CYLINDRICAL GRINDING MACHINE

OGM-EX III OGM-NC III

SERIES





OGM-EX III / NC III Series

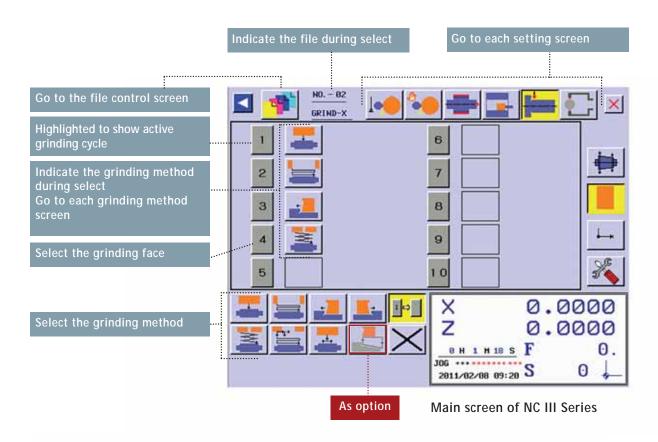
Data input has been much improved by the grinding data a

Grinding data automatic setting function

The most suitable grinding parameters, according to our grinding experience, are automatically entered by inputting only the wheel grain size and wheel width.

Touch panel input

There is no dialogue on the screen. All parameters, even those for complicated forms, are input via the touch screen and operator panel.





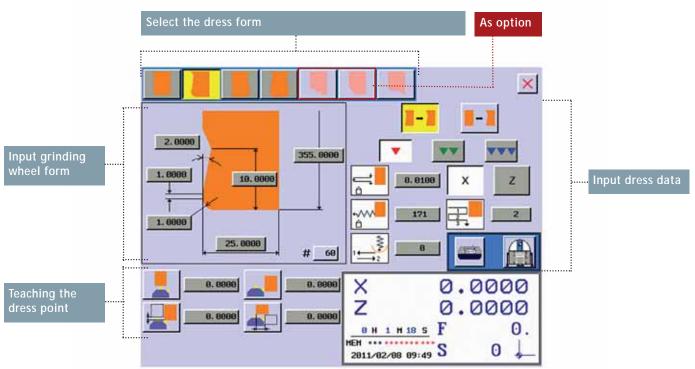
automatic setting function via the graphical touch screen.

Indication of estimated cycle time

Cycles can be optimized during setting.

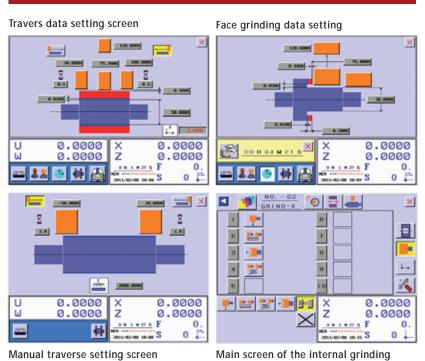
File control

21 part programmes can be stored.

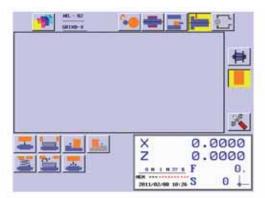


Grinding form select screen (Screen is NC III)

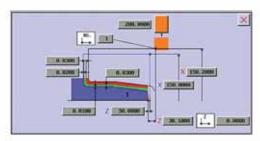
Main Screen (Common EX III · NC III)



(with internal grinding attachment option)



Main screen of EX III Series



Screen of contour grinding (option)

OGM-EX III Series

Concept is as conventional type machine with automatic dress function

- The standard software is one step grinding. (10 steps available as option)
- Face grinding is also set by teaching.
- Locator and Gap eliminator are available as option.
- Both the grinding wheel and work spindles are driven by AC servo motors as standard. The highest accuracy is possible.
- There is standard manual pulse generator for longitudinal and cross feed, you can operate like conventional type.

OGM-NC III Series

Complicated form grinding made easy

- The standard software has 10 step grinding as standard.
- Contour grinding software available as option.
- Face grinding is also set by teaching.
- Both the grinding wheel and work spindles are driven by AC servo motors as standard. The highest accuracy is possible.

