

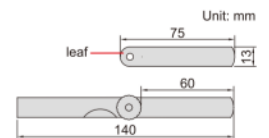
## FEELER GAGE

- Range: 0.04-1.00mm
- Made of hardened alloy steel
- Meet DIN2275/grade TC1
- Accuracy:  $\pm(3+T/80)$   $\mu\text{m}$ ,  
 'T' is the thickness of leaves in  $\mu\text{m}$

Code	Thickness of leaves included (mm)	Quantity of leaves
4601-25	0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	25



4601-25

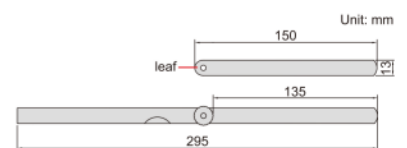


## LONG FEELER GAGE

- Range: 0.05-1.00mm
- Made of hardened alloy steel
- Meet DIN2275/grade TC1
- Accuracy:  $\pm(3+T/80)$   $\mu\text{m}$ ,  
 'T' is the thickness of leaves in  $\mu\text{m}$



4605-20



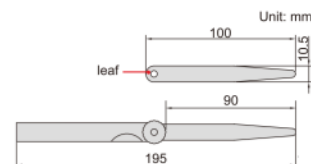
Code	Thickness of leaves included (mm)	Quantity of leaves
4605-20	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	20

## FEELER GAGES

- Made of hardened alloy steel
- Meet DIN2275/grade TC1
- Accuracy:  $\pm(3+T/80) \mu\text{m}$ ,  
"T" is the thickness of leaves in  $\mu\text{m}$



4602-20



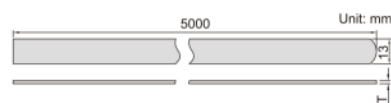
Code	Range	Thickness of leaves included (mm)	Quantity of leaves
4602-13A	0.03-0.50mm	0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.30, 0.40, 0.50	13
4602-13	0.05-1.00mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 1.00	13
4602-17	0.02-1.00mm	0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.75, 1.00	17
4602-20	0.05-1.00mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	20
4602-32	0.03-1.00mm	0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.13, 0.15, 0.18, 0.20, 0.23, 0.25, 0.28, 0.30, 0.33, 0.35, 0.38, 0.40, 0.45, 0.50, 0.55, 0.60, 0.63, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 1.00	32

## FEELER GAGE TAPES

- Used as shims to accurately set spacing
- Made of hardened alloy steel
- Length 5m
- Width 13mm

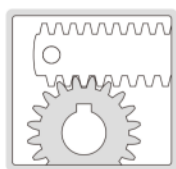


4621-30

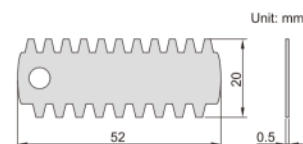


Code	Thickness (T)	Accuracy	Code	Thickness (T)	Accuracy	Code	Thickness (T)	Accuracy
4621-02	0.02mm	$\pm 4\mu\text{m}$	4621-12	0.12mm	$\pm 5\mu\text{m}$	4621-50	0.50mm	$\pm 14\mu\text{m}$
4621-03	0.03mm	$\pm 4\mu\text{m}$	4621-15	0.15mm	$\pm 6\mu\text{m}$	4621-55	0.55mm	$\pm 14\mu\text{m}$
4621-04	0.04mm	$\pm 4\mu\text{m}$	4621-18	0.18mm	$\pm 7\mu\text{m}$	4621-60	0.60mm	$\pm 14\mu\text{m}$
4621-05	0.05mm	$\pm 4\mu\text{m}$	4621-20	0.20mm	$\pm 8\mu\text{m}$	4621-65	0.65mm	$\pm 14\mu\text{m}$
4621-06	0.06mm	$\pm 4\mu\text{m}$	4621-25	0.25mm	$\pm 9\mu\text{m}$	4621-70	0.70mm	$\pm 17\mu\text{m}$
4621-07	0.07mm	$\pm 5\mu\text{m}$	4621-30	0.30mm	$\pm 9\mu\text{m}$	4621-75	0.75mm	$\pm 17\mu\text{m}$
4621-08	0.08mm	$\pm 5\mu\text{m}$	4621-35	0.35mm	$\pm 11\mu\text{m}$	4621-80	0.80mm	$\pm 19\mu\text{m}$
4621-09	0.09mm	$\pm 5\mu\text{m}$	4621-40	0.40mm	$\pm 12\mu\text{m}$	4621-90	0.90mm	$\pm 22\mu\text{m}$
4621-10	0.10mm	$\pm 5\mu\text{m}$	4621-45	0.45mm	$\pm 12\mu\text{m}$			

