

PALMARY PRODUCTS

- Centerless Grinder
- Cylindrical Grinder
- Internal Grinder
- Vertical Grinder
- Surface Grinder
- Special Purpose Grinder



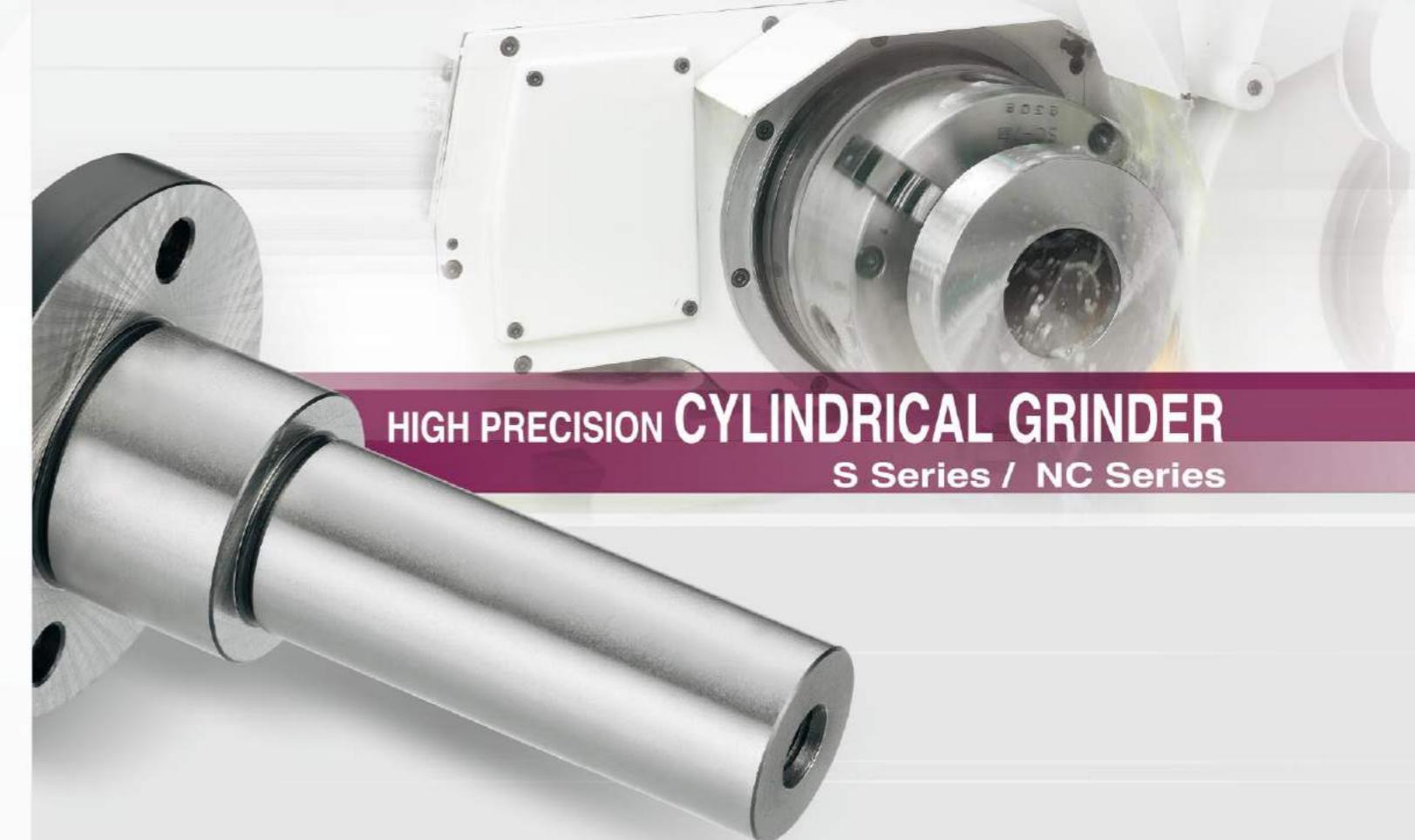
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PALMARY
A Total Dedication to New Technological Level



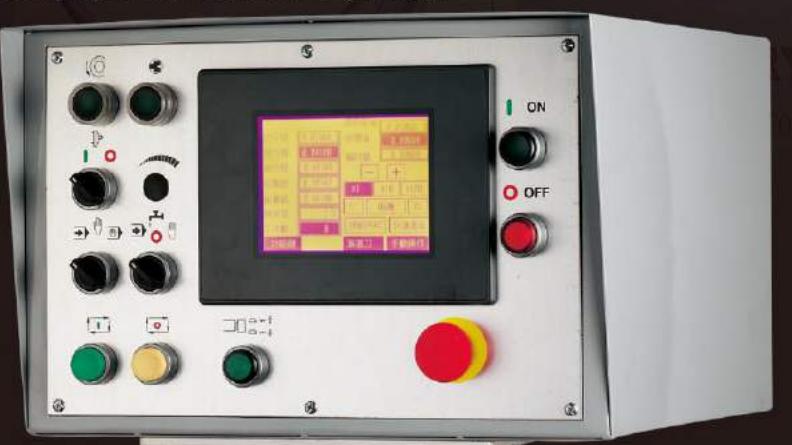
Precise, Perfect and Excellent



Maximum Flexibility PALMARY Cylindrical Grinder State-of-the-art Technology Your Right Choice!

“ Advanced NC Control for User-friendly Operation ,”

- The wheel head feed on the NC series machine is driven by servomotor combined with NC control assuring maximum operational convenience.
- Humanified operation, conversational control and program-editing-free feature superb operational convenience.
- Easy to set sizes for new parts - saves 1/3 of time compared with conventional setting. Feed amount and feed rate are easy to set as desired.
- Suitable for small batch production with increased efficiency of over 30%.
- Allows direct change to automatic feed once manual feed is accomplished - without changing program.
- Available to set for straight plunge grinding and traverse grinding.



