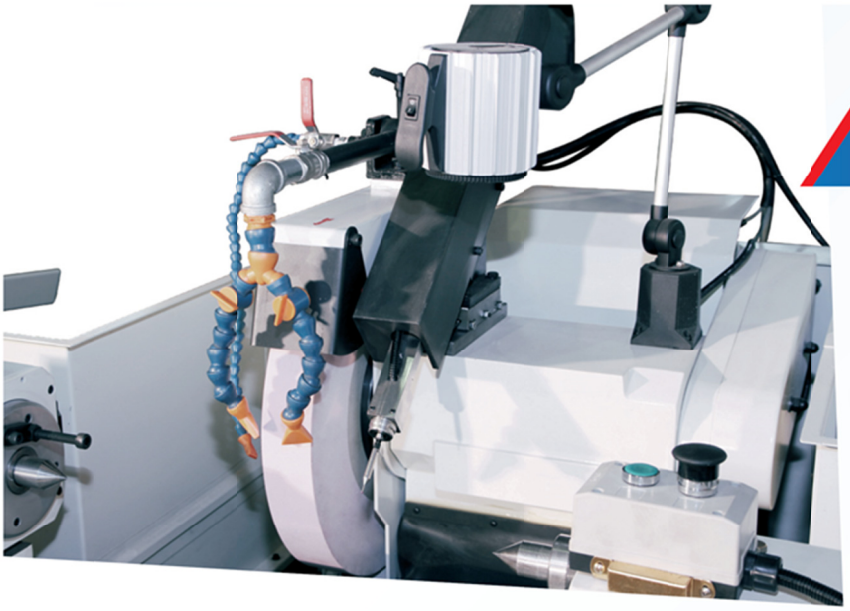
GRIMA
GUAN-YU MACHINE CO., LTD.

CNC Cylindrical Grinder

Plunge type GP27 Series
Angular type GA27 Series

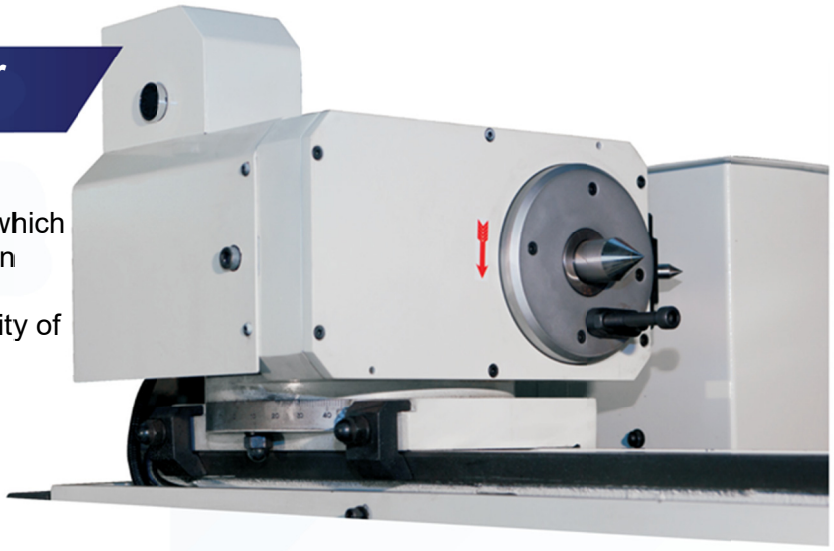


Hydrodynamic spindle

The grinding wheel spindle is made of high-grade alloy steel (SNCM220) by precision machining, including multiple heat treatment, grinding, polishing, etc. for its durability. The spindle is supported by unique hydrodynamic bearing to reach excellent rigidity and shock resistance. (End measuring device is optional)

Rotary center / Fixed center head stock

The simple and stable head stock is equipped with high-precision bearing, which greatly improves the rigidity and rotation precision of the spindle. Excellent waterproof ability enhances the durability of the machine.



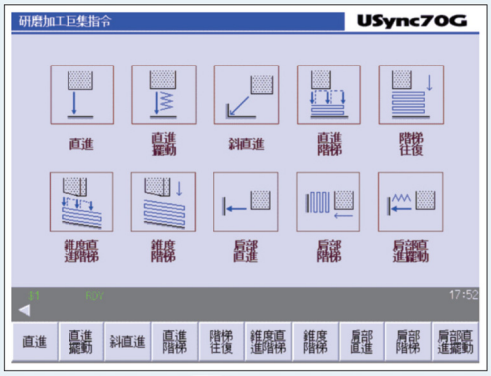
Manual/Hydraulic tailstock

The oil-filled type lubrication system of tailstock consolidates the waterproof and dust-proof abilities, and ensures the high-precision of tailstock.

