

**Machine Tool Products**

**Siemens Measuring Cycles Software Option**

**for**

**Milling Machines**

Revised: 06/04/2018

***For more information or to request a quote please contact:***

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Cell: 317-830-3057

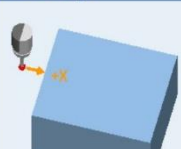
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## Measurement in the Manual Setup Mode (JOG)

### Basic Scope (included with 828D BASIC)

**Measure: edge**



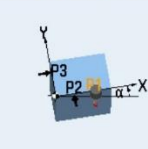
<b>Std. meas. method</b>	Values W/O
Work offset G54	X 0.0000
Meas.direct. +	Y 0.0000
X0 0.0000	Z 0.0000
	Measured values
	X0

**Measure: align edge**



<b>Align edge</b>	Measure workpiece	Values W/O
Std. meas. method	Work offset G54	Z 0.000 °
Work offset G54	Meas. axis + X	Measured values
Angle offs.	Coord. rotat.	alpha
Spec. angle	0.000 °	

**Measure: rectang. corner**



<b>Rectangular corner</b>	Measure workpiece	Values W/O
Work offset G54	Corner	X 0.0000
Outs.corner	Pos. 1	Y 0.0000
X0 0.0000		Z 0.0000
Y0 0.0000		Z 0.000 °
		Measured values
		X0
		Y0

**Measure: 1 hole**



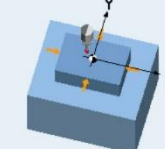
<b>1 hole</b>	Measure workpiece	Values W/O
Std. meas. method	Work offset G54	X 0.0000
Work offset G54	∅Hole 10.0000	Y 0.0000
Contact ang.	0.000 °	Z 0.0000
X0 0.0000		Measured values
Y0 0.0000		∅
		X0
		Y0

**Measure: 1 circ. spigot**



<b>1 circ. spigot</b>	Measure workpiece	Values W/O
Std. meas. method	Work offset G54	X 0.0000
Work offset G54	∅Spigot 10.0000	Y 0.0000
Contact ang.	0.000 °	Z 0.0000
X0 0.0000		Measured values
Y0 0.0000		∅
		X0
		Y0

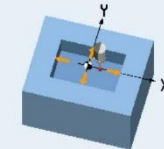
**Measure: rectang. spigot**



<b>Rectang.spigot</b>	Measure workpiece	Values W/O
Std. meas. method	Work offset G54	X 0.0000
Work offset G54	L	Y 0.0000
L		Z 0.0000
W		Measured values
DZ 10.0000		L
X0 0.0000		W
Y0 0.0000		X0
		Y0

**Extended Scope (Extended Operator Functions Software Option)**

Measure: rectang. pocket



**Rectang. pocket**

Std. meas. method  
 Work offset G54

L  
 W  
 X0 0.0000  
 Y0 0.0000

Values WJ0  
 X 0.0000  
 Y 0.0000  
 Z 0.0000  
 Measured values  
 L  
 W  
 X0 0.0000  
 Y0 0.0000

Measure: 2 holes



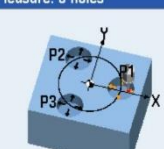
**2 holes**

Std. meas. method  
 Work offset G54  
 øHole 10.0000  
 Angle offs.  
 Spec. angle 0.000  
 Coord. rotat.

X0 0.0000  
 Y0 0.0000

Values WJ0  
 X 0.0000  
 Y 0.0000  
 Z 0.0000  
 Measured values  
 L  
 X0 0.0000  
 Y0 0.0000

Measure: 3 holes



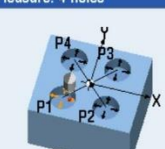
**3 holes**

Std. meas. method  
 Work offset G54  
 øHole 10.0000  
 Angle offs. No

X0 0.0000  
 Y0 0.0000

Values WJ0  
 X 0.0000  
 Y 0.0000  
 Measured values  
 ø  
 X0  
 Y0

Measure: 4 holes



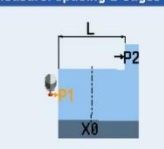
**4 holes**

Std. meas. method  
 Work offset G54  
 øHole 10.0000  
 Angle offs. No

X0 0.0000  
 Y0 0.0000

Values WJ0  
 X 0.0000  
 Y 0.0000  
 Z 0.0000  
 Measured values  
 X0  
 Y0

Measure: spacing 2 edges



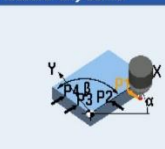
**Spacing 2 edges**

Std. meas. method  
 Work offset G54  
 Meas. dir. P1 + X  
 Meas. dir. P2 + X

X0 0.0000

Values WJ0  
 X 0.0000  
 Y 0.0000  
 Z 0.0000  
 Measured values  
 L  
 X0

Measure: any corner



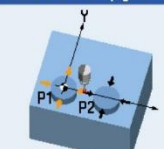
**Any corner**

Work offset G54  
 Corner  
 Outs. corner  
 Pos. 1

X0 0.0000  
 Y0 0.0000

Values WJ0  
 X 0.0000  
 Y 0.0000  
 Z 0.0000  
 Measured values  
 α  
 β  
 X0  
 Y0

Measure: 2 circ. spigots



**2 circ. spigots**

Std. meas. method  
 Work offset G54  
 øSpigot 10.0000  
 DZ 10.0000  
 Angle offs.  
 Spec. angle 0.000  
 Coord. rotat.