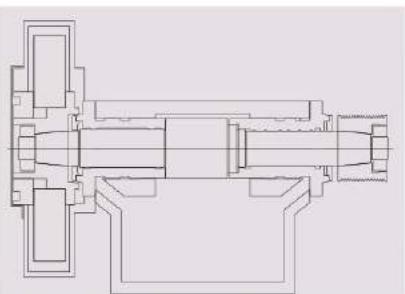
PALMARY
Committed to Excellence

Stable and Rigid Spindle Head

- The spindle runs on precision bearings, assuring maximum spindle stability. It guarantees outstanding accuracy for external and internal diameter grinding and face grinding.
- The spindle head swivels +90° ~ -30°.
- The spindle head on the 20 series machines provides variable speed changed by frequency inverter.
- The spindle head on the 32 and 42 series is driven by servomotor, providing variable speed.

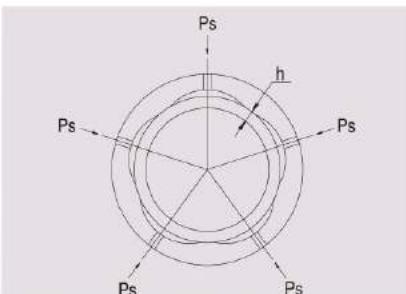


“ PALMARY high precision cylindrical grinders are unmatched in structural rigidity and stability, grinding accuracy and operational convenience. Each machine provides maximum operational flexibility thereby allowing for various grinding operations. You will get extra value when putting a PALMARY cylindrical grinder on your production line. ”



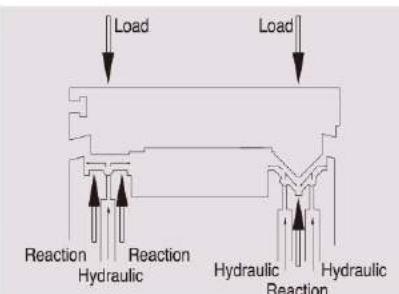
Precision Wheel Head

- The grinding wheel spindle is precision machined from high quality alloy steel SNCM-220, normalized, tempered, carburized and sub-zero treated, precision ground and mirror-effect treated. Hardness reaches to over HRC 62°. No deformation, maximum wear resistance and lifetime accuracy are assured.



Special Hydrostatic Bearing

- The wheel spindle runs by using a special hydrostatic bearing and is especially ideal for precision grinding work. It features high speed, no friction between metals, no heat generation, deformation-free, extra high accuracy and continual use.

