

COORDINATE MEASURING MACHINES



FEATURES

- X&Z axis beam are made of aviation aluminum
- RENISHAW steel scale
- High precision, rigid, pre-loaded air bearings on all axis

RENISHAW UCC CONTROL SYSTEM

- High speed measurement & servo control system

RATIONAL-DMIS SOFTWARE

- Unique operation interface, complete drag-and-drop operation
- Instructional programming allows users to replace text
- Intelligent recognition of the construction, calculation and output of relevant geometric elements
- Seamless link with CAD data

RENISHAW PROBE BODY

- The TP20 is a touch trigger probe
- The TP200B is a touch triggered probe of electronic strain sensing technology, with high measurement accuracy and operate life
- The SP25M is high performance scanning and touch trigger probe



CMM-ST564A-U

Part No.	Range(X×Y×Z)	Probe body	Accuracy		Max. weight of workpiece	Overall dimension	Weight
			MPEE	MPEP			
CMM-ST454A-U	15.74×19.68×15.74" (400×500×400mm)	TP20	±(2.1+L/300)μm	2.2μm	1102lb (500kg)	39.37×48.81×88.18" (1000×1240×2240mm)	1256lb (570kg)
CMM-ST454B-U		TP200B	±(1.8+L/300)μm	1.9μm			
CMM-ST454B-U		SP25M					
CMM-ST564A-U	19.68×23.62×15.74" (500×600×400mm)	TP20	±(2.1+L/300)μm	2.2μm	1102lb (500kg)	43.30×52.75×88.18" (1100×1340×2240mm)	1543lb (700kg)
CMM-ST564B-U		TP200B	±(1.8+L/300)μm	1.9μm			
CMM-ST564B-U		SP25M					
CMM-ST686A-U	23.62×31.50×23.62" (600×800×600mm)	TP20	±(2.2+L/300)μm	2.3μm	1543lb (700kg)	47.24×64.96×104.72" (1200×1650×2660mm)	2116lb (960kg)
CMM-ST686B-U		TP200B	±(1.9+L/300)μm	2.0μm			
CMM-ST686C-U		SP25M					
CMM-ST8106A-U	31.50×39.37×23.62" (800×1000×600mm)	TP20	±(2.2+L/300)μm	2.3μm	2204lb (1000kg)	55.11×72.83×104.72" (1400×1850×2660mm)	2799lb (1270kg)
CMM-ST8106B-U		TP200B	±(1.9+L/300)μm	2.0μm			
CMM-ST8106C-U		SP25M					
CMM-ST10128A-U	39.37×47.24×31.50" (1000×1200×800mm)	TP20	±(2.7+L/300)μm	2.7μm	3968lb (1800kg)	66.53×93.30×124.01" (1690×2370×3150mm)	5423lb (2460kg)
CMM-ST10128B-U		TP200B	±(2.4+L/300)μm	2.4μm			
CMM-ST10128C-U		SP25M					
CMM-ST10158A-U	39.37×59.06×31.50" (1000×1500×800mm)	TP20	±(2.7+L/300)μm	2.7μm	3968lb (1800kg)	66.53×105.11×124.01" (1690×2670×3150mm)	6217lb (2820kg)
CMM-ST10158B-U		TP200B	±(2.4+L/300)μm	2.4μm			
CMM-ST10158C-U		SP25M					
CMM-ST10208A-U	39.37×78.74×31.50" (1000×2000×800mm)	TP20	±(2.7+L/300)μm	2.7μm	3968lb (1800kg)	66.53×128.74×124.01" (1690×3270×3150mm)	7517lb (3410kg)
CMM-ST10208B-U		TP200B	±(2.4+L/300)μm	2.4μm			
CMM-ST10208C-U		SP25M					
CMM-ST121510A-U	47.24×59.06×39.37" (1200×1500×1000mm)	TP20	±(3.0+L/300)μm	3.0μm	4409lb (2000kg)	74.40×108.26×131.10" (1890×2750×3330mm)	7341lb (3330kg)
CMM-ST121510B-U		TP200B	±(2.7+L/300)μm	2.7μm			
CMM-ST121510C-U		SP25M					
CMM-ST122010A-U	47.24×78.74×39.37" (1200×2000×1000mm)	TP20	±(3.0+L/300)μm	3.0μm	4409lb (2000kg)	74.40×131.88×131.10" (1890×3350×3330mm)	8620lb (3910kg)
CMM-ST122010B-U		TP200B	±(2.7+L/300)μm	2.7μm			
CMM-ST122010C-U		SP25M					

