

# Metrology fixturing for ZEISS CMM systems

## **Fixturing made simple**

Renishaw CMM fixtures can improve the throughput, reproducibility and accuracy of inspection processes by providing quick and repeatable fixturing set-ups for components. Renishaw CMM fixtures are modular and can be expanded to provide a complete fixturing solution for parts of almost any size, shape or material.

# **Build a modular fixturing solution**



#### **Plate options**

#### **Recommended CMM fixture base plates**

Parts are held securely using Renishaw CMM fixture base plates and modular fixturing components, ensuring repeatability and reproducibility. Renishaw's cast aluminium base plates for CMMs are coated with Nituff® hard coat anodise to resist wear and scratching. Set-ups can be documented and repeated precisely as base plates are labelled alpha-numerically.

Plates are available with M6 and ¼-20 thread size fixturing holes, for a selection of ZEISS machines. M8 plates are available upon request.

Part number	Size	Compatible machine models*				
M6 plates						
R-PCZ2-13450450-12-6**	12.7 mm x 450 mm x 450 mm	CONTURA 7/7/6; DuraMax; ACCURA/PRISMO 7/9/5; SPECTRUM 5/5/6				
R-PCZ4-19750750-12-6**	19 mm x 750 mm x 750 mm	CONTURA 7/7/6; ACCURA/PRISMO 7/9/5; SPECTRUM 7/7/6				
R-PC-19600600-12-6	19 mm x 600 mm x 600 mm	CONTURA 7/7/6; ACCURA/PRISMO 7/9/5; SPECTRUM 7/7/6				
R-PC-197501000-12-6	19 mm x 750 mm x 1000 mm	CONTURA 7/10/6; ACCURA/PRISMO 9/12/7; SPECTRUM 7/10/6				
R-PC-199001200-12-6	19 mm x 900 mm x 1200 mm	CONTURA 9/12/8; ACCURA/PRISMO 9/12/7				
1/4-20 plates						
R-PC-Z2-501818-50-20**	0.50" x 18" x 18"	CONTURA 7/7/6; DuraMax; ACCURA/PRISMO 7/9/5; SPECTRUM 5/5/6				
R-PC-Z4-753030-50-20**	0.75" x 30" x 30"	CONTURA 7/7/6; ACCURA/PRISMO 7/9/5; SPECTRUM 7/7/6				
R-PC-752424-50-20	0.75" x 24" x 24"	CONTURA 7/7/6; ACCURA/PRISMO 7/9/5; SPECTRUM 7/7/6				
R-PC-752840-50-20	0.75" x 28" x 40"	CONTURA 9/12/8; ACCURA/PRISMO 9/12/7; SPECTRUM 7/10/6				
R-PC-753648-50-20	0.75" x 36" x 48"	CONTURA 9/12/8; ACCURA/PRISMO 9/12/7				

<sup>\*</sup>Minimum machine model size is listed. Plates will also fit onto larger machines than those listed.

<sup>\*\*</sup>Plate has mounting holes specific to the machines listed.

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## **Component set options**

#### Recommended component sets

There are several component sets recommended for fixturing parts on a base plate. Components with M6 and ¼-20 thread sizes are all suitable for use with ZEISS CMM systems. Component set compatibility is dependant upon the base plate fixturing hole thread size.

Component sets with other thread sizes are available upon request.



