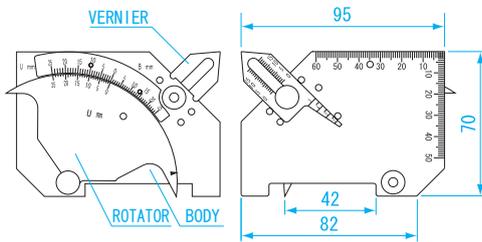


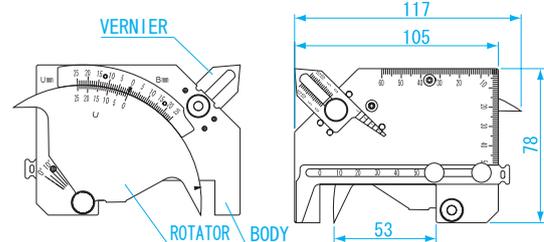
DIMENSIONS

Units : mm



DIMENSIONS

Units : mm



USE • For wide of variety welding measurements

Undercut depth/ Groove angle/ Inconsistent level
Height of fillet weld & bead weld/ Throat thickness of fillet
Root opening/ Plate thickness

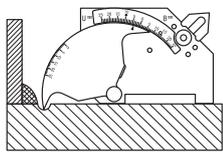
MATERIAL • Stainless steel (SUS410)

FEATURES

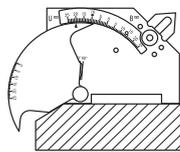
- Long usage life, rust and corrosion resistant and extremely durable as well as being light weight
- Very convenient to the welding process involving steel frame assembly such as general welding, ship building, bridge construction, etc.
- Easy reading scale

MEASUREMENT FUNCTION

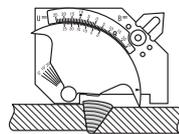
WGU-7M, WGU-8M, WGU-9M common functions



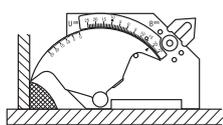
① Undercut depth (0~25mm)



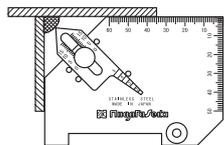
② Bevel angle (WGU-7M: 0~60°) (WGU-8M-WGU-9M: 0~70°)



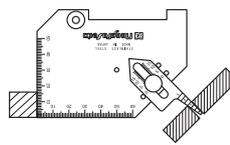
③ Bead striding width (WGU-7M: 42mm) (WGU-8M-WGU-9M: 53mm) Step difference (0~25mm)



④ Height of fillet & bead weld (0~25mm)

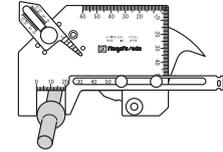


⑤ Throat thickness of fillet weld (0~15mm)

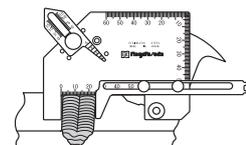


⑥ Root opening (2~5mm)
⑦ Plate thickness (scale)

WGU-8M, WGU-9M common functions



⑧ External diameter of circular workpiece
WGU-8M: up to 30mm
WGU-9M: up to 50mm



⑨ Width of bead weld (0~53mm)

