

# Conprofe Vertical Machining Centers



UGV-500

UGV-856

UGV-1165

**UGV Series**

The information given is not binding. The actual product and mutual agreement shall prevail.

UGV Series 20231110 VE1.3

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## Technical Parameters

Item	Unit	UGV-500	
<b>Travel</b>			
X/Y/Z-Axis Travel	mm	550/400/450	
Spindle Nose to Table	mm	140-590	
Spindle Center to Column Guide	mm	409	
<b>Worktable</b>			
Dimensions	mm	650×400	
Max. Load	kg	300	
T-Slot (No.×Width×Distance)	pcs×mm×mm	3×14×110	
<b>Spindle</b>			
		Standard	Optional
Diameter	mm	Φ 140	Φ 150
Max. Speed (Short-Duration)	rpm	15,000 (Direct-Driven)	20,000 (Electrical Spindle)
Max. Speed (Long-Duration)	rpm	12,000 (Direct-Driven)	16,000 (Electrical Spindle)
Motor Power (Rated / Short-Duration)	kW	5.5	9/15
Motor Torque (Rated/Short-Duration)	Nm	17.5	14.8/6
Spindle Taper	-	BT40	HSK-A63
Ultrasonic	-	Optional	Optional
Minimum Quantity Lubrication (MQL)	-	Optional	Optional
Ultrasonic + MQL	-	Optional	Optional
<b>Feed Rate</b>			
X/Y/Z-Axis Rapid Speed	m/min	48/48/48	
X/Y/Z-Axis Max. Feed	m/min	10/10/10	
X/Y/Z-Axis Motor Power	kW	1.5/1.5/3.0	
<b>Accuracy</b>			
X/Y/Z-Axis Positioning Accuracy	mm	0.006	
X/Y/Z-Axis Repeatability	mm	0.003	
<b>Tool Magazine</b>			
		Standard	Optional
Tool Holding Capacity	No. of Tools	24	30
Max. Tool Diameter (Full / Partial)	mm	Φ 75/Φ 150	
Max. Tool Length	mm	300	
Max. Tool Weight	kg	8	
Type	-	Disc Type	
<b>Miscellaneous</b>			
		Standard	Optional
Power Supply Voltage	-	Three-Phase AC, 380V/50Hz	
Power Capacity	kVA	18	20
Air Pressure	MPa	0.5-0.7	
Total Air Consumption	L/min	>100	
Total Weight (incl. Accessories)	kg	3,800	
Machine Size (L×W×H)	mm	2,120×2,380×2,850	
<b>Controller</b>			
CNC Controller	-	Mitsubishi M80A	



## Technical Parameters

Item	Unit	UGV-856	
<b>Travel</b>			
X/Y/Z-Axis Travel	mm	800×550×600	
Spindle Nose to Table	mm	130-730	
Spindle Center to Column Guide	mm	575	
<b>Worktable</b>			
Dimensions	mm	1,000×500	
Max. Load	kg	450	
T-Slot (No.×Width×Distance)	pcs×mm×mm	4×18×124	
<b>Spindle</b>			
		Standard	Optional
Diameter	mm	Φ 140	Φ 150
Max. Speed (Short-Duration)	rpm	15,000 (Direct-Driven)	20,000 (Electrical Spindle)
Max. Speed (Long-Duration)	rpm	12,000 (Direct-Driven)	15,000 (Direct-Driven)
Motor Power (Rated / Short-Duration)	kW	5.5/7.5	5.5/7.5
Motor Torque (Rated/Short-Duration)	Nm	35/47.7	35/47.7
Spindle Taper	-	BT40	BT40
Ultrasonic	-	Optional	Optional
Minimum Quantity Lubrication (MQL)	-	Optional	Optional
Ultrasonic + MQL	-	Optional	Optional
<b>Feed Rate</b>			
X/Y/Z-Axis Rapid Speed	m/min	48/48/32	
X/Y/Z-Axis Max. Feed	m/min	10/10/10	
X/Y/Z-Axis Motor Power	kW	2/2/3	
<b>Accuracy</b>			
X/Y/Z-Axis Positioning Accuracy	mm	0.006	
X/Y/Z-Axis Repeatability	mm	0.004	
<b>Tool Magazine</b>			
		Standard	Optional
Tool Holding Capacity	Tools	24	30
Max. Tool Diameter (Full / Partial)	mm	Φ 78/ Φ 120	
Max. Tool Length	mm	300	
Max. Tool Weight	kg	8	
Type	-	Disc Type	
<b>Miscellaneous</b>			
Power Supply Voltage	-	Three-Phase AC, 380V/50Hz	
Power Capacity	kVA	20	
Air Pressure	MPa	0.5-0.7	
Total Air Consumption	L/min	>100	
Total Weight (incl. Accessories)	kg	5,500	
Machine Size (L×W×H)	mm	2,350×2,950×2,550	
<b>Controller</b>			
CNC Controller	-	Mitsubishi M80B	