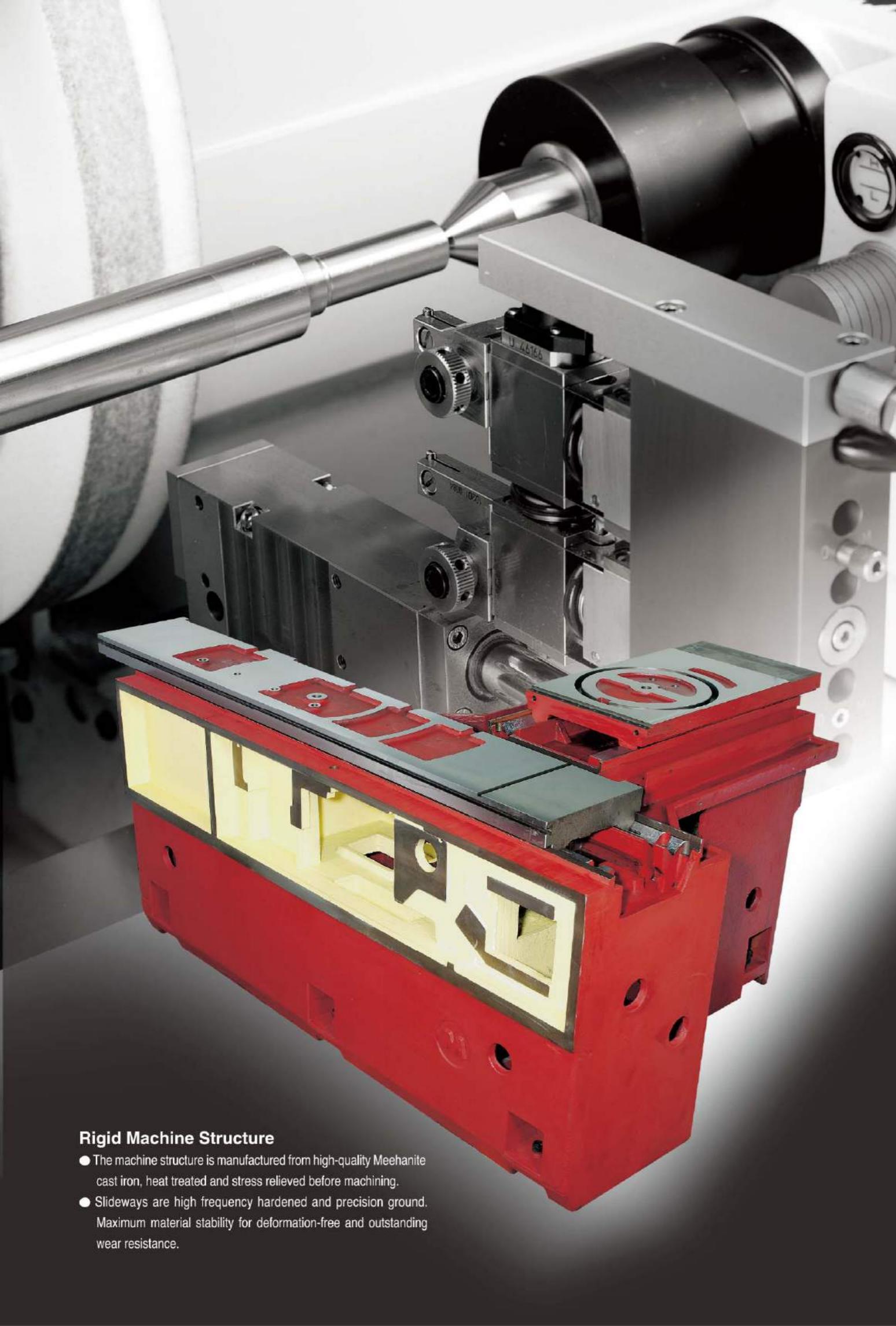


Advanced Hydrostatic Lubrication System

- The slideways of the table and the wheel head are lubricated by an advanced automatic hydrostatic lubrication system. This provides various features, such as extremely smooth movement, added feed accuracy and superior grinding accuracy.

Example of Grinding Workpieces





Rigid Machine Structure

- The machine structure is manufactured from high-quality Meehanite cast iron, heat treated and stress relieved before machining.
- Slideways are high frequency hardened and precision ground. Maximum material stability for deformation-free and outstanding wear resistance.

PALMARY Committed to Excellence

Care to Every Detail Insist on Quality! PALMARY Cylindrical Grinders

“ Based on PALMARY's tradition of "Pursuing Quality Perfection", combined with human engineering design and peak performance concepts, each machine fully reflects PALMARY's unmatched design and technique. In addition, PALMARY's rigorous quality control gives added assurance of superior quality. ”

Grinding Examples

- A grinder allows for various grinding applications with changeover ease.

Straight Plunge Grinding

- For small lot production, use automatic feed combined with sparkout timer to achieve superior grinding quality. For mass production, use 2-step automatic feed and 2-step automatic measurement device (optional) for upgrading productivity and grinding quality.

Shoulder Grinding

- Provides workpiece outside diameter and shoulder grinding accomplished at a time.
- Easy to set up. Simply clamp the workpiece between two centers, mount the grinding wheel on the right side of wheel head and swivel the head to a degree for performing grinding.

Traverse Grinding

- Use automatically intermittent feed combined with hydraulic drive of table for the most effective traverse grinding operations.

End Surface Grinding

- Dismantle the spindle head cover. Mount a 3-jaw or 4-jaw chuck. Change position of the pin for chuck rotation. Position the pin at a 90 degree angle for end surface grinding.

Taper Grinding

- Hold the workpiece by a chuck or two centers. The table and the wheel head can be easily adjusted and swiveled.

Internal Grinding

- To proceed with internal grinding with a hinge-type internal grinding attachment (optional accessory), simply pull down the internal grinding spindle and fix it in place.

Wheel forming device (For NC model, with auto compensation) (Optional)

The device functions as the manual wheel forming device. It further employs an automatic hydraulic unit, and compensation parameters are able to be set during operation (driven by motor) for fast grinding compensation. The device can be equipped with NC models.

Wheel forming device (Manual type, without auto compensation) (Optional)

The device is located above the wheel and driven by a hydraulic unit to slide in longitudinal direction. It is equipped with a diamond tool for dressing and a forming board for profiling. These operations are accomplished without moving the working table. The device is compatible with all series of cylindrical grinders.

PALMARY PRECISE · PERFECT · EXCELLENT

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High Precision
Cylindrical Grinder
NC Controlled Series

GU20x40NC

- Distance between centers 400 mm.
- Swing over table 200 mm.
- Max. grinding diameter Ø180 mm.
- NC computer controlled combined with conversational operation control for maximum operation convenience.
- Variable spindle speed 10 ~ 300 rpm.
- Automatic feed is driven by servomotor.
- Hydraulically operated traverse feed.



SPECIFICATIONS		GU20x40NC		SPECIFICATIONS		GU20x40NC	
Capacity		Tailstock		Tailstock		Tailstock	
Distance Between Centers	400 mm	Center Taper	MT:3	Center Taper	MT:3	Center Taper	MT:4
Swivel Over Table	200 mm	Stroke	20 mm	Stroke	25 mm	Stroke	25 mm
Max. Load of Centers	60 kgs						
Max. External Grinding Diameter	180 mm						
Wheel Head		Table		Table		Table	
Swivel Angle	±30°	Swivel Angle	-3°, +12°	Swivel Angle	-2°, +10°	Swivel Angle	-3°, +8° (100 Type); 3°, +7° (150 Type); -1°, +7° (200 Type)
Manual Distance	135 mm	Traverse Speed	50 / 5400 mm/min	Traverse Speed	50 / 5400 mm/min	Traverse Speed	50 / 5400 mm/min
Auto Rapid Advance	25 mm	Auto. Reciprocate Min. Stroke	8 mm	Auto. Reciprocate Min. Stroke	8 mm	Auto. Reciprocate Min. Stroke	8 mm
Sliding Seat Supplementary Displacement	95 (total 255 mm)	Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)	Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)	Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)
Min. Setting Unit	0.001 mm	Motor		Motor		Motor	
One Turn of Handwheel (graduation)	2 (0.005) mm	Wheel Spindle	2.2 kw (4 P)	Wheel Spindle	3.7 kw (4 P)	Wheel Spindle	3.7 kw (4 P)
Grinding Wheel		Workhead Spindle	0.37 kw (4 P)	Workhead Spindle	0.85 kw	Workhead Spindle	1.3 / 2.0 kw
O.D. x Width x I.D.	355 x 38 x 127 mm	Hydraulic Pump	0.37 kw (4 P)	Hydraulic Pump	0.37 kw (4 P)	Hydraulic Pump	0.37 kw (4 P)
Speeds (belt-type) r.p.m.	2085 / 2495	Wheel Spindle Lubrication Pump	0.18 kw (4 P)	Wheel Spindle Lubrication Pump	0.18 kw (4 P)	Wheel Spindle Lubrication Pump	0.18 kw (4 P)
Work Spindle Head		Coolant Pump	0.18 kw (2 P)	Coolant Pump	0.18 kw (2 P)	Coolant Pump	0.18 kw (2 P)
Swivel Angle	120° (+90°, -30°)	Internal Grinding Spindle	0.18 kw (2 P)	Internal Grinding Spindle	0.75 kw (2 P)	Internal Grinding Spindle	0.75 kw (2 P)
Center Taper	MT:3	Tank Capacity		Tank Capacity		Tank Capacity	
Spindle Speeds (variable) r.p.m.	10 ~ 300	Wheel Spindle Lubricant Tank	76	Wheel Spindle Lubricant Tank	94	Wheel Spindle Lubricant Tank	94
Max. Load of Spindle (tool holder included)	15 kgs (Max length: 100 mm)	Hydraulic Fluid Tank	46ℓ	Hydraulic Fluid Tank	46ℓ	Hydraulic Fluid Tank	46ℓ
		Coolant Tank	110ℓ	Coolant Tank	110ℓ	Coolant Tank	110ℓ
		Machine Weight	2000 kgs	Machine Weight	2600 kgs / 2800 kgs	Machine Weight	3200 kgs / 3400 kgs / 4100 kgs / 4300 kgs / 6000 kgs / 6200 kgs