X0 0.0000

Values WJ0  
 X 0.0000  
 Y 0.0000  
 Z 0.0000  
 Measured values  
 L  
 X0  
 Y0

Measure: 3 circ. spigots



**3 circ. spigots**

Std. meas. method  
 Work offset G54  
 øSpigot 10.0000  
 DZ 10.0000  
 Angle offs. No

X0 0.0000

Values WJ0  
 X 0.0000  
 Y 0.0000  
 Measured values  
 X0  
 Y0

Measure: 4 circ. spigots



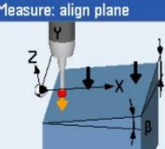
**4 circ. spigots**

Std. meas. method  
 Work offset G54  
 øSpigot 10.0000  
 DZ 10.0000  
 Angle offs. No

X0 0.0000

Values WJ0  
 X 0.0000  
 Y 0.0000  
 Z 0.0000  
 Measured values  
 X0  
 Y0

Measure: align plane



**Align plane**

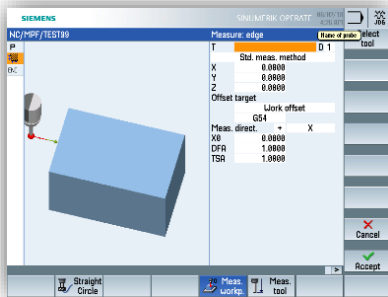
Work offset G54

X0 0.0000  
 Y0 0.0000  
 Z0 0.0000

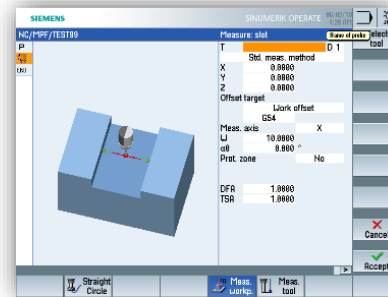
Values WJ0  
 X 0.0000  
 Y 0.0000  
 Z 0.0000  
 Measured values  
 α  
 β

*\*See Note 1*

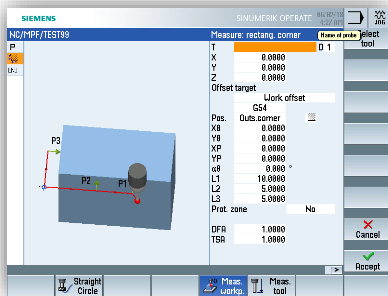
## In-Process Measurement (AUTOMATIC)