Order No.	Model No.	Weight
007513	WGU-7M	150g
007514	WGU-8M	190g

BLOCK GAUGES

PIN GAUGES

PIN VISE

PIN GAUGE ACCESSORIES

GAUGES

THREAD GAUGES

PLUG GAUGES

RING GAUGES

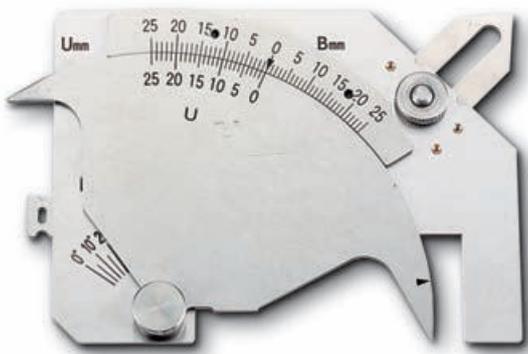
THICKNESS GAUGES

TAPER GAUGES

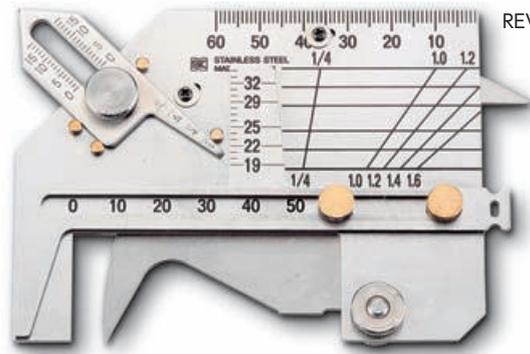
WELDING GAUGES

OTHER GAUGES

WELDING GAUGE



FRONT



REVERSE

USE

- For a wide variety of welding measurements
- Undercut depth/ Groove angle/ Inconsistent level
- Height of fillet weld & bead weld/ Throat thickness of fillet
- Root opening/ Plate thickness/ External diameter of circular workpiece/ Width of bead weld

MATERIAL

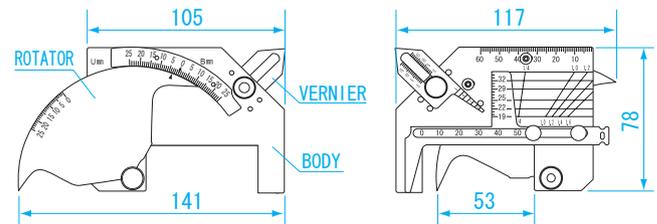
- Stainless steel (SUS420J2)

FEATURES

- Additional functions for measurement of
 - external diameter of circular workpiece
 - swelling of pressure welded reinforcing iron
 - width of bead weld
- Bead stride width: 53mm
- Bevel angle range: 0-70°
- Higher accuracy undercut measurement function

DIMENSIONS

Units : mm



BLOCK GAUGES

PIN GAUGES

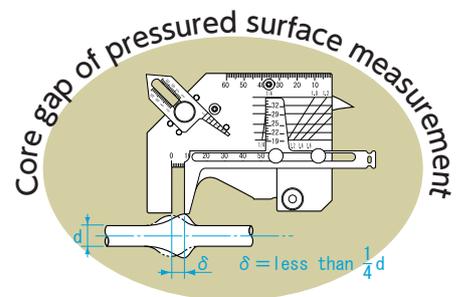
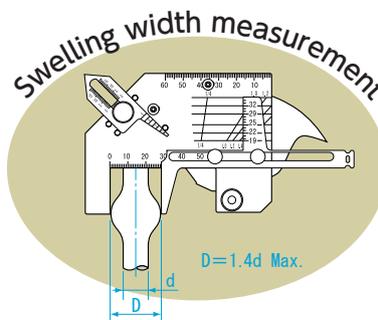
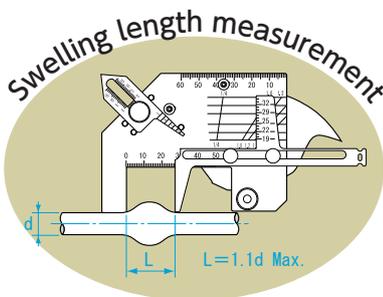
PIN VISE

PIN GAUGE ACCESSORIES

Additional functions

Provides quick way to measure the diameter of welded rebar to insure proper dimensions of weld seam.

Scale marked for material diameter (ϕ 19, 20, 25, 29, 32) corresponding to various rebar diameters, and amount of expansion (1/4, 1.0~1.6). You can quickly find the ratio by reading the intersection of the two scale lines.