* The mentioned specifications & dimensions are subject to change without notice.

High Precision
Cylindrical Grinder
NC Controlled Series

GU32x60NC

- Swing over table 320 mm.
- Max. grinding diameter Ø300 mm.

Common Features:

- Distance between centers: 600 mm.
- NC computer controlled combined with conversational operation control for maximum operational convenience.
- Various spindle speed 10 ~ 300 rpm, driven by servomotor.
- Automatic feed is driven by servomotor.
- Hydraulically operated traverse feed.



SPECIFICATIONS		GU32/42x60NC		SPECIFICATIONS		GU32/42x60NC	
Capacity		Tailstock		Tailstock		Tailstock	
Distance Between Centers	600 mm	Center Taper	MT:3	Center Taper	MT:3	Center Taper	MT:4
Swivel Over Table	320 mm / 420 mm	Stroke	20 mm	Stroke	25 mm	Stroke	25 mm
Max. Load of Centers	100 kgs / 150 kgs						
Max. External Grinding Diameter	300 mm / 400 mm						
Wheel Head		Table		Table		Table	
Swivel Angle	±30°	Swivel Angle	-3°, +12°	Swivel Angle	-2°, +10°	Swivel Angle	-3°, +8° (100 Type); 3°, +7° (150 Type); -1°, +7° (200 Type)
Manual Distance	160 mm	Traverse Speed	50 / 5400 mm/min	Traverse Speed	50 / 5400 mm/min	Traverse Speed	50 / 5400 mm/min
Auto Rapid Advance	40 mm	Auto. Reciprocate Min. Stroke	8 mm	Auto. Reciprocate Min. Stroke	8 mm	Auto. Reciprocate Min. Stroke	8 mm
Sliding Seat Supplementary Displacement	95 (total 295 mm)	Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)	Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)	Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)
Min. Setting Unit	0.001 mm	Motor		Motor		Motor	
One Turn of Handwheel (graduation)	2 (0.005) mm	Wheel Spindle	2.2 kw (4 P)	Wheel Spindle	3.7 kw (4 P)	Wheel Spindle	3.7 kw (4 P)
Grinding Wheel		Workhead Spindle	0.37 kw (4 P)	Workhead Spindle	0.85 kw	Workhead Spindle	1.3 / 2.0 kw
O.D. x Width x I.D.	355 x 38 x 127 mm	Hydraulic Pump	0.37 kw (4 P)	Hydraulic Pump	0.37 kw (4 P)	Hydraulic Pump	0.37 kw (4 P)
Speeds (belt-type) r.p.m.	1783 / 1940	Wheel Spindle Lubrication Pump	0.18 kw (4 P)	Wheel Spindle Lubrication Pump	0.18 kw (4 P)	Wheel Spindle Lubrication Pump	0.18 kw (4 P)
Work Spindle Head		Coolant Pump	0.18 kw (2 P)	Coolant Pump	0.18 kw (2 P)	Coolant Pump	0.18 kw (2 P)
Swivel Angle	120° (+90°, -30°)	Internal Grinding Spindle	0.18 kw (2 P)	Internal Grinding Spindle	0.75 kw (2 P)	Internal Grinding Spindle	0.75 kw (2 P)
Center Taper	MT:4	Tank Capacity		Tank Capacity		Tank Capacity	
Spindle Speeds (variable) r.p.m.	10 ~ 300	Wheel Spindle Lubricant Tank	76	Wheel Spindle Lubricant Tank	94	Wheel Spindle Lubricant Tank	94
Max. Load of Spindle (tool holder included)	35 kgs (Max length: 150 mm)	Hydraulic Fluid Tank	46ℓ	Hydraulic Fluid Tank	46ℓ	Hydraulic Fluid Tank	46ℓ
		Coolant Tank	110ℓ	Coolant Tank	110ℓ	Coolant Tank	110ℓ
		Machine Weight	2000 kgs	Machine Weight	2600 kgs / 2800 kgs	Machine Weight	3200 kgs / 3400 kgs / 4100 kgs / 4300 kgs / 6000 kgs / 6200 kgs

* The mentioned specifications & dimensions are subject to change without notice.

High Precision
Cylindrical Grinder
NC Controlled Series

GU42x60NC

- Swing over table 420 mm.
- Max. grinding diameter Ø400 mm.