## Technical Parameters



Item	Unit	UGV-1165		
<b>Travel</b>				
X/Y/Z-Axis Travel	mm	1,100×650×600		
Spindle Nose to Table	mm	140-740		
Spindle Center to Column Guide	mm	710		
<b>Worktable</b>				
Dimensions	mm	1,200×600		
Max. Load	kg	800		
T-Slot (No. x Width x Distance)	pcs x mm x mm	5 x 18 x 100		
<b>Spindle</b>				
		Standard	Optional 1	Optional 2
Diameter	mm	Φ 150	Φ 150	Φ 150
Max. Speed (Short-Duration)	rpm	12,000 (Direct-Driven)	15,000 (Direct-Driven)	18,000 (Electrical Spindle)
Max. Speed (Long-Duration)	rpm	9,600 (Direct-Driven)	12,000 (Direct-Driven)	14,400 (Electrical Spindle)
Motor Power (Rated / Short-Duration)	kW	7.5/11	9/11	Y:6/7.5 Δ:11/13.75
Motor Torque (Rated / Short-Duration)	Nm	35.8/70	57.3/70	Y:32.5/42.9 Δ:18.8/24.2
Spindle Taper	-	BT40	BT40	HSK-A63
Ultrasonic	-	Optional	Optional	Optional
Minimum Quantity Lubrication (MQL)	-	Optional	Optional	Optional
Ultrasonic + MQL	-	Optional	Optional	Optional
<b>Feed Rate</b>				
X/Y/Z-Axis Rapid Speed	m/min	36/36/36		
X/Y/Z-Axis Max. Feed	m/min	10/10/10		
X/Y/Z-Axis Motor Power	kW	2/2/3		
<b>Accuracy</b>				
X/Y/Z-Axis Positioning Accuracy	mm	0.008		
X/Y/Z-Axis Repeatability	mm	0.005		
<b>Tool Magazine</b>				
		Standard	Optional	
Tool Holding Capacity	Tools	24	30	
Max. Tool Diameter (Full / Partial)	mm	Φ 75/Φ 150		
Max. Tool Length	mm	250		
Max. Tool Weight	kg	8		
Type	-	Disc Type		
<b>Miscellaneous</b>				
		Standard	Optional 1	Optional 2
Power Supply Voltage	-	Three-Phase AC, 380V/50Hz		
Power Capacity	kVA	20	22	23
Air Pressure	MPa	0.5-0.7		
Total Air Consumption	L/min	>100		
Total Weight (incl. Accessories)	kg	7,200		
Machine Size (LxWxH)	mm	2,760×3,000×3, 100		
<b>Controller</b>				
		Standard	Optional	
CNC Controller	-	Mitsubishi M80B	SIEMENS 828D-280 / FANUC 0i-MF (5)	

## Technical Parameters

Item	Unit	UGV-1580		
<b>Travel</b>				
XY/Z-Axis Travel	mm	1,500×800×800		
Spindle Nose to Table	mm	150-950		
Spindle Center to Column Guide	mm	896		
<b>Worktable</b>				
Dimensions	mm	1,700×800		
Max. Load	kg	1,500		
T-Slot (No. xWidth×Distance)	pcs×mm×mm	5×18×145		
<b>Spindle</b>				
		Standard	Optional 1	Optional 2
Diameter	mm	Φ 150	Φ 150	Φ 150
Max. Speed (Short-Duration)	rpm	12,000 (Direct-Driven)	15,000 (Direct-Driven)	18,000 (Electrical Spindle)
Max. Speed (Long-Duration)	rpm	9,600 (Direct-Driven)	12,000 (Direct-Driven)	14,400 (Electrical Spindle)
Motor Power (Rated / Short-Duration)	kW	11/15	9/11	Y:6/7.5 Δ:11/13.75
Motor Torque (Rated/Short-Duration)	Nm	52.5/95.5	57.3/70	Y:32.5/42.9 Δ:18.8/24.2
Spindle Taper	-	BT40	BT40	HSK-A63
Ultrasonic	-	Optional	Optional	Optional
Minimum Quantity Lubrication (MQL)	-	Optional	Optional	Optional
Ultrasonic + MQL	-	Optional	Optional	Optional
<b>Feed Rate</b>				
XY/Z-Axis Rapid Speed	m/min	20/20/20		
XY/Z-Axis Max. Feed	m/min	10/10/10		
XY/Z-Axis Motor Power	kW	3/3/3		
<b>Accuracy</b>				
XY/Z-Axis Positioning Accuracy	mm	0.012		
XY/Z-Axis Repeatability	mm	0.006		
<b>Tool Magazine</b>				
		Standard	Optional	
Tool Holding Capacity	Tools	24	30	
Max. Tool Diameter (Full / Partial)	mm	Φ 75/Φ 150		
Max. Tool Length	mm	250		
Max. Tool Weight	kg	8		
Type	-	Disc Type		
<b>Miscellaneous</b>				
		Standard	Optional 1	Optional 2
Power Supply Voltage	-	Three-Phase AC, 380V/50Hz		
Power Capacity	kVA	25	23	23
Air Pressure	MPa	0.5-0.7		
Total Air Consumption	L/min	>100		
Total Weight (incl. Accessories)	kg	12,000		
Machine Size (L×W×H)	mm	4,660×3,990×3,450		
<b>Controller</b>				
		Standard	Optional	
CNC Controller	-	FANUC 0i-MF (5)	SIEMENS 828D-280 / Mitsubishi M80B	