GAUGES

THREAD GAUGES

PLUG GAUGES

RING GAUGES

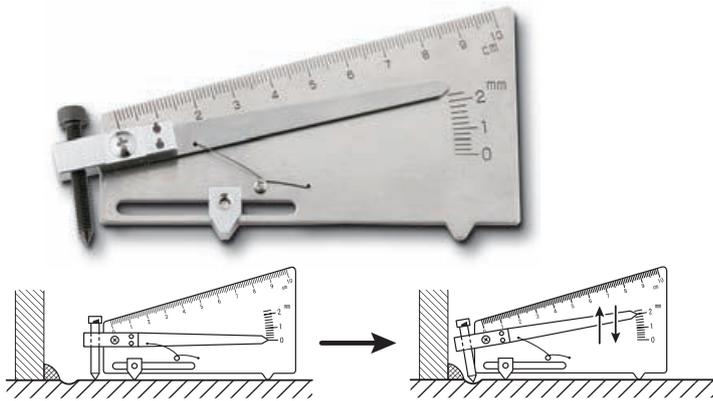
THICKNESS GAUGES

TAPER GAUGES

WELDING GAUGES

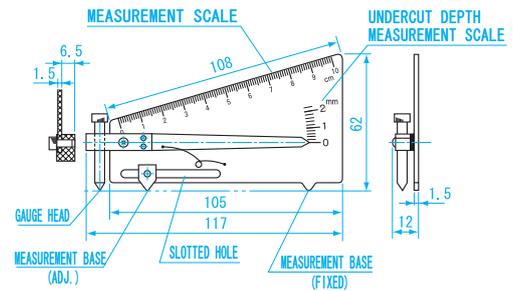
OTHER GAUGES

Order No.	Model No.	Rebar diameter (mm)	Expansion	Weight
007515	WGU-9M	ϕ 19 ~ 35	1/4, 1.0 ~ 1.6	190g



DIMENSIONS

Units : mm



Zero Adjustment

1. Press this gauge to the measuring sample.
2. Adjust Zero point adjustment screw to indicate 0, insuring that all three points contact surface.

Measurement

After 0 adjustment, put the tool on undercut and the spring will move indicator arm to show depth of undercut on graduation.

USE • For undercut depth and length measurement (Scale range : 0-2mm)

MATERIAL

- Stainless steel (SUS410)

FEATURES

- Easy to measure depth and length of undercut
- Capable of 0 adjustment with screw type of gauge head

SPECIFICATIONS

- Exclusive use for undercut measurement (minimum reading : 0.2mm)

Order No.	Model No.	Weight
007521	WGU-2S	100g

BLOCK GAUGES

PIN GAUGES

WELDING GAUGE

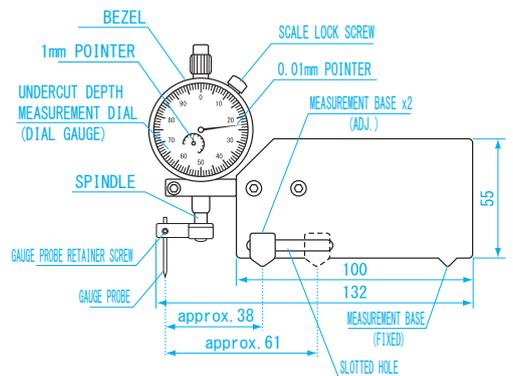
PIN VISE

PIN GAUGE ACCESSORIES

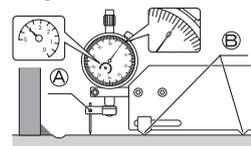


DIMENSIONS

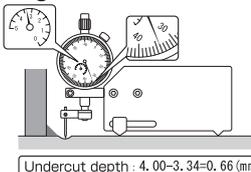
Units : mm



(Figure 1)



(Figure 2)



Zero Adjustment

Recommended to be performed on a flat surface such as a surface plate.

- ① Loosen GAUGE PROBE RETAINER SCREW using hex key.
- ② Place Welding Gauge on surface insuring all three points of MEASUREMENT BASE are making contact (2x ADJ. 1x FIXED) and push on SPINDLE shaft. When 1mm POINTER indicates 4.00mm, tighten GAUGE PROBE RETAINER SCREW. (Insure that probe tip is in contact with the surface plate)

Measurement

- ① Place the gauge on a flat surface and rotate BEZEL to indicate 0.01mm. (Figure 1)
- ② Place PROBE tip on weld undercut point to be measured. (Figure 2)
- ③ Undercut value is obtained by subtracting Dial Gauge reading from 4.00mm.