SPECIFICATIONS		GU32/42x100NC / GU32/42x150NC / GU32/42x200NC		SPECIFICATIONS		GU32/42x100NC / GU32/42x150NC / GU32/42x200NC	
Capacity		Tailstock		Tailstock		Tailstock	
Distance Between Centers	1000 mm, 1500 mm, 2000 mm	Center Taper	MT:4	Center Taper	MT:4	Center Taper	MT:4
Swivel Over Table	320 mm / 420 mm	Stroke	25 mm	Stroke	25 mm	Stroke	25 mm
Max. Load of Centers	100 kgs / 150 kgs						
Max. External Grinding Diameter	300 mm / 400 mm						
Wheel Head		Table		Table		Table	
Swivel Angle	±30°	Swivel Angle	-3°, +12°	Swivel Angle	-2°, +10°	Swivel Angle	-3°, +8° (100 Type); 3°, +7° (150 Type); -1°, +7° (200 Type)
Manual Distance	160 mm	Traverse Speed	50 / 5400 mm/min	Traverse Speed	50 / 5400 mm/min	Traverse Speed	50 / 5400 mm/min
Auto Rapid Advance	40 mm	Auto. Reciprocate Min. Stroke	8 mm	Auto. Reciprocate Min. Stroke	8 mm	Auto. Reciprocate Min. Stroke	8 mm
Sliding Seat Supplementary Displacement	95 (total 295 mm)	Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)	Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)	Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)
Min. Setting Unit	0.001 mm	Motor		Motor		Motor	
One Turn of Handwheel (graduation)	2 (0.005) mm	Wheel Spindle	2.2 kw (4 P)	Wheel Spindle	3.7 kw (4 P)	Wheel Spindle	3.7 kw (4 P)
Grinding Wheel		Workhead Spindle	0.37 kw (4 P)	Workhead Spindle	0.85 kw	Workhead Spindle	1.3 / 2.0 kw
O.D. x Width x I.D.	405 x 50 x 127 mm	Hydraulic Pump	0.37 kw (4 P)	Hydraulic Pump	0.37 kw (4 P)	Hydraulic Pump	0.37 kw (4 P)
Speeds (belt-type) r.p.m.	1783 / 1940	Wheel Spindle Lubrication Pump	0.18 kw (4 P)	Wheel Spindle Lubrication Pump	0.18 kw (4 P)	Wheel Spindle Lubrication Pump	0.18 kw (4 P)
Work Spindle Head		Coolant Pump	0.18 kw (2 P)	Coolant Pump	0.18 kw (2 P)	Coolant Pump	0.18 kw (2 P)
Swivel Angle	120° (+90°, -30°)	Internal Grinding Spindle	0.18 kw (2 P)	Internal Grinding Spindle	0.75 kw (2 P)	Internal Grinding Spindle	0.75 kw (2 P)
Center Taper	MT:4	Tank Capacity		Tank Capacity		Tank Capacity	
Spindle Speeds (variable) r.p.m.	10 ~ 300	Wheel Spindle Lubricant Tank	76	Wheel Spindle Lubricant Tank	94	Wheel Spindle Lubricant Tank	94
Max. Load of Spindle (tool holder included)	35 kgs (Max length: 150 mm)	Hydraulic Fluid Tank	46ℓ	Hydraulic Fluid Tank	46ℓ	Hydraulic Fluid Tank	46ℓ
		Coolant Tank	110ℓ	Coolant Tank	110ℓ	Coolant Tank	110ℓ
							

High Precision
Cylindrical Grinder
Economic Series

GU20x40S

- Distance between centers 400 mm.
- Swing over table 200 mm.
- Max. grinding diameter Ø180 mm.
- Variable spindle speed 10 ~ 300 rpm. Frequency inverter control type.
- Semi-auto feed. Hydraulically operated traverse moving.
- Wheel head provides rapid feed and manual feed for grinding.



High Precision
Cylindrical Grinder
Economic Series

GU32x60S

- Swing over table 320 mm.
- Max. grinding diameter Ø300 mm.

Common Features:

- Distance between centers: 600 mm.
- Variable spindle speed 10 ~ 300 rpm, driven by servomotor.
- Semi-auto feed. Hydraulically operated traverse moving.
- Wheel head provides rapid feed and manual feed for grinding.



SPECIFICATIONS

	GU20x40S
Capacity	
Distance between Centers	400 mm
Swivel Over Table	200 mm
Max. Load of Centers	60 kgs
Max. External Grinding Diameter	180 mm
Wheel Head	
Swivel Angle	±30°
Manual Distance	135 mm
Auto Rapid Advance	25 mm
Sliding Seat Supplementary Displacement	95 (total 255 mm)
Min. Setting Unit (Micro-adjust)	0.001 mm
One Turn of Handwheel (graduation)	2 (0.005) mm
Grinding Wheel	
O.D. x Width x I.D.	355 x 38 x 127 mm
Speeds (belt type) r.p.m.	2085 / 2495
Work Spindle Head	
Swivel Angle	120° (+90°, -30°)
Center Taper	MT:3
Spindle Speeds (variable) r.p.m.	10 ~ 300
Max. Load of Spindle (tool holder included)	15 kgs (Max length: 100 mm)

SPECIFICATIONS

	GU20x40S
Tailstock	
Taper Center	MT:3
Stroke	20 mm
Table	
Swivel Angle	-3°, +12°
Traverse Speed	50 / 5400 mm/min
Auto. Reciprocate Min. Stroke	8 mm
Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)
Motor	
Wheel Spindle	2.2 kw (4 P)
Workhead Spindle	0.37 kw (4 P)
Hydraulic Pump	0.37 kw (4 P)
Wheel Spindle Lubrication Pump	0.18 kw (4 P)
Coolant Pump	0.18 kw (2 P)
Internal Grinding Spindle	0.18 kw (2 P)
Tank Capacity	
Wheel Spindle Lubricant Tank	7ℓ
Hydraulic Fluid Tank	63ℓ
Coolant Tank	110ℓ
Machine Weight	
Kgs	2000 kgs