Standard acc	essories	EX III Series	NC III Series	
Grinding whe	el	0	0	
Grinding whe	el flange	0	0	
Carbide cente	r 2 pcs	0	0	
Grease gun		0	0	
Short circuit b	reaker	0	0	
Manual taper	fine adjustment type tailstock	0	0	
One step soft	vare & 2 point dress	0	_	
10 steps softv	vare & 3 point dress	*option	0	
	Plunge grinding	0	0	
	Traverse grinding (left, right, both sides)	0	0	
Automatic	Plunge oscillation grinding	0	0	
grinding	Plunge and fine oscillation grinding	0	0	
cycle	Rough shift plunge grinding & fine traverse grinding	0	0	
	Manual traverse grinding	0	0	
	Shoulder grinding (right side)	0	0	
Cycle time est	imate indication	0	0	
Preparation fo	r mist extraction (hood)	0	0	
Table swivel n	neasuring device	0	0	
Tool nose R co	mpensation	-	0	
LED lamp insi	de cover	0	0	
Work head AC	servo motor	0	0	
Grinding whe	el AC spindle motor	0	0	
Table cooling	via constant coolant supply	0	0	
Dress coolant	system	0	0	
Table feed ma	nual pulse handle	0	0	
Interlocked do	or	0	0	
Wheel saftey	visor	0	0	
Locator (grind	ing wheel head front type)	option	0	

 $[\]ensuremath{^{\star}}$ If you use this option we recommend locator system.

	Optional accessories	EX	EXB / UEX III Series				NCB / UNC III Series				
	Items	20	200		300		200		00		
		plain	univers.	plain	univers.	plain	univers.	plain	univers.		
1.	Internal grinding attachment (with automatic grinding cycle)	0	0	_	0	0	0	_	0		
2.	Spindle for internal grinding attachment										
	1) 10000 rpm	_	_	_	0	_	_	_	0		
	2) 18000 rpm	0	0	_	0	0	0	_	0		
	3) 25000 rpm	0	0	_	0	0	0	_	0		
3.	3-jaws scroll chuck (with face plate, chuck cover)										
	1) No. 4, 5	0	0	0	0	0	0	0	0		
	2) No. 6, 7	_	_	0	0	_	_	0	0		
4.	Tailstock										
	1) Manual taper fine adjustment type tailstock				stan	dard					
	2) Motor retract type tailstock	0	0	0	0	0	0	0	0		
	3) Hydraulic type tailstock	0	0	0	0	0	0	0	0		
	4) Quil stretch type tailstock (150 mm)	0	0	0	0	0	0	0	0		
5.	Steady rest										
	1) Manual adjust type 2 point steady rest	0	0	0	0	0	0	0	0		
	2) Manual adjust Type 3 point steady rest	0	0	0	0	0	0	0	0		
6.	Work rest	0	0	0	0	0	0	0	0		
7.	Automatic dog set (ø 6~ ø 80 x 6 pieces)	0	0	0	0	0	0	0	0		
	Work driver	0	0	0	0	0	0	0	0		
9.	Coolant tank device	0	0	0	0	0	0	0	0		
10.	Grinding wheel balancing device										
	1) BW-360 (with an arbor)	0	0	_	0	0	0	_	0		
	2) Micro balancer	0	0	0	0	0	0	0	0		
	3) Automatic balancer	0	0	0	0	0	0	0	0		
11.	Spare grinding wheel flange	0	0	0	0	0	0	0	0		
12.	Jib crane	0	0	0	0	0	0	0	0		
13.	Lubricating oil	0	0	0	0	0	0	0	0		
14.	OD direct sizing device	0	0	0	0	0	0	0	0		
	Rotary dresser specification	_	_	_	_	_	_	0	0		
16.	Hydrostasics wheel spindle	0	0	0	0	0	0	0	0		
17.	Oil cooled type wheel head (with oil temperature regulator, oil)	0	0	0	0	0	0	0	0		
18.	Removable manual pulse handle	0	0	0	0	0	0	0	0		
19.	Auto loader specification	_	_	_	-	0	0	0	0		
20.	Graphic conversational software										
	1) Forming dress cycle	0	0	0	0	0	0	0	0		
	1. Taper	-	_	_	-	0	0	0	0		
	2. Shoulder	0	0	0	0		stan	dard	1		
	3. Multi level straight (3 step)	0	0	0	0	0	0	0	0		
	4. G-code	_	_	_	-		stan	andard			
	2) Shoulder grinding cycle (left)	0	0	0	0			dard			
	3) Contour grinding cycle	_	_	_	-	0	0	0	0		
21.	10 steps software & locator & 3 point dresser, incl. locator	0	0	0	0	_	_	_	-		
	Swing over table ø 420 mm	_	_	0	0	_	_	0	0		
	Gap eliminator	0	0	0	0	0	0	0	0		