USE • Exclusive use for undercut measurement

FEATURES

- Stainless steel (SUS420J2)
- Easy and accurate to measure depth and length of undercut
- Dial gauge type performs more precise measurement
- Three point support for stable measurement

SPECIFICATIONS

- Measurement range : 0 ~ 4.00mm
- Minimum reading : 0.01mm
- Accuracy : ± 0.04 mm
- Width of measurement base : ≈ 23 mm

Order No.	Model No.	Weight
007520	FDW-1	280g

GAUGES

THREAD GAUGES

PLUG GAUGES

RING GAUGES

THICKNESS GAUGES

TAPER GAUGES

WELDING GAUGES

OTHER GAUGES

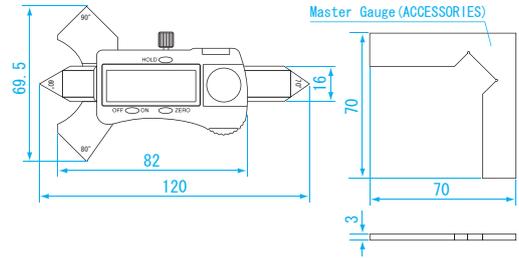
DIGITAL WELDING GAUGE

Essential for welding process. Digital welding gauge specialized for measuring fillet weld and bead weld height
 Provided with zero setting master gauge



DIMENSIONS

Units : mm



USE • For measuring the size of fillet weld and bead weld

MATERIAL

- Stainless steel

FEATURES

- Easy to read with digital display
- Bevel angle: 60° , 70° , 80° , 90°
- Master gauge included
- Hold function

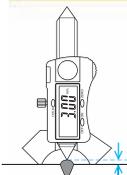
SPECIFICATIONS

- Throat thickness : 20mm
- Bead height : 10mm
- operating temperature : 0 ~ 40°C

POWER

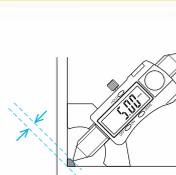
- SR44 or LR44, one included for testing

Weld reinforcement height measurement

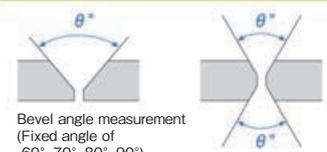


Bead Height
Maximum measurement 10mm

Measurement before welding process



Throat thickness
Maximum measurement 20mm



Bevel angle measurement
(Fixed angle of 60°, 70°, 80°, 90°)

Order No.	Model No.	Resolution (mm)	Accuracy※ (mm)	Weight
007526	DWG-20G	0.01	± 0.03	130g

※ Quantization Error (± 1 digit) not included

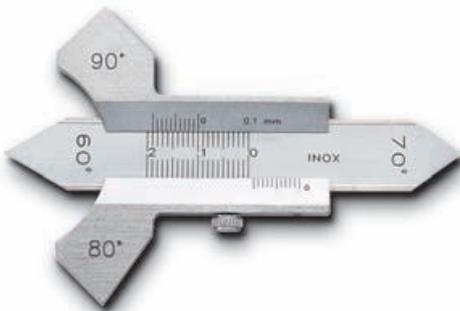
BLOCK GAUGES

PIN GAUGES

PIN VISE

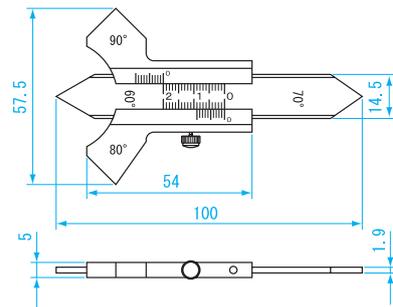
PIN GAUGE ACCESSORIES

WELDING GAUGE



DIMENSIONS

Units : mm



USE • Use for measuring the size of fillet weld and bead weld

MATERIAL

- Stainless steel

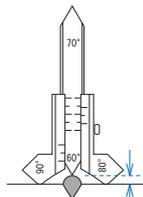
FEATURES

- Bevel angle: 60° 70° 80° 90°

SPECIFICATIONS

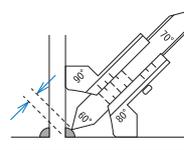
- Fillet weld : 11mm
- Bead weld : 8mm
- Accuracy: ± 0.2mm
- Minimum reading : 0.1mm