SPECIFICATIONS

	GU32/42x60S	GU32/42x60S
Capacity		
Distance between Centers	600 mm	600 mm
Swivel Over Table	320 mm / 420 mm	320 mm / 420 mm
Max. Load of Centers	100 kgs / 150kgs	100 kgs / 150kgs
Max. External Grinding Diameter	300 mm / 400 mm	300 mm / 400 mm
Wheel Head		
Swivel Angle	±30°	±30°
Manual Distance	160 mm	160 mm
Auto Rapid Advance	40 mm	40 mm
Sliding Seat Supplementary Displacement	95 (total 295 mm)	95 (total 295 mm)
Min. Setting Unit (Micro-adjust)	0.001 mm	0.001 mm
One Turn of Handwheel (graduation)	2 (0.005) mm	2 (0.005) mm
Grinding Wheel		
O.D. x Width x I.D.	405 x 50 x 127 mm	405 x 50 x 127 mm
Speeds (belt type) r.p.m.	1783 / 1940	1783 / 1940
Work Spindle Head		
Swivel Angle	120° (+90°, -30°)	120° (+90°, -30°)
Center Taper	MT:4	MT:4
Spindle Speeds (variable) r.p.m.	10 ~ 300	10 ~ 300
Max. Load of Spindle (tool holder included)	35 kgs (Max length: 150 mm)	35 kgs (Max length: 150 mm)
Machine Weight		
Kgs	2600 kgs / 2800 kgs	2600 kgs / 2800 kgs



GU32x100S

- Swing over table 320 mm.
- Max. grinding diameter Ø300 mm.

Common Features:

- Distance between centers: 1,000 mm.
- Variable spindle speed 10 ~ 300 rpm, driven by servomotor.
- Semi-auto feed. Hydraulically operated traverse moving.
- Wheel head provides rapid feed and manual feed for grinding.

GU42x100S

- Swing over table 420 mm.
- Max. grinding diameter Ø400 mm.



GU32x150S

- Swing over table 320 mm.
- Max. grinding diameter Ø300 mm.

Common Features:

- Distance between centers: 1,500 mm, 2,000 mm.
- Variable spindle speed 10 ~ 300 rpm, driven by servomotor.
- Semi-auto feed. Hydraulically operated traverse moving.
- Wheel head provides rapid feed and manual feed for grinding.

GU42x150S

- Swing over table 420 mm.
- Max. grinding diameter Ø400 mm.



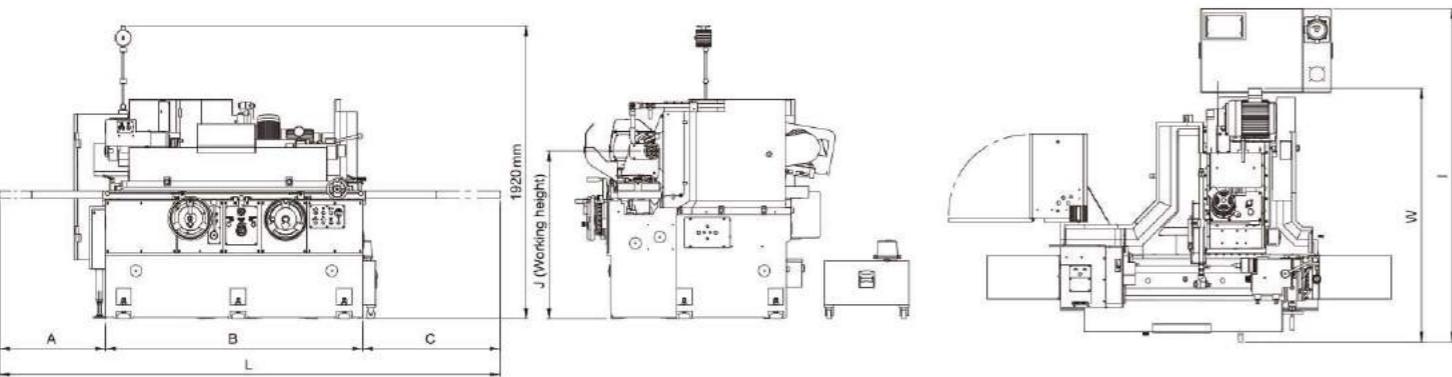
SPECIFICATIONS	GU32/42x100S	SPECIFICATIONS	GU32/42x100S
Capacity		Tailstock	MT:4
Distance between Centers	1000 mm	Taper Center	
Swivel Over Table	320 mm / 420 mm	Stroke	25 mm
Max. Load of Centers	100 kgs / 150 kgs		
Max. External Grinding Diameter	300 mm / 400 mm	Table	
Wheel Head		Swivel Angle	-3°, +8°
Swivel Angle	±30°	Traverse Speed	50 / 5400 mm/min
Manual Distance	160 mm	Auto. Reciprocate Min. Stroke	8 mm
Auto Rapid Advance	40 mm	Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)
Sliding Seat Supplementary Displacement	95 (total 295 mm)	Motor	
Min. Setting Unit (Micro-adjust)	0.001 mm	Wheel Spindle	3.7 kw (4 P)
One Turn of Handwheel (graduation)	2 (0.005) mm	Workhead Spindle	1.3 / 2.0 kw
Grinding Wheel		Hydraulic Pump	0.37 kw (4 P)
O.D. x Width x I.D.	405 x 50 x 127 mm	Wheel Spindle Lubrication Pump	0.18 kw (4 P)
Speeds (belt type) r.p.m.	1783 / 1940	Coolant Pump	0.18 kw (2 P)
Work Spindle Head		Internal Grinding Spindle	0.75 kw (2 P)
Swivel Angle	120° (+90°, -30°)	Tank Capacity	9ℓ
Center Taper	MT:4	Wheel Spindle Lubricant Tank	9ℓ
Spindle Speeds (variable) r.p.m.	10 ~ 300	Hydraulic Fluid Tank	63ℓ
Max. Load of Spindle (tool holder included)	35 kgs (Max length: 150 mm)	Coolant Tank	110ℓ
		Machine Weight	3200 kgs / 3400 kgs
		Kgs	

* The mentioned specifications & dimensions are subject to change without notice.

