

CNC FULL AUTOMATIC PISTONRING GRINDING MACHINE

OUTLINE

This is a vertical type grinding machine for finishing rings of various O.D. shapes in the full-automatic mode.

This machine is equipped only with the template-less trueform dressing.

More than one ring clamped with the one-side mandrel can be processed simultaneously.

PGV-160

6/16-21400

O.D. PROFILE

● Use	DIESEL/GASOLINE	
● Material	C	S
● Condition	W	
● O.D.Range	φ 60 ~ φ 160	
● Chucking Breadth	00mm(	p.c.s)
● 1-cycle processes	MULTI	
● Machining Profile		



SPEC

PHOTO

PHOTO

PISTONRING GRINDING MACHINE 11211 Series List of Specifications

Specifications item		11211 6/16-21400 PGV-160		
SPEC SHEET				
No. of work clamps		Multiple		
Method of work clamp		Mandrel on one side		
Work head side		Mandrel on one side		
Tailstock side				
Closing sleeve				
Structure		Vertical type		
Operation mode	Full automatic	○		
	Semi automatic			
SPEC	Machining capacity	Ring nominal diameter(ϕ)	60~160	
		Max. width(mm)	30/60	
	Machining count per cycle		Multiple	
	Work head	Motor output(kW)	5/9	
		Rotation speed(rpm)	35~140	
	Grinding head	Motor output(kW)	7.5	
		Rotation speed(rpm)	2500~23600	
		Spindle structure	Angular contact	
	Machine dimensions L × D × H(mm)		4219×2397×2180	
	Machine weight(kg)		About 3500	
Basic structure	NC controlled axes	Grinding axis(X)	1	
		Shift axis(Y)	1	
		Dress axis	1	
	Grinding shift axis		○	
	Dressing unit	Diamond roll dressing	Diamond roll	
		Truform dressing	Template-less	
	Hydraulic unit		○	
	Pneumatic unit		○	
	Forcible lubrication unit for slide		○	
	Electric Control panel		○	
	system NC unit		○	
	Truform dressing			
	Diamond roll dressing			
Standard attachments	Diamond tool for truform dressing		○	
	Diamond tool for profile dressing		○	
	Leveling bolt & plate		○	
	Adjustment tool		○	
	Machine instruction manual		○	
	NC instruction manual		○	
Basic options	Grinding axis hydrostatic spindle		○	
	CBN wheel compliant		○	
	CE marking		○	
Added options	C V	Low-pressure splash guard	○	
		High-pressure splash guard	○	
	C L	Coolant tank	○	
		Low-pressure coolant unit	○	
		High-pressure coolant unit	○	
		Coolant separator	○	
		Coolant filtering unit	○	
		Magnetic separator	○	
		Spicron	○	
		Oil skimmer	○	
		Paper filter	○	
	M C	Mist collector	○	
		Cover & hood for mist collector	○	
	D	Standard dressing unit	○	
		Dressing unit for CBN wheel	○	
		Template for profile dressing	○	
		Diamond roll	○	

G	Auto OD sizing unit	○		
	Auto stack width measuring unit	○		
	Auto OD sizing & stack width measuring unit (dual-purpose type)	○		
	Touch sensor detection unit	○		
AIR		×		
HYD	Fan cooler for hydraulic unit	○		
	Heater for hydraulic unit	○		
	Oil controller	○		
	Oil controller for hydrostatic bearing	○		
E	3-lamp signal tower	○		
	4-lamp signal tower	○		
	Manual both-hand start	○		
	Data registration function	○		
	RS232C interface	○		
	Entanglement preventive proximity switch	○		
	Air conditioner	○		
	Mandrel	○		
	Balancing arbor	○		
	Auto grinding dynamic balancer	○		
	Diamond tool	○		
	Metal for hydrostatic bearing (spare)	○		
	Spare part 1	○		
	Spare part 2	○		

Added options mark

CV : Cover CL : Coolant unit MC : Mist collector D : Dressing unit G : Measuring unit AIR : Pneumatic unit V : Dust collector HYD : Hydraulic unit
E : Electric system LUB : Lubricator