Weld Bead Measurement

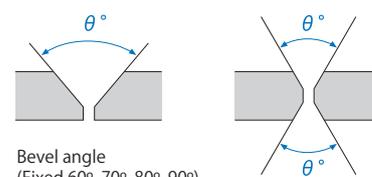


Bead height
Maximum measurement 8mm

Measurement Before Welding



Throat thickness
Maximum measurement 11mm



Bevel angle
(Fixed 60°, 70°, 80°, 90°)

Order No.	Model No.	Weight
007516	AWG-10	80g

THREAD GAUGES

PLUG GAUGES

RING GAUGES

THICKNESS GAUGES

TAPER GAUGES

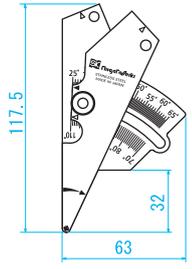
WELDING GAUGES

OTHER GAUGES

New Product. Specialized for angle measurement of grooves with minimum reading 0.5°



DIMENSIONS
Units : mm



USE • Butt angle measurement and gap angle measurement
MATERIAL • Stainless(SUS410)

FEATURES

- Measurement of butt joint gap angle
- Sharpened tip enables measurement for root gap of 0mm, or when sheet thickness is less than 15mm
- Minimum reading 0.5° , large scale for easy reading
- T-joint gap angle can be measured avoiding weld buildup
- Non-reflective satin finish for easy to read scale
- Solid and convenient carrying.(Provided with plastic carrying case)

SPECIFICATIONS

- Bevel angle : 25 ~ 65° (Minimum graduation: 0.5°)
- Angle of cross weld part : 70-110°

Example use

1) Butt joint gap angle measurement (Max. Inside Angle 65°: Plate Thickness :30mm)

2) T-joint gap angle measurement (Min. Inside Angle 25°:Plate Thickness: 30mm)

3) Angle of cross weld part (Max. Angle 110°)

4) Angle of cross weld part (Min. Angle 70°)

• How to Read the value for examples 1) & 2)
Angle between ◀ marks indicated at ▶

• How to Read the value for examples 3) & 4)
Angle between ◀ marks indicated at ▶

SPECIFICATIONS

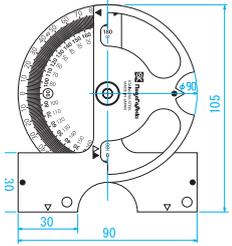
Order No.	Model No.	Accuracy of angle	Weight
007518	WGA-65	± 0.5°	73.5g

ANGLE PROTRACTOR

New Product. Specialized for angle measurement. 3 measurement points enable multiple angle measurements



DIMENSIONS
Units : mm



USE • Measuring angles for sheet metal bending, welding flanges and butt joints, openings and bevels, scissors plates, etc.
MATERIAL • Stainless steel (SUS410)

FEATURES

- Enables a wide range of angle measurements before and after welding process
- Direct measurement can be done without interference from swelling or weld bead
- Can measure sheet metal bends and outside angle measurements
- Non-reflective satin finish for easy to read scale
- Solid and convenient carrying (provided with plastic case)

SPECIFICATIONS

- Bevel angle : Scissors angle 30-130° (Minimum graduation : 1°)
- Bending angle and angle of butt weld joint : 0 ~ 90°
- Stud and beam angle after welding : 0 ~ 180°

Example use

Example 1) Angle measurement of bent butt weld (0-90°:Example indicates 10°)

Example 2) Angle measurement of bent Flange and metal plate (0-180°:Example indicates 20°)

Example 3) Angle of cross weld part (0-180°:Example indicates 110°)

Example 4) Plate bevel angle (30-130°: Example indicates 65°)