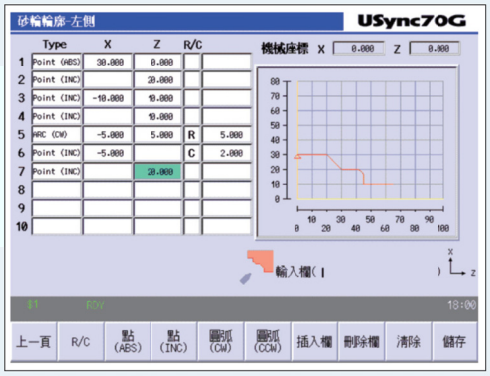
CNC control system

It is equipped with advanced CNC controller and form-filling type operation interface, and has editable standard grinding cycle program. It can also customize the dressing shape for special grinding request. It is easy to learn and understand.

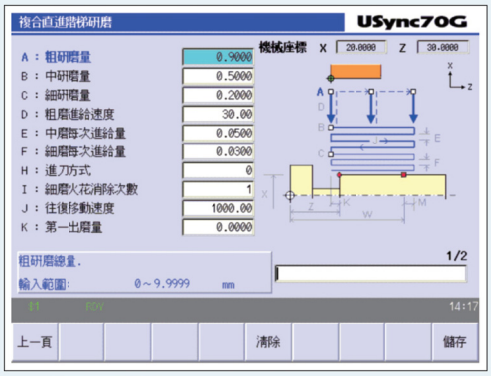
Operation screen



Grinding cycle diagram



Grinding wheel profile

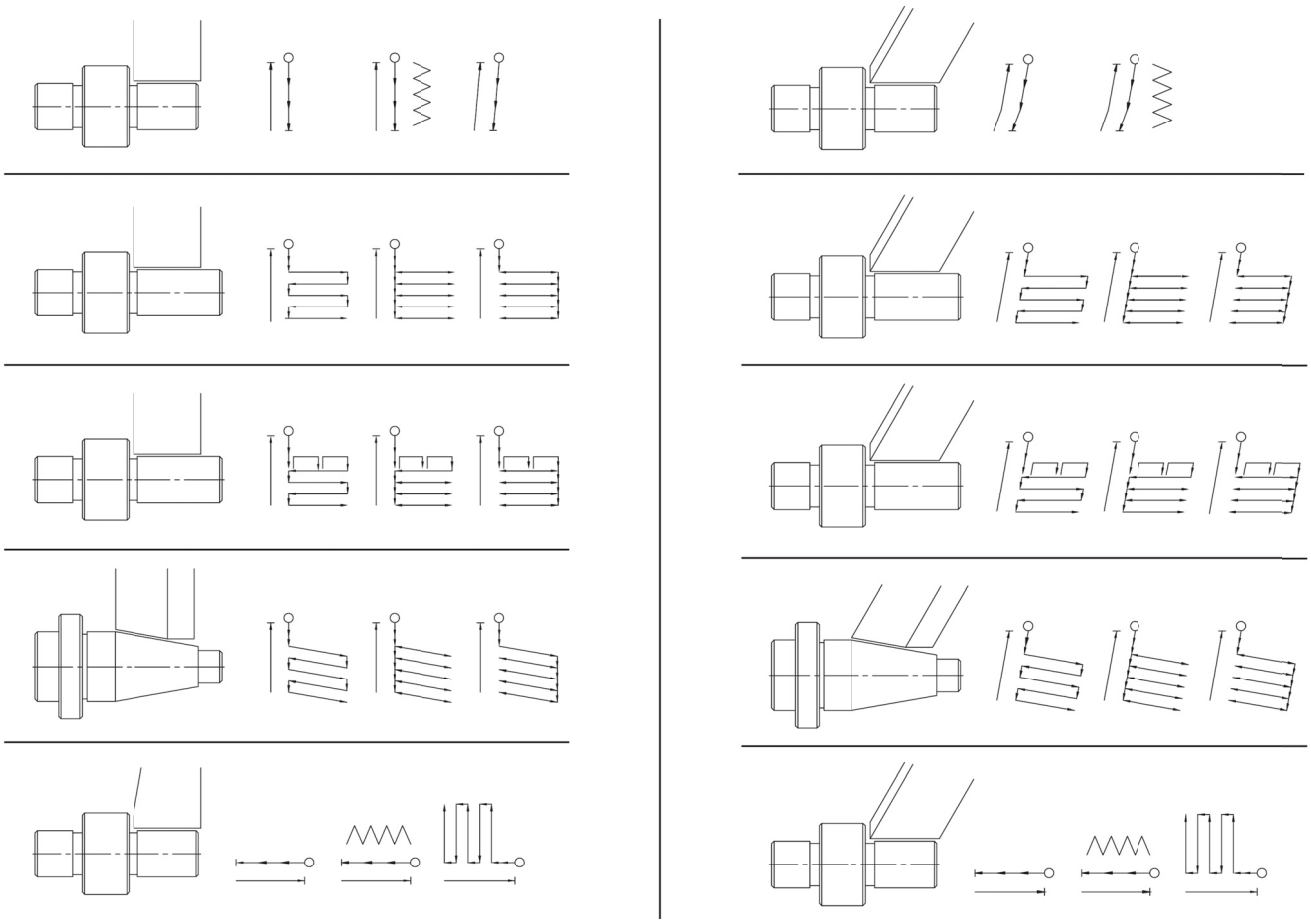


Multi-plunge traverse grinding

Overview of grinding wheel profile

Grinding cycle

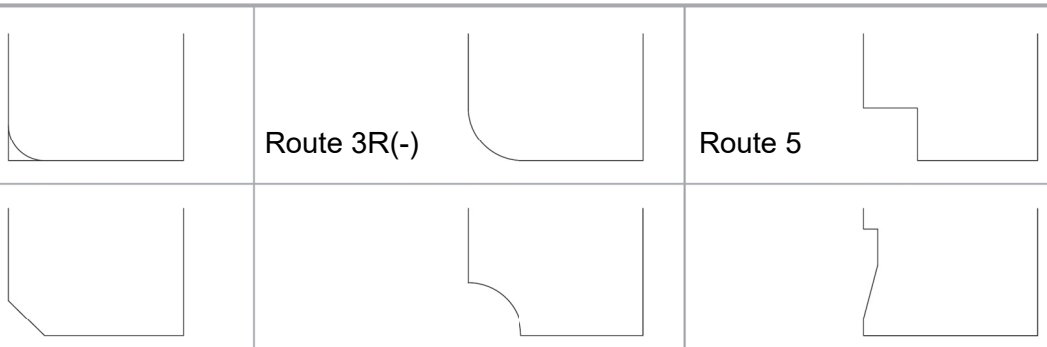
Plunge grinding	Angular grinding



