

Micrometers

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

U-WAVE^{fit}

V-Anvil Micrometers SERIES 314 — 3 Flutes

- Measures the outside diameter of cutting tools (such as taps, reamers, end mills) with an odd number of flutes.
- Carbide tipped spindle.
- Equipped with Ratchet Stop for constant measuring force.



314-351-30



314-353-30

SPECIFICATIONS

Inch / Metric		For 3-flute cutting tools			
Order No.	Range (in)	Resolution (in)	Accuracy* (in)	Anvil	Remarks
Digimatic					
314-351-30	0.05 - 0.6	0.00005 in/ 0.001 mm	±0.0002	60°	w/groove
314-352-30	0.4 - 1		±0.00025		—
314-353-30	1 - 1.6		±0.0002		—
314-361-30	0.05 - 0.6		—		—
314-362-30	0.4 - 1		—		—

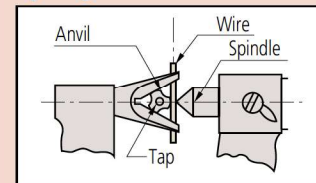
Metric		For 3-flute cutting tools			
Order No.	Range (mm)	Resolution (mm)	Accuracy* (μm)	Anvil	Remarks
Digimatic					
314-251-30	1 - 15	0.001	±4	60°	w/groove
314-252-30	10 - 25		±5		—
314-253-30	25 - 40		±4		—
314-261-30	1 - 15		—		—
314-262-30	10 - 25		—		—

* EMPE (ISO 3611:2023 and ASME B89.1.13-2013)

Measurement example



Pitch diameter measurement of tap by single-wire method



Optional Accessories

Order No.	Type	Description
264-020	—	USB Input Tool Series USB Keyboard Signal Conversion Type IT-020U
05CZA662	B	Connection cable (1 m)
05CZA663	B	Connection cable (2 m)
06AFM380B	B	USB Input Tool Direct (2 m)
02AZD730G	IP67	U-WAVE-T
02AZD880G	Buzzer	U-WAVE-T
02AZE200	—	U-WAVE-T mounting bracket
02AZD790B	B	Connection cable for U-WAVE-T (160 mm)
02AZE140B	B	Connection cable for U-WAVE-T For foot switch
264-622	IP67	U-WAVE-TM
264-623	Buzzer	U-WAVE-TM
264-626	IP67	U-WAVE-TMB
264-627	Buzzer	U-WAVE-TMB
02AZF310	IP67	Connecting unit for U-WAVE-TM/TMB

Micrometers

V-Anvil Micrometers SERIES 114 — 3 Flutes and 5 Flutes

- Measures the outside diameter of cutting tools (such as taps, reamers, end mills) with an odd number of flutes.
- Equipped with Ratchet Stop for constant measuring force.



114-135

SPECIFICATIONS

Inch For 3-flute cutting tools					
Order No.	Range (in)	Graduation (in)	Accuracy* (in)	Anvil	Remarks
Analog - Anvil, Spindle (with carbide tip)					
114-202	0.09 - 1	0.0001	±0.0002	60°	—
Analog - Spindle (with carbide tip)					
114-163	0.05 - 0.6	0.001	±0.0002	60°	—
114-113	1 - 1.6		±0.00025		—
114-114	1.6 - 2.2		±0.0003		—

Metric For 3-flute cutting tools					
Order No.	Range (mm)	Graduation (mm)	Accuracy* (µm)	Anvil	Remarks
Analog - Anvil, Spindle (with carbide tip)					
114-204	2.3 - 25	0.01	±4	60°	—
Analog - Spindle (with carbide tip)					
114-101	1 - 15	0.01	±4	60°	w/groove
114-102	10 - 25				—
114-103	25 - 40				—
114-104	40 - 55				—
114-105	55 - 70				—
114-106	70 - 85				—
114-107	85 - 100				—
114-108	100 - 115				—
114-109	115 - 130				—
114-110	130 - 145				—
114-161	1 - 15	0.01	±4	60°	—
114-162	10 - 25				—

Inch For 5-flute cutting tools					
Order No.	Range (in)	Graduation (in)	Accuracy* (in)	Anvil	Remarks
Analog - Anvil, Spindle (with carbide tip)					
114-135	0.09 - 1	0.0001	±0.0002	108°	—

* EMPE (ISO 3611:2023 and ASME B89.1.13-2013)

Metric For 5-flute cutting tools					
Order No.	Range (mm)	Graduation (mm)	Accuracy* (µm)	Anvil	Remarks
Analog - Anvil, Spindle (with carbide tip)					
114-137	2.3 - 25	0.01	±4	108°	—
Analog - Spindle (with carbide tip)					
114-121	5 - 25	0.01	±4	108°	w/groove
114-122	25 - 45				—
114-123	45 - 65				—
114-124	65 - 85				—
114-165	5 - 25				±4

DIMENSIONS

Unit: mm

For 3-flute cutting tools	
Range (mm)	(g)
10 - 25	6.2
25 - 40	19.14
40 - 55	32.13
55 - 70	45.12
70 - 85	58.11



MRM Metrology Inc.
905 595 1000
sales@MRMmetrology.com
www.MRMmetrology.com