• How to read the value
Angle between ● marks indicated at ●

• How to read the value
Angle between ▼ marks indicated at ▶

• How to read the angle
Angle between ◀ marks indicated at ▶

• How to read the angle
Angle between ▲ marks indicated at ▶

SPECIFICATIONS

Order No.	Model No.	Accuracy of angle	Weight
007519	AP-130	± 0.5°	100g



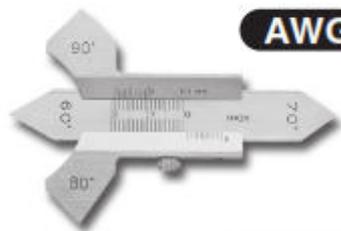
Measurement function and List

Process	No.	Categories	Figures	Applicable Model														
				Taper Gauge	WG-1	WG-2	WG-3	WG-5	WGU-7M	WGU-8M	WGU-9M	WGU-2S	FDW-1	WRL310 WRL1118	WAL2542 WAL4562	AWG-10	DWG-20G	WGA-65
Machining and Assembly (Before welding)	1	T joint Gap		✓	✓	✓	✓	—	✓	✓	✓	—	—	✓	—	—	—	—
	2	Lap joint Gap		✓	✓	✓	✓	—	✓	✓	✓	—	—	✓	—	—	—	—
	3	Misalignment of Butt weld		✓	✓	✓	✓	—	✓	✓	✓	—	—	✓	—	—	—	—
	4	Root Openings		✓	✓	✓	✓	—	✓	✓	✓	—	—	✓	—	—	—	—
	5	Root gap of T-joint		—	—	—	—	—	—	—	—	—	—	✓	—	—	—	—
	6	Root Face		—	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	—	—	—	—
	7	Bevel Angle		—	✓	✓	✓	—	✓	✓	✓	—	—	—	—	—	—	✓
	8	Groove angle		—	—	—	—	—	—	—	—	—	—	—	✓	✓	✓	✓
	9	T-joint gap angle		—	—	—	—	—	—	—	—	—	—	—	✓	—	—	✓
	10	Edg Misalignment		—	✓	✓	✓	✓	✓	✓	✓	—	—	—	—	—	—	—
After Welding	11	Leg length (height) of Fillet Weld		—	✓	✓	✓	✓	✓	✓	—	—	—	✓	✓	—	—	
	12	Throat Thickness of Fillet Weld		—	✓	✓	✓	✓	✓	✓	—	—	—	—	✓	✓	✓	
	13	Height of Butt weld Overlay		—	✓	✓	✓	✓	✓	✓	—	—	—	✓	—	✓	—	
	14	Height of T-joint weld Overlay		—	✓	✓	✓	✓	✓	✓	—	—	—	✓	—	✓	—	
	15	Undercut		—	—	✓	✓	—	✓	✓	✓	✓	—	—	—	—	—	
	16	Misalignment of Butt Weld		—	—	✓	✓	✓	✓	✓	✓	—	—	—	—	—	—	
	17	Bending angle and angle of butt weld joint		—	—	—	—	—	—	—	—	—	—	—	—	—	—	✓
	18	Angle of Cross weld part		—	—	—	—	—	—	—	—	—	—	—	—	—	—	✓
	19	Stud angle after welding		—	—	—	—	—	—	—	—	—	—	—	—	—	—	✓
	20	Irregularity of Bead Surface		—	—	—	—	—	—	—	✓	✓	—	—	—	—	—	—
Pressure welding	21	Swelling diameter		—	—	—	—	—	—	△※	✓	—	—	—	—	—	—	
	22	Swelling length		—	—	—	—	—	—	—	△※	✓	—	—	—	—	—	
	23	Misalignment of Pressured Surface		—	—	—	—	—	—	—	—	△※	✓	—	—	—	—	
	24	Bending angle		—	—	—	—	—	—	—	—	—	—	—	—	—	—	✓

※ Measures dimension of weld, relative amount must be calculated.