## GEAR TOOTH PITCH GAGES



4860-245



- Accuracy:  $\pm 0.05\text{mm}$
- Check the module pitch of gear tooth
- Made of hardened stainless steel

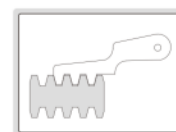
Code	Range	Pressure angle	Quantity of leaves
4860-145	0.35-4.5mm	14.5°	15
4860-245	0.35-4.5mm	20°	15
4860-112	5-12mm	14.5°	8
4860-212	5-12mm	20°	8

## PITCH GAGE



4824-12

- Accuracy:  $\pm 0.07\text{mm}$
- Check the pitch of screw thread
- Made of medium carbon steel



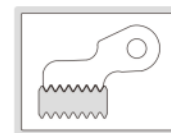
Code	Range	Thread type	Pitch of leaves included	Quantity of leaves
4824-12	2-20mm	Tr30°	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 16, 20mm	12

## PITCH GAGES

- Identify the pitch of screw thread
- Made of medium carbon steel



4820-124



### Metric 60° screw

Code	Range	Pitch of leaves included	Quantity of leaves
4820-124	0.25-7mm	0.25, 0.3, 0.35, 0.4, 0.5, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	24

### Unified 60° screw

Code	Range	Pitch of leaves included	Quantity of leaves
4820-230	4-42TPI	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42TPI	30

### Metric 60° and Whitworth 55° screw

Code	Range	Pitch of leaves included	Quantity of leaves
4820-452	0.25-6mm	0.25, 0.3, 0.35, 0.4, 0.45, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6mm	52
	4-62TPI	4, 4-1/2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 19, 20, 22, 24, 25, 26, 28, 30, 32, 36, 40, 48, 60, 62TPI	

### Metric 60° and Unified 60° screw

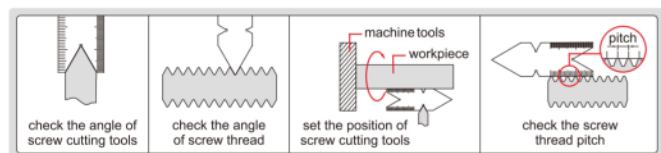
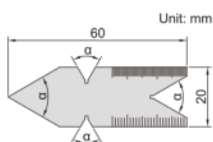
Code	Range	Pitch of leaves included	Quantity of leaves
4820-552	0.4-7mm	0.4, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	52
	4-42TPI	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42TPI	

## CENTER GAGES



4810-601

- To check and set screw cutting tools, and check the angle and pitch of screw thread
- Angle accuracy:  $\pm 30$ min.
- Made of stainless steel



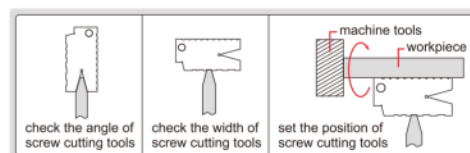
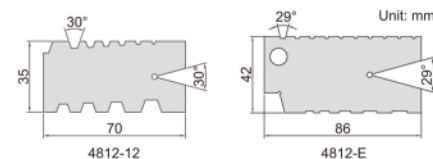
Code	Thread type	Angle ( $\alpha$ )	Graduation
4810-601	METRIC 60°	60°	0.5mm and 1mm
4810-55	WHITWORTH 55°	55°	14ths and 20ths on front side, 24ths and 32ths on back side

## THREAD GAGES



4812-E

- To check and set screw cutting tools
- Made of medium carbon steel



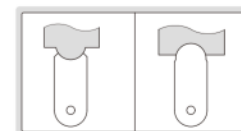
Code	Range	Thread type	Pitch
4812-12	2-12mm	Tr 30°	2, 3, 4, 5, 6, 7, 8, 9, 10, 12mm
4812-E	1-10TPI	ACME 29°	1, 1-1/3, 1-1/2, 1-3/4, 2, 2-1/2, 3, 4, 5, 6, 7, 8, 9, 10TPI

## RADIUS GAGES

- Made of carbon steel

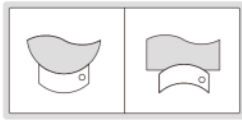


4801-17



Code	Range	Radius of leaves included (mm)	Quantity of leaves (internal+external)
4801-17	1-7mm	1, 1.25, 1.5, 1.75, 2, 2.25, 2.5, 2.75, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7	17+17
4801-16	7.5-15mm	7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13, 13.5, 14, 14.5, 15	16+16
4801-15	15.5-25mm	15.5, 16, 16.5, 17, 17.5, 18, 18.5, 19, 19.5, 20, 21, 22, 23, 24, 25	15+15