R-FSC-CB-6

#### M6 component sets

Part number	Description	Set A (part no. R-FSC-CA-6)	Set B (part no. R-FSC-CB-6)	Set C (part no. R-FSC-CC-6)
R-S-910-6	9 mm dia. × 10 mm standoff	-	3	6
R-S-1310-6	13 mm dia. × 10 mm standoff	-	-	4
R-S-1320-6	13 mm dia. × 20 mm standoff	3	6	8
R-S-1325-6	13 mm dia. × 25 mm standoff	3	6	8
R-S-1350-6	13 mm dia. × 50 mm standoff	3	6	8
R-S-1910-6	19 mm dia. × 10 mm standoff	-	3	4
R-S-1920-6	19 mm dia. × 20 mm standoff	3	6	8
R-S-1925-6	19 mm dia. × 25 mm standoff	3	6	8
R-S-1950-6	19 mm dia. × 50 mm standoff	3	6	8
R-S-19100-6	-19100-6 19 mm dia. × 100 mm standoff		4	6
R-S-2520-6	25 mm dia. × 20 mm standoff	3	6	8
R-S-2525-6	25 mm dia. × 25 mm standoff	3	6	8
R-S-2550-6	25 mm dia. × 50 mm standoff	3	6	8
R-S-25100-6	25 mm dia. × 100 mm standoff	-	4	6
R-SP-1325-6	13 mm dia. × 25 mm pin standoff	2	4	4
R-SP-1925-6	19 mm dia. × 25 mm pin standoff	-	-	2
R-CT-40-30-6	40 mm tension clamp with 30 mm post	2	6	6
R-CT-64-70-6	64 mm tension clamp with 70 mm post	4	12	12
R-CT-95-83-6	95 mm tension clamp with 83 mm post	-	-	3
R-CT-100P-83-6	100 mm tension clamp plunger with 83 mm post	-	-	3
R-CTB-25-6	25 mm tension clamp bracket	-	-	1
R-RCD-6	Delrin® resting cone	4	4	6
R-RPS-6	Steel resting pin	-	4	6
R-APJ-6	Adjustable pivot joint	-	-	1
R-AJ-13-6	13 mm dia. adjustable jackstand	1	2	4
R-AJ-25-6	25 mm dia. adjustable jackstand	-	2	3
R-AS-45-6	45 mm long adjustable slide	1	2	3
R-AS-70-6	70 mm long adjustable slide	1	2	4
R-TB-2025-6	Tower block with base 20 mm <sup>2</sup> × 30 mm	-	2	2
R-T-25300-6	25 mm <sup>2</sup> × 300 mm tower	-	-	1
R-TC-500200	500 mm × 200 mm × 25 mm component tray	1	1	2
R-BC10	50 mm × 200 mm × 150 mm compartment box	1	1	2
Total number of components in each set		44	110	163



#### 1/4-20 component sets

Part number	Description	Set A (part no.	Set B (part no.	Set C (part no.
rait number	Description	R-FSC-CA-20)	R-FSC-CB-20)	R-FSC-CC-20
R-S-37550-20	0.375 in dia. × 0.5 in standoff	-	3	6
R-S-5050-20	0.5 in dia. × 0.5 in standoff	-	-	4
R-S-5075-20	S-5075-20 0.5 in dia. × 0.75 in standoff		6	8
R-S-501-20	0.5 in dia. × 1.0 in standoff	3	6	8
R-S-502-20	0.5 in dia. × 2.0 in standoff	3	6	8
R-S-7550-20	0.75 in dia. × 0.5 in standoff	-	3	4
R-S-7575-20	0.75 in dia. × 0.75 in standoff	3	6	8
R-S-751-20	0.75 in dia. × 1.0 in standoff	3	6	8
R-S-752-20	0.75 in dia. × 2.0 in standoff	3	6	8
R-S-754-20	R-S-754-20 0.75 in dia. × 4.0 in standoff		4	6
R-S-175-20	1.0 in dia. × 0.75 in standoff	3	6	8
R-S-11-20	1.0 in dia. × 1.0 in standoff	3	6	8
R-S-12-20	1.0 in dia. × 2.0 in standoff	3	6	8
R-S-14-20	1.0 in dia. × 4.0 in standoff	-	4	6
R-SP-501-20	0.5 in dia. × 1.0 in pin standoff	2	4	4
R-SP-751-20	0.75 in dia. × 1.0 in pin standoff	-	-	2
R-CT-160-125-20	1.6 in tension clamp with 1.25 in post	2	6	6
R-CT-250-275-20	2.5 in tension clamp with 2.75 in post	4	12	12
R-CT-375-325-20	3.75 in tension clamp with 3.25 in post	-	-	3
R-CT-4P-325-20	4.0 in tension clamp plunger with 3.25 in post	-	-	3
R-CTB-1-20	1.0 in tension clamp bracket	-	-	1
R-RCD-20	Delrin® resting cone	3	4	6
R-RPS-20	Steel resting pin	-	4	6
R-APJ-20	Adjustable pivot joint	-	-	1
R-AJ-50-20	0.50 in dia. adjustable jackstand	1	2	4
R-AJ-1-20	1.0 in dia. adjustable jackstand	-	2	3
R-AS-1-20	1.0 in long adjustable slide	1	2	3
R-AS-3-20	3.0 in long adjustable slide	1	2	4
R-TB-751-20	Tower block with base 0.75 in <sup>2</sup> × 1.0 in	-	2	2
R-T-112-20	1.0 in <sup>2</sup> × 12.0 in tower (1 row, 4 sides)	-	-	1
R-TC-500200	20 in × 8 in × 1 in component tray	1	1	2
R-BC10	8 in × 8 in × 2 in compartment box	1	1	2
Total number of components in each set		42	109	161

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## **Custom solutions**

If modular fixturing is not suitable, Renishaw can provide CMM custom fixtures, designed to hold single or multiple parts. Renishaw can design and create a custom fixture for parts of almost any size, shape, weight or material.

Ask a local sales representative about custom fixturing solutions or visit www.renishaw.com/customfixture







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