SPECIFICATIONS	GU32/42x150S / GU32/42x200S	SPECIFICATIONS	GU32/42x150S / GU32/42x200S
Capacity		Tailstock	MT:4
Distance between Centers	1500 mm, 2000 mm	Taper Center	
Swivel Over Table	320 mm / 420 mm	Stroke	25 mm
Max. Load of Centers	100 kgs / 150 kgs	Table	
Max. External Grinding Diameter	300 mm / 400 mm	Swivel Angle	-3°, +7° (150 Type); -1°, +7° (200 Type)
Wheel Head		Traverse Speed	50 / 5400 mm/min
Swivel Angle	±30°	Auto. Reciprocate Min. Stroke	8 mm
Manual Distance	160 mm	Feed of One Turn of Handwheel (2-step)	20 mm (2 mm)
Auto Rapid Advance	40 mm	Motor	
Sliding Seat Supplementary Displacement	95 (total 295 mm)	Wheel Spindle	3.7 kw (4 P)
Min. Setting Unit (Micro-adjust)	0.001 mm	Workhead Spindle	1.3 / 2.0 kw
One Turn of Handwheel (graduation)	2 (0.005) mm	Hydraulic Pump	0.37 kw (4 P)
Grinding Wheel		Wheel Spindle Lubrication Pump	0.18 kw (4 P)
O.D. x Width x I.D.	405 x 50 x 127 mm	Coolant Pump	0.18 kw (2 P)
Speeds (belt type) r.p.m.	1783 / 1940	Internal Grinding Spindle	0.75 kw (2 P)
Work Spindle Head		Tank Capacity	9ℓ
Swivel Angle	120° (+90°, -30°)	Wheel Spindle Lubricant Tank	9ℓ
Center Taper	MT:4	Hydraulic Fluid Tank	63ℓ
Spindle Speeds (variable) r.p.m.	10 ~ 300	Coolant Tank	110ℓ
Max. Load of Spindle (tool holder included)	35 kgs (Max length: 150 mm)	Machine Weight	Kgs
		Kgs	4100 kgs / 4300 kgs / 6000 kgs / 6200 kgs

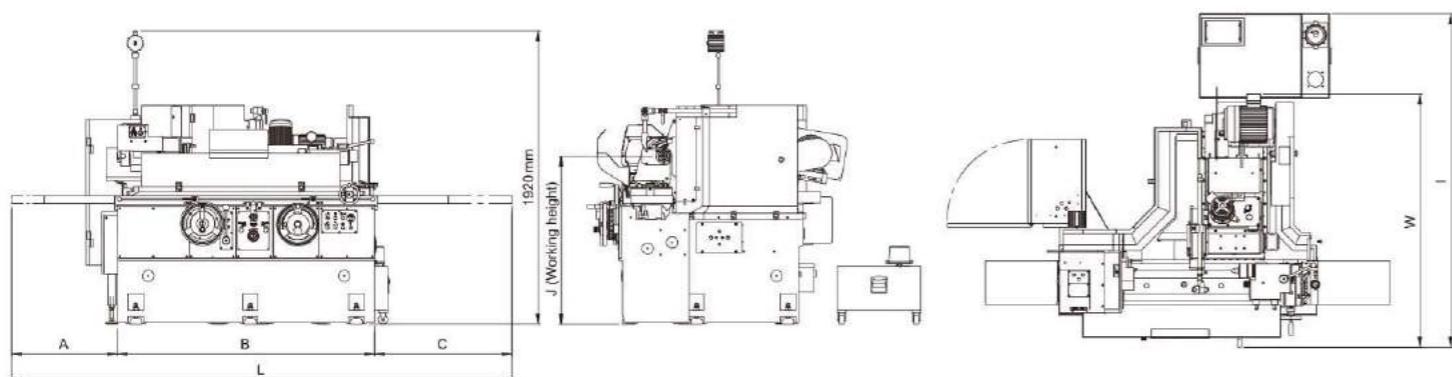
Floor Space Occupied and Machine Dimensions

S Series



MODEL	A	B	C	L	W	I	J
20 x 40	515	1320	480	2315	1434	2019	1060
32 x 60 / 42 x 60	694	1685	900	3279	1660	2185	1100/1150
32 x 100 / 42 x 100	1086	2465	1125	4676	1660	2185	1100/1150
32 x 150 / 42 x 150	1202	3810	1342	6354	1620	2200	1100/1150
32 x 200 / 42 x 200	1432	5210	1557	8199	1620	2200	1100/1150

NC Series



MODEL	A	B	C	L	W	I	J
20 x 40	515	1320	480	2315	1434	2019	1060
32 x 60 / 42 x 60	694	1685	900	3279	1660	2185	1100/1150
32 x 100 / 42 x 100	1086	2465	1125	4676	1660	2185	1100/1150
32 x 150 / 42 x 150	1202	3810	1342	6354	1620	2200	1100/1150
32 x 200 / 42 x 200	1432	5210	1557	8199	1620	2200	1100/1150