## RADIUS GAGE

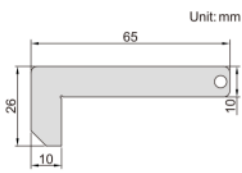


4802-31

- Made of stainless steel

Code	Range	Radius of leaves included (mm)	Quantity of leaves
4802-31	25-40mm	25, 25.5, 26, 26.5, 27, 27.5, 28, 28.5, 29, 29.5, 30, 30.5, 31, 31.5, 32, 32.5, 33, 33.5, 34, 34.5, 35, 35.5, 36, 36.5, 37, 37.5, 38, 38.5, 39, 39.5, 40	31 pcs

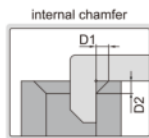
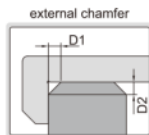
## CHAMFER GAGE



Unit: mm



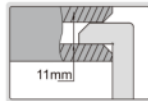
4844-1



- Accuracy:  $\pm 0.25$ mm
- To measure internal and external chamfers
- Made of stainless steel

Code	Graduation
4844-1	0.5mm

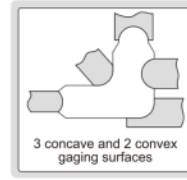
for internal chamfer measurement, diameter should be larger than 11mm



## RADIUS GAGE SET



use of handle



3 concave and 2 convex gaging surfaces

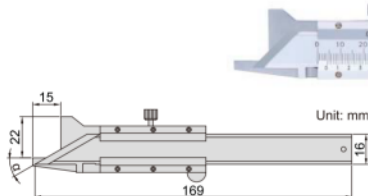


4804-26

- Each piece has 3 concave and 2 convex gaging surfaces
- Supplied with handle
- Made of medium carbon steel

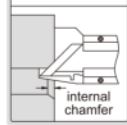
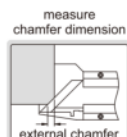
Code	Range	Radius of leaves included (mm)	Quantity of leaves
4804-26	0.5-13mm	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13	26

## CHAMFER GAGES



Unit: mm

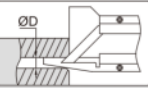
1267-6



- Measure 30°/45°/60° chamfer dimension
- Accuracy:  $\pm 0.06$ mm
- Graduation: 0.02mm
- Made of stainless steel
- Satin chrome plated reading surface

Code	Range	Chamfer ( $\alpha$ )	$\varnothing D$
1267-6	0-10mm	45°	7mm
1267-63	0-10mm	30°	8mm
1267-66	0-10mm	60°	7mm

for internal chamfer measurement, diameter should be larger than  $\varnothing D$

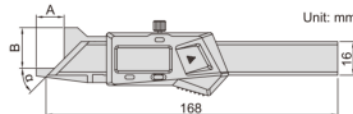


## DIGITAL CHAMFER GAGES

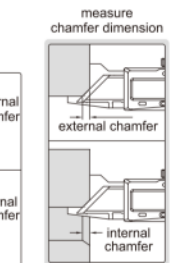
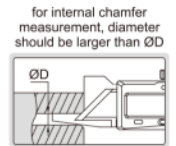
DATA OUTPUT



1180-6



Unit: mm



- Measure 30°/45°/60° chamfer dimension
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: data output cable (code 7315-21, 7302-21)

Code	Range	Accuracy	Chamfer ( $\alpha$ )	A	B	$\varnothing D$
1180-6	0-10mm/0-0.39"	$\pm 0.06$ mm	45°	15mm	22mm	7mm
1180-63	0-10mm/0-0.39"	$\pm 0.06$ mm	30°	15mm	22mm	8mm
1180-66	0-10mm/0-0.39"	$\pm 0.06$ mm	60°	14mm	21mm	7mm

## DIGITAL CHAMFER GAGES



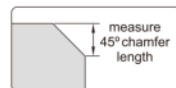
VIDEO

DATA OUTPUT

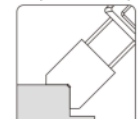
ATTENTION: THE ACTUAL LENGTH IS 1.414 TIMES OF THE READING

ATTENTION: CHAMFER OF HOLES CANNOT BE MEASURED

- Measure 45° chamfer length
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Supplied with pin gage for zero setting