OGM-EXIII / NCIII Series Specification

	ltem			200 Series		300 Series						
			Unit	Plain Type	Universal Type	Plain Type			Universal Type			
				250	250	350	390	3150	350	390	3150	
	Work swing o	ver table	mm	220				3	20			
Capacity	Distance between centers		mm	500	500 500		900	1500	500	900	1500	
	Maximum grind diameter		mm	20	00	30			00			
	Workhead Center maximum		ka	50 150								
	weight	Chuck	kg -	20 (Face plate +chuck +work) 40 (Face plate +chuck				+chuck +v	chuck +work)			
Grinding	Size (OD x W x ID)		mm	ø355x50xø127	ø305x50xø127	ø455x50(option 75)xø127			ø405x50(option 75)xø127			
wheel	Max. peripheral speed		m/sec	45 (Inverte	45 (Inverter Standard)							
	X axis travel distance		mm	2	15	30			00			
Grinding wheel	Swivel angle		deg	Non-swivel	±30	Non-swivel			±30			
head	Least travel increment (ϕ)		mm			0.0001						
	Rapid feed rate (ϕ)		m/min			4						
	Z axis travel distance		mm	762	762	870	1270	1870	870	1270	1870	
Table	Swivel angle		deg	0~−9	0~-9	0~-10	0~−8.5	0~−5	0~-10	0~ −8.5	0~-5	
14510	Least travel increment		mm			0.0001						
	Rapid feed rate		m/min	8 10								
	Spindle type		_	Rigidity spindle for dead and live combined use								
10/	Center taper		MT	No.3 No.4								
Work head	Through hole diameter		mm	φ18 φ20				20	0			
	Spindle speed		min ⁻¹		10~500							
	Swivel angle		deg	30~	-90	Non-swivel 30∼ −90)	
	Tailstock spindle type		-	Manual taper fine adjustment type								
Tailstock	Spindle stroke		mm	2	0	30						
	Center taper		MT	The state of the s	5.3	No.4						
	Grinding wheel spindle		kW	3.	3.75 5.5(option 7.5)							
	Workhead spindle		kW	1.8 (AC servo motor) 1.8 (AC servo motor)								
	Table feed kW			1,2 (AC servo motor)								
Motor	Grinding wheel	head feed	kW	1,2 (AC servo motor)								
	Lubricating pump W/P		W/P	3/4								
Required electrical power consumption kV			kVA	15 20								
Tank capacity	Lubrication oi	i Liters 3										
Height from floor to work center		mm	98	1000								
Floor	Length		mm	2920		3400	4200	5600	3400	4200	5600	
space	Width x Height		mm	2010x1800		2330x1950						
Machine weight	Net		kg	33	00	4600	5000	6000	4600	5200	6000	

^{*} Electrical power consumption and floor space requirements may change subject to specification.



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Caution

*When and before using our products, you are requested to well go through the articles on danger, warning and attention for the sake of safety described in operation manual attached to the machine and also in the warning plates mounted on the machine.

*Specifications subject to change without notice.

*When a product manufactured at our factory comes under the Foreign Exchange and Foreign Trade Control Law and is exported or carried overseas, it is necessary to receive permission or approval of the Japanese Government.

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^{*} Standard color is brownish (Munsell 5Y6/1). A separate quotation is necessary for special color.