Part No.	Range(X×Y×Z)	Probe body	Accuracy		Max. weight of workpiece	Overall dimension	Weight
			MPEE	MPEP			
CMM-ST152010A-U	59.05×78.74×39.37" (1500×2000×1000mm)	TP20	±(3.3+L/300)μm	3.3μm	6613lb (3000kg)	86.22×131.88×132.67" (2190×3350×3370mm)	11508lb (5220kg)
CMM-ST152010B-U		TP200B	±(3.0+L/300)μm	3.0μm			
CMM-ST152010B-U		SP25M					
CMM-ST152510A-U	59.05×98.42×39.37" (1500×2500×1000mm)	TP20	±(3.3+L/300)μm	3.3μm	6613lb (3000kg)	86.22×151.57×133.85" (2190×3850×3400mm)	14726lb (6680kg)
CMM-ST152510B-U		TP200B	±(3.0+L/300)μm	3.0μm			
CMM-ST152510B-U		SP25M					
CMM-ST153010A-U	59.05×118.11×39.37" (1500×3000×1000mm)	TP20	±(3.5+L/250)μm	3.5μm	6613lb (3000kg)	88.97×153.93×134.64" (2260×3910×3420mm)	17901lb (8120kg)
CMM-ST153010B-U		TP200B	±(3.2+L/250)μm	3.2μm			
CMM-ST153010C-U		SP25M					
CMM-ST152512A-U	59.05×98.42×47.24" (1500×2500×1200mm)	TP20	±(3.5+L/250)μm	3.5μm	6613lb (3000kg)	86.22×151.57×152.36" (2190×3850×3870mm)	14837lb (6730kg)
CMM-ST152512B-U		TP200B	±(3.2+L/250)μm	3.2μm			
CMM-ST152512C-U		SP25M					
CMM-ST152515A-U	59.05×98.42×59.05" (1500×2500×1500mm)	TP20	±(3.8+L/250)μm	3.8μm	6613lb (3000kg)	86.22×156.69×177.16" (2190×3980×4500mm)	15322lb (6950kg)
CMM-ST152515B-U		TP200B	±(3.5+L/250)μm	3.5μm			
CMM-ST152515C-U		SP25M					
CMM-ST153015A-U	59.05×118.11×59.05" (1500×3000×1500mm)	TP20	±(4.0+L/250)μm	4.0μm	6613lb (3000kg)	88.97×159.05×177.95" (2260×4040×4520mm)	18607lb (8440kg)
CMM-ST153015B-U		TP200B					
CMM-ST153015C-U		SP25M	±(3.7+L/250)μm	3.7μm			
CMM-ST163515A-U	62.99×137.79×59.05" (1600×3500×1500mm)	TP20	±(4.0+L/250)μm	4.0μm	6613lb (3000kg)	92.91×178.74×177.95" (2360×4540×4520mm)	21958lb (9960kg)
CMM-ST163515B-U		TP200B	±(3.7+L/300)μm	3.7μm			
CMM-ST163515C-U		SP25M					
CMM-ST203015A-U	78.74×118.11×59.05" (2000×3000×1500mm)	TP20	±(4.5+L/300)μm	4.5μm	13227lb (6000kg)	108.66×166.92×177.95" (2760×4240×4520mm)	24691lb (11200kg)
CMM-ST203015B-U		TP200B	±(4.0+L/300)μm	4.0μm			
CMM-ST203015C-U		SP25M					
CMM-ST203018A-U	78.74×118.11×70.86" (2000×3000×1800mm)	TP20	±(4.5+L/300)μm	4.5μm	13227lb (6000kg)	108.66×166.92×201.57" (2760×4240×5120mm)	24691lb (11200kg)
CMM-ST203018B-U		TP200B	±(4.0+L/300)μm	4.0μm			
CMM-ST203018C-U		SP25M					

OPERATION ENVIRONMENT

Air pressure	72-145psi (0.5-1.0MPa)
Air supply	10.59-15.88CFM (0.3~0.45m ³ /min)
Temperature	64.4-74.6°F (18-22°C)
Humidity	55%~65%
Power	110V±10%, 50/60Hz

STANDARD DELIVERY

Main unit		1 pc
Probe system	Probe head (Renishaw)	1 pc
	Probe body (Renishaw)	1 pc
	Styli (Renishaw)	1 set
Calibration sphere	Ø19mm	1 pc
Computer		1 pc
Printer		1 pc
Software		1 pc

PROBE HEAD SPECIFICATION

Probe head (PH10T)	Angular movement with horizontal axis	0°~105° in 7.5 steps
	Angular movement with vertical axis	±180° in 7.5 steps
	Number of positions	720
	Probe mounting	M8
	Max. output torque	0.45N.m
	Max. extension length	300mm
	Weight	1.43lb (649g)
Probe body	Detect direction	±X, ±Y, +Z
	Styli mounting	M2
	Rating life	>1000,000 times

STYLI INCLUDED IN TP20 AND TP200B

Material	Ball diameter	Length	Quantity
ruby ball / stainless steel stem	SØ1mm	10mm	1 pc
	SØ2mm	20mm	1 pc
	SØ3mm	20mm	1 pc
	SØ3mm	30mm	1 pc
	SØ4mm	10mm	1 pc
	SØ4mm	30mm	1 pc
	SØ4mm	40mm	1 pc
	SØ5mm	20mm	1 pc
	SØ5mm	50mm	1 pc
stainless steel stem	—	10mm	1 pc
	—	20mm	1 pc
	—	30mm	1 pc

STYLI INCLUDED IN SP25M

Material	Ball diameter	Length	Quantity
ruby ball / stainless steel stem	SØ2mm	21mm	2 pc
	SØ3mm	21mm	2 pc
	SØ4mm	21mm	2 pc
	SØ2mm	30mm	2 pc
	SØ3mm	40mm	2 pc
	SØ4mm	50mm	2 pc
	SØ6mm	75mm	2 pc
stainless steel stem	—	20mm	1 pc