1537-8 can measure small workpieces or workpieces with steps



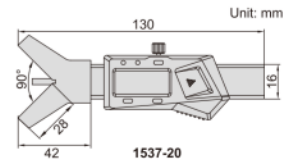
pin gage (included)



Code	Range	Accuracy
1537-20	0-20mm/0-0.787"	$\pm 0.05$ mm
1537-8	0-8mm/0-0.315"	$\pm 0.05$ mm



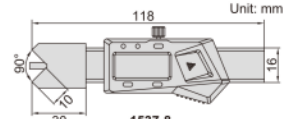
1537-20



1537-20



1537-8



1537-8



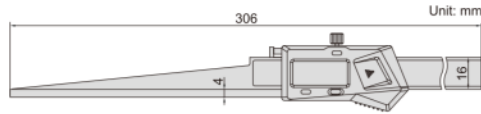
## DIGITAL TAPER SLOT GAGE

ATTENTION: ACTUAL SLOT WIDTH IS 1/10 OF THE READING

DATA OUTPUT



1160-10



- Measuring opening, slot width
- Resolution: 0.01mm/0.0005"
- Accuracy:  $\pm 0.03$ mm
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: data output cable (code 7315-21, 7302-21)

measure slot width

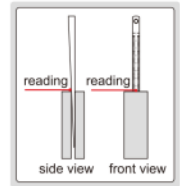


Code	Range
1160-10	0.2-10mm/0.01-0.39"

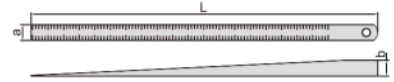
## TAPER SLOT GAGES



4630-1

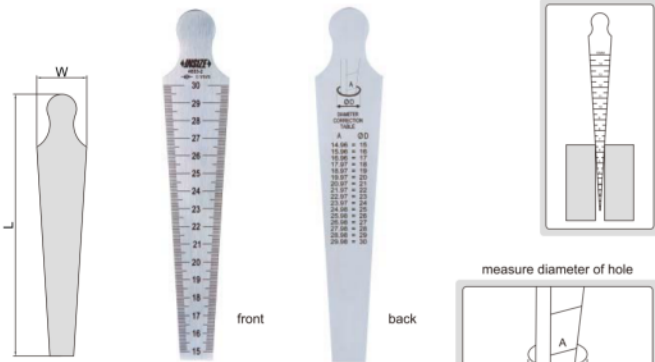


- For quick measurement of slot width
- Satin chrome plated reading surface
- Made of stainless steel



Code	Range	Graduation	Accuracy	L	a	b
4630-3	0.4-6mm	0.05mm	$\pm 0.04$ mm	164	12.5	6.5
4630-1	0.5-10mm	0.05mm	$\pm 0.07$ mm	220	10	10.5
4630-2	0.5-15mm	0.1mm	$\pm 0.08$ mm	184	12.5	16.5

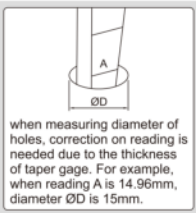
## TAPER GAGES



4833-2

- Measure opening, slot width, hole diameter, etc.
- Diameter correction table on the back (only for 4833-1, 4833-2)
- Made of stainless steel

measure diameter of hole

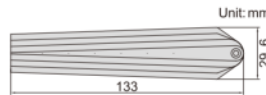


Code	Range	Graduation	Accuracy	L	W
4833-1	0.8-15mm	0.1mm	$\pm 0.05$ mm	146mm	17mm
4833-2	15-30mm	0.1mm	$\pm 0.05$ mm	159mm	30.4mm
4833-3	30-45mm	0.1mm	$\pm 0.05$ mm	166mm	45.4mm
4833-4	45-60mm	0.1mm	$\pm 0.05$ mm	170mm	60.5mm

## TAPER GAGE SET



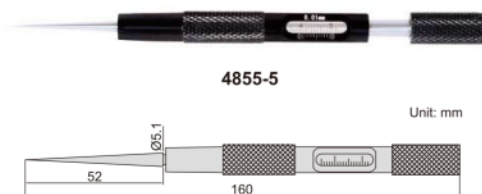
4837-1



- Include 4pcs (1-8mm, 8-15mm, 15-22mm, 22-29mm)
- Measure opening, slot width, hole diameter, etc.
- Diameter correction table on the back
- Made of stainless steel

Code	Range	Graduation	Accuracy
4837-1	1-29mm	0.05mm	$\pm 0.05$ mm

## SMALL TAPER BORE GAGE



4855-5

Unit: mm

- Quick measurement of small bore diameter
- Hardened working face
- Supplied with protection cap

supplied with protection cap