Notes: 1. By separate setting for grinding cycle, the grinding cycle can be divided into rough grinding, medium grinding, fine grinding and spark-out grinding.
2. With an automatic measuring device for outer diameter (optional), the grinding volume can be set for plunge or angular grinding.

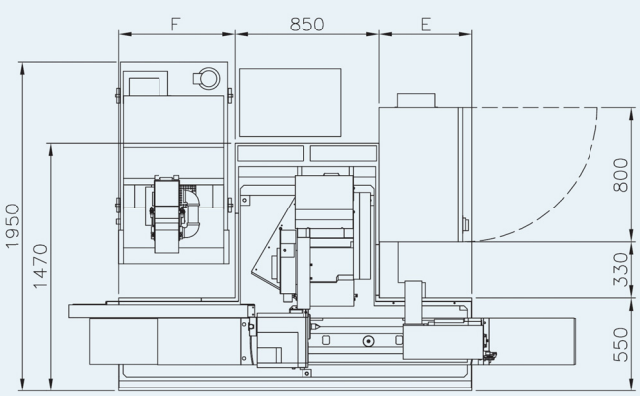
Grinding wheel dressing cycle

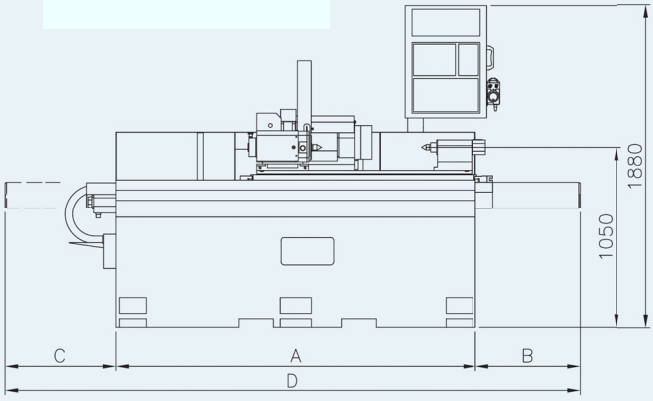
Route 1	Route 3R(+)	Route 4
Route 2	Route 3R(-)	Route 5



Notes: 1. Diamond dressers can be set up to 5.
2. There are five profile selections for grinding wheel dressing. Both sides can be dressed.
3. Support customized profile setting function with graphical display, up to 40 points.