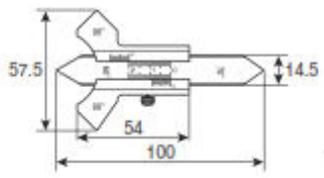
SPECIFICATIONS

Model No.	Material	Scale	Height of Bead Weld	Height of Fillet Weld	Throat thickness of fillet weld	Undercut depth	Root Opening	Width of Bead Weld	Welding Bar Diameter	Length Accuracy	Beveling(groove) angle	Bending angle and angle of butt weld joint	Stud and beam angle after welding	Angle Accuracy
WG-1	Stainless steel SUS410 Plate thickness: 4.3mm	40mm	10mm	20mm	10mm	—	0.5~3mm	—	10mm	±0.4mm	0~60° Minimum reading value:5°	—	—	±0.7°
WG-2	Stainless steel (SUS410) Plate thickness: 4.9mm			10mm Minimum reading 0.1						10mm				
WG-3	Stainless steel SUS410	30·35mm	10mm	50mm	50mm	10mm	0.5~5mm	—	10mm	±0.4mm	0~60° Minimum reading value:5°	—	—	±0.7°
WG-5	Plate thickness 7mm Satin finish													
WGU-7M	Stainless steel (SUS410) Plate thickness: 1.5mm	50·60mm	25mm	25mm	15mm	25mm	2~5mm	0~53mm	30mm	±0.4mm (Throat thickness measurement ±0.7mm-manufacturing accuracy)	0~60° Minimum reading value:5°	—	—	±2°
WGU-8M	Stainless steel (SUS420J2) Plate thickness: 1.5mm													
WGU-9M	Stainless steel (SUS420J2) Plate thickness: 1.5mm	60mm	—	—	—	—	—	—	50mm	—	0~70° Minimum reading value:5°	—	—	—
WGU-2S	Stainless steel (SUS410) Plate thickness: 1.5mm	100mm	—	—	—	2mm	—	—	—	±0.1mm	—	—	—	—
FDW-1	Stainless steel (SUS420J2) Plate thickness: 1.5mm	—	—	—	—	4mm	—	—	—	±0.04mm	—	—	—	—
AWG-10	Stainless steel Thickness: Body: 5mm, Blade: 1.9mm	—	8mm	—	11mm	—	—	—	—	±0.2mm	60·70·80·90° fixed	—	—	—
DWG-20	Stainless steel Thickness: Body: 5.2mm Blade: 2.7mm Display: 13.5mm	—	10mm	—	20mm	—	—	—	±0.05mm					
WRL310	Stainless steel (SUS304) Plate thickness: 2mm	20mm	10~17mm (1mm step)	10~17mm fixed (1mm step)	—	—	3~10mm fixed (1mm step)	—	—	±0.1mm	—	—	—	—
WRL1118	Stainless steel (SUS304) Plate thickness: 2mm		2~9mm (1mm step)	2~9mm fixed (1mm step)										
WAL2542	Stainless steel (SUS304) Plate thickness: 1.5mm	—	—	5·7·8·10mm fixed	4~7mm fixed (1mm step)	—	—	—	—	±0.1mm	25·27.5·30·32.5 35·37.5·40·42.5° fixed	—	—	±1°
WAL4562	Stainless steel (SUS304) Plate thickness: 1.5mm			11·13·14·15mm fixed	8~11mm fixed (1mm step)						55·57.5·60·62.5° fixed			
WGA-65	Stainless steel SUS410 Plate thickness 1.5mm Satin finish	—	—	—	—	—	—	—	—	—	25~65° Minimum reading value:0.5°	—	70~110°	±0.5°
AP-130	—	—	—	—	—	—	—	—	—	—	30~130° Minimum reading value:1°	0~90°	0~180°	

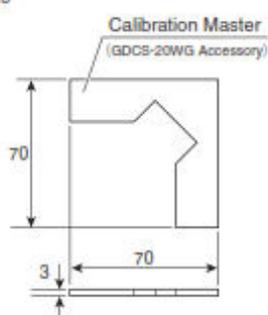


AWG-10

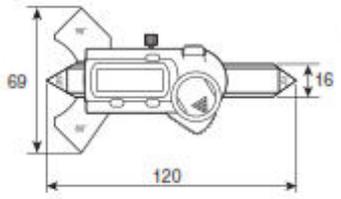
- FEAT.**
- Measures fillet throat depth and bead height with ease.
 - Easy to read digital version GDCS-20WG also supports communication via separately available Bluetooth Box.



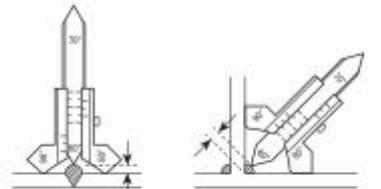
[Dimensions]
(mm, approx.)



GDCS-20WG



BEAD MEASUREMENT



Bead Height
(AWG-10: Max.: 8mm)
(GDCS-20WG: Max.: 10mm)

Throat Depth
(AWG-10: Max.: 11mm)
(GDCS-20WG: Max.: 20mm)

MATERIAL PREP.