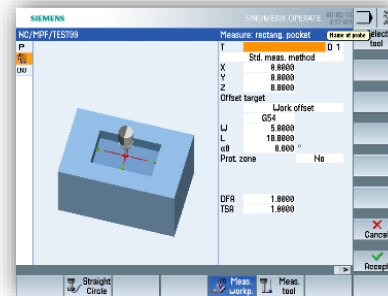
Edge



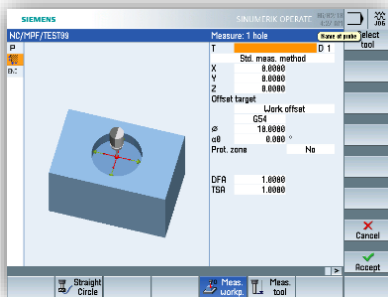
Slot



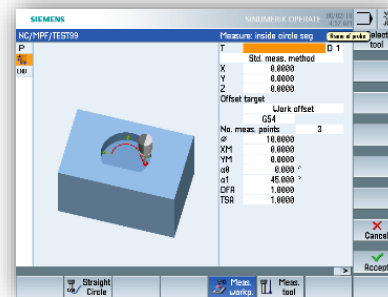
Rectangular Corner



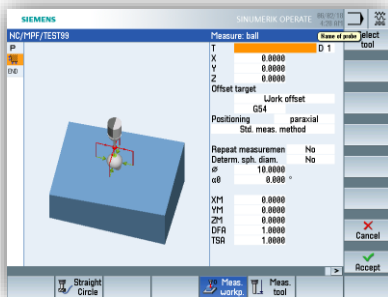
Rectangular Pocket



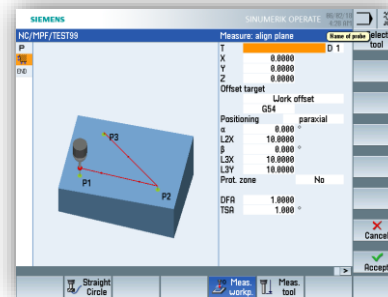
Hole



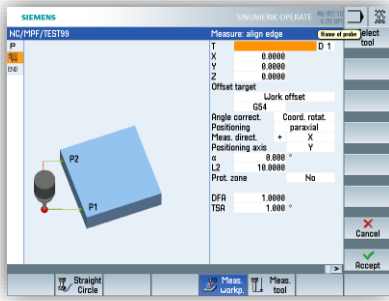
Inside Circular Segment



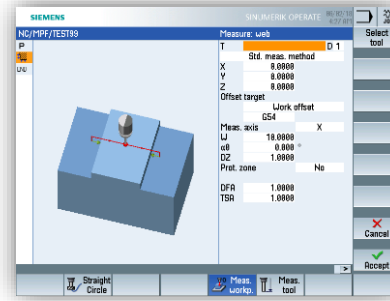
Ball



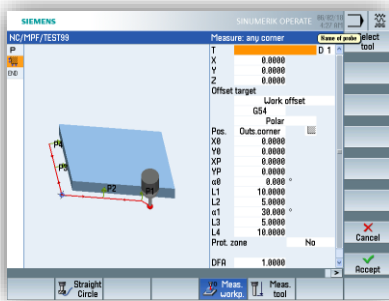
Align Plane



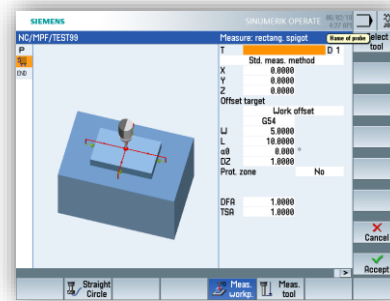
Align Edge



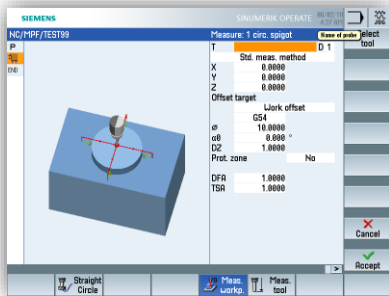
Web



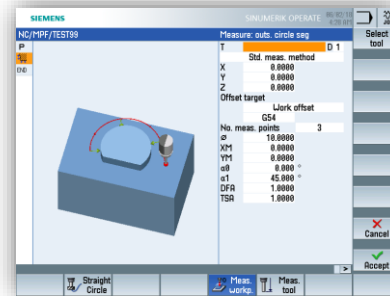
Any Corner



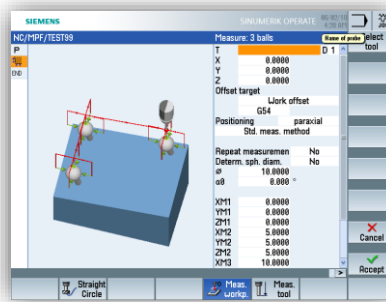
Rectangular Spigot



Circular Spigot

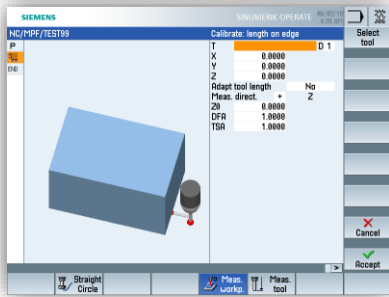


Outside Circular Spigot

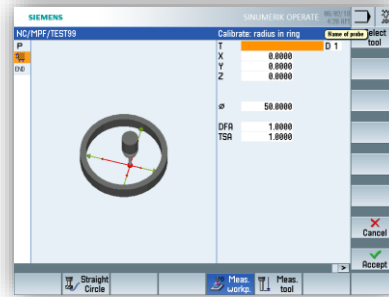


3 Balls

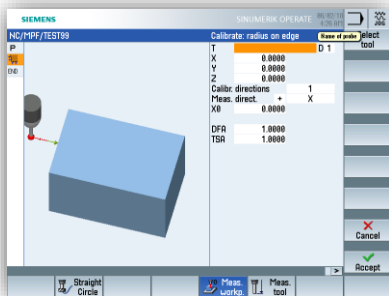
### Probe Calibration Cycles



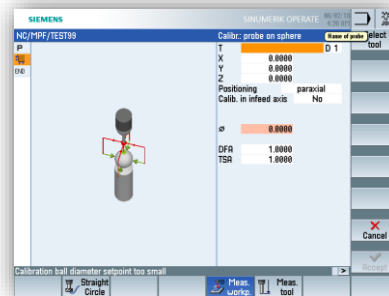
Length on Edge



Radius in Ring



Radius on Edge



Probe on Sphere

**NOTE 1:** The CNC option Extended operator functions enables the following additional operator functions:

- Overstore
- Teach-in
- DRF function
- Extended block search
- Extended skip levels > 2
- Backup workpiece setup data
- *Additional measuring version beyond standard scope (only milling)*
  - *Standard scope workpiece zero: Set edge, align edge, right-angled corner, 1 hole, and 1 circular spigot and rectangular spigot*
  - *Expansion of the measurement screens via combo box*
- Synchronized actions softkey
- MDI load/save
- G code converter (turning and milling only)

**For more information or to request a quote please contact:**

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