Dimensions of CNC cylindrical grinder





SN	400 Series	600 Series	800 Series
A	1700	2100	2500
B	590	610	630
C	630	650	670
D	2920	3360	3800
E	355	555	755
F	495	695	895

Standard accessories

- Grinding wheel and flange * 1 set
- Grinding wheel dismounting device *1
- Diamond dresser * 1 set
- Toolbox * 1 set
- Workpiece drive ring * 1 set
- Balancing stand and arbor * 1 set
- MT4 center * 2 pieces
- Heat exchanger in electric box
- Standard water tank and pump
- Grinding wheel inverter
- Gap elimination anti-collision device
- Quartz work lamp

Optional accessories

- X-axis digital readout
- Z-axis digital readout
- Outer diameter measuring device
- Automatic grinding wheel balancer
- Hydraulic tailstock
- Manual 3-jaw chuck
- Hydraulic 3-jaw chuck
- Oil mist collector
- Magnetic separator
- Paper filter
- Air conditioner in electric box
- 2-point center rack
- 3-point center rack
- Workpiece support rack
- Grinding wheel suspending rack
- Grinding wheel hanger

Specification

Plunge type

GP27 Series

MODLE			GP27-400CNC	GP27-600CNC	GP27-800CNC
Work capacity	Maximum grinding diameter	mm	270		
	Distance between centers	GP	400	600	800
	Distance from spindle hole center to the slide	mm	136		
	Maximum workpiece weight	kgs	120		
Grinding wheel	Grinding wheel size	mm	Ψ405×32 ~ 50×Ψ152.4 (opt.Ψ455×50 ~ 80×Ψ152.4)		
	Rotating speed of grinding wheel spindle	rpm	1650 (1890)		
	Maximum peripheral speed	m/sec	35 (45) m/sec		
Wheel head	Feed angle	deg	GP = 90, GA = 60		
	Maximum feed rate	mm	6m/min		
	Minimum setting unit	mm	0.001		
	Total stroke	mm	250		
Head stock	Spindle speed	rpm	10 ~ 600		
	Center taper	MT	MT4		
	Spindle through hole diameter	mm	25		
Tailstock	Sleeve stroke	mm	30		
	Center taper	MT	MT4		
Worktable	Swivel angle	deg	-8 ~ +11	~6 ~ +9	-4 ~ +7
	Rapid traverse speed	mm	6m/min		
	Minimum setting unit	mm	0.001		
Motor	Grinding wheel spindle motor	hp	5 (7.5)		
	Head stock motor	kw	1.0 (1.5)		
	Hydraulic motor for grinding wheel spindle	hp	1/8		
	Coolant pump motor	hp	1/4		
	X-axis feed servo motor	kw	1.0 (1.2)		
	Z-axis feed servo motor	kw	1.5 (1.8)	1.5 (1.8)	1.5 (1.8)
Control system			MITSUBISH (FANUC)		
Net weight (approx.)		kgs	2600	3000	3400
Gross weight (approx.)		kgs	2800	3200	3600
Packing size (L * W * H)		mm	2400×1900×2000	2800×1900×2000	3200×1900×2000

* We reserve the right to modify any machine specifications without prior notice.

Specification

Angular type

GA27 Series

MODLE			GA27-250CNC	GA27-450CNC	GA27-650CNC
Work capacity	Maximum grinding diameter	mm	270		
	Distance between centers	GP	250	450	650
	Distance from spindle hole center to the slide	mm	136		
	Maximum workpiece weight	kgs	120		
Grinding wheel	Grinding wheel size	mm	Ψ405×32 ~ 50×Ψ152.4 (opt.Ψ455×50 ~ 80×Ψ152.4)		
	Rotating speed of grinding wheel spindle	rpm	1650 (1890)		
	Maximum peripheral speed	m/sec	35 (45) m/sec		
Wheel head	Feed angle	deg	GP = 90, GA = 60		
	Maximum feed rate	mm	6m/min		
	Minimum setting unit	mm	0.001		
	Total stroke	mm	250		
Head stock	Spindle speed	rpm	10 ~ 600		
	Center taper	MT	MT4		
	Spindle through hole diameter	mm	25		
Tailstock	Sleeve stroke	mm	30		
	Center taper	MT	MT4		
Worktable	Swivel angle	deg	-8 ~ +11	~6 ~ +9	-4 ~ +7
	Rapid traverse speed	mm	6m/min		
	Minimum setting unit	mm	0.001		
Motor	Grinding wheel spindle motor	hp	5 (7.5)		
	Head stock motor	kw	1.0 (1.5)		
	Hydraulic motor for grinding wheel spindle	hp	1/8		
	Coolant pump motor	hp	1/4		
	X-axis feed servo motor	kw	1.0 (1.2)		
	Z-axis feed servo motor	kw	1.5 (1.8)	1.5 (1.8)	1.5 (1.8)
Control system			MITSUBISH (FANUC)		
Net weight (approx.)		kgs	2600	3000	3400
Gross weight (approx.)		kgs	2800	3200	3600
Packing size (L * W * H)		mm	2400×1900×2000	2800×1900×2000	3200×1900×2000

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