# Main Configurations

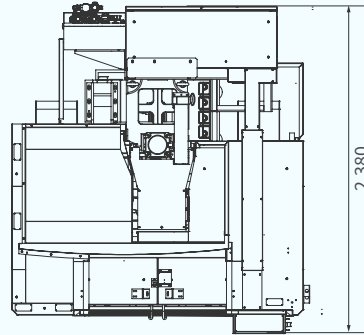
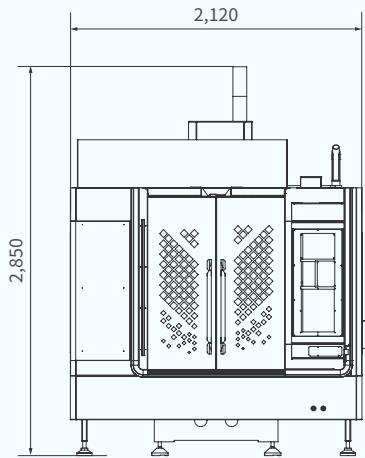
● Yes ○ No

	UGV-500	UGV-856	UGV-1165	UGV-1580
<b>Standard Configurations</b>				
Coolant System	●	●	●	●
Centralized Automatic Lubrication System	●	●	●	●
Handwheel	●	●	●	●
Blow Gun	●	●	●	●
Electrical Cabinet Heat Exchanger	●	●	●	●
LED Work Light	●	●	●	●
Three-Color Alarm Light	●	●	●	●
Door Safety Interlock	●	●	●	●
Two-Sided Chip Auger & Front-End Chain Type Chip Conveyor	○	○	○	●

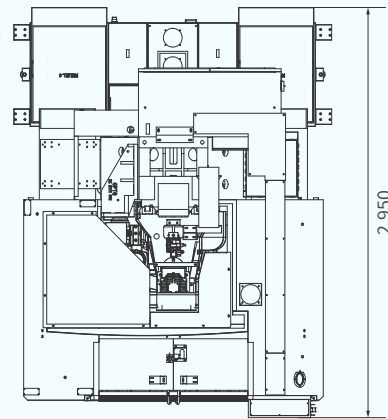
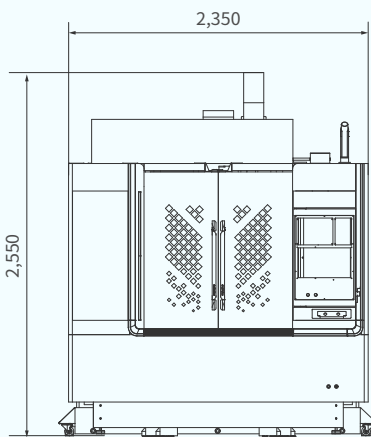
	UGV-500	UGV-856	UGV-1165	UGV-1580
<b>Optional Configurations</b>				
Oil-Mist Collector	●	●	●	●
4/5th Axis Rotary Table	●	●	●	●
Contact Tool Setter	●	●	●	●
High Precision 3D Probe	●	●	●	●
Automatic Door	●	●	●	●
Disc-Type Oil-Water Separator	●	●	●	●
Spindle Chiller	●	●	●	●
Water Gun	●	●	●	●
Chip Conveyor	●	●	●	○

# Floor Plans (Unit: mm)

## UGV-500



## UGV-856



## UGV-1165