Standard Accessories



1. Grinding wheel and flange x 1 set 2. Diamond tool holder (Table mounted type) x 1 pc 3. Carbide tipped work centers x 2 pcs 4. Coolant system x 1 set 5. Hydraulic system x 1 set



6. Work lamp x 1 pc 7. Tools and tool box x 1 set

Optional Accessories



1. Internal grinding attachment (including one spindle) 2. Diamond tool holder for internal and external grinding wheel dressing (upward open type)



3. Diamond tool holder (Tailstock mounted type) 4. Diamond tool holder for internal and external grinding wheel dressing (sideward open type) 5. Angle trimming device 6. Radius trimming device 7. Cam locked driving dogs (6 pcs/set)



8. Work steady rest (2 pcs/set) 9. 2-point steady rest 10. 3-point steady rest 11. Adjustable 3-jaw scroll chuck 12. Adjustable 4-jaw scroll chuck



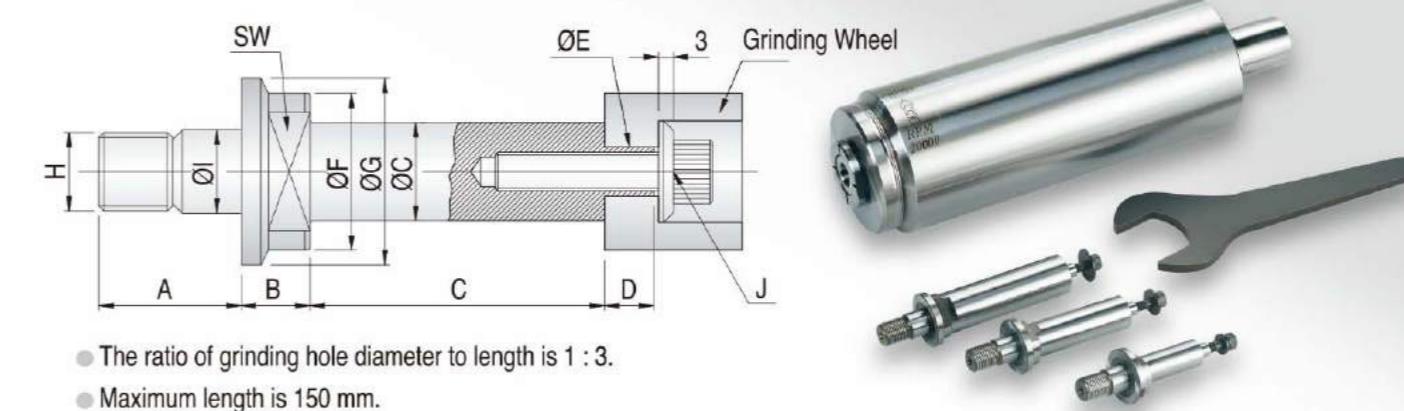
13. Magnetic coolant separator 14. Magnetic coolant separator with paper filter 15. Wheel forming device (Manual type, without auto compensation) 16. Wheel forming device (For NC model, with auto compensation) 17. Wheel balancing stand and arbor

Rigorous Quality Inspection

- PALMARY's Q.C. department is fully equipped with comprehensive high precision inspection instruments, providing in-process and final product inspections. These precision instruments enable us to achieve the highest levels of quality. PALMARY cylindrical grinders are fully satisfied to every customer around the world. This achievement results from our tradition of "Insisting on Quality."



Internal Grinding Spindle



- The ratio of grinding hole diameter to length is 1 : 3.
- Maximum length is 150 mm.

Grinding	Grease type	A	B	C	D	E	F	G	H	I	J	SW
Ø65 ~ Ø150	8,000rpm	42	16	Ø40 x 100 Ø40 x 85 Ø40 x 55	12	Ø12	Ø50	Ø58	M26 x 2P	Ø28	M8 x 1.25P	41
Ø40 ~ Ø80	10,000rpm	29	14	Ø30 x 90 Ø25 x 70 Ø20 x 60	10	Ø10	Ø32	Ø38	M16 x 1.5P	Ø17	M8 x 1.25P	24
Ø35 ~ Ø70	15,000rpm	29	14	Ø30 x 90 Ø25 x 70 Ø20 x 60	10	Ø10	Ø32	Ø38	M16 x 1.5P	Ø17	M8 x 1.25P	24
Ø24 ~ Ø40	20,000rpm	28	11	Ø24 x 80 Ø20 x 60 Ø16 x 40	8	Ø8	Ø26	Ø32	M14 x 1.5P	Ø15	M6 x 1.0P	19
Ø15 ~ Ø25	30,000rpm	21	9	Ø16 x 40 Ø13 x 30 Ø10 x 25	6	Ø6	Ø21	Ø26	M10 x 1.5P	Ø10.5	M4 x 0.7P	17
Ø12 ~ Ø16	40,000rpm	20	8	Ø12 x 35 Ø10 x 30 Ø8 x 25	x	x	Ø18	Ø23	M8 x 1.25P	Ø8.5	M4 x 0.7P	14
Ø9 ~ Ø13	50,000rpm	18	7	Ø8 x 30 Ø7 x 25 Ø6 x 20	x	x	Ø15	Ø20	M7 x 1P	Ø7.5	M4 x 0.7P	11



Rotary-type Internal Grinding Attachment (Optional Accessory)

- Easy to change over from O.D. grinding to I.D. grinding. The attachment is fixed by the rotary support for convenient workpiece loading.
- To position the internal grinding attachment, simply turn it downward and fix it in the grinding position.
- Allows for external and internal grinding operations in one process.
- Tapered workpieces can be ground by swiveling on the workhead and table.
- The internal grinding attachment on the GU20 series is driven by a 1/2 HP motor.
- The internal grinding attachment on the GU32/42 series is driven by a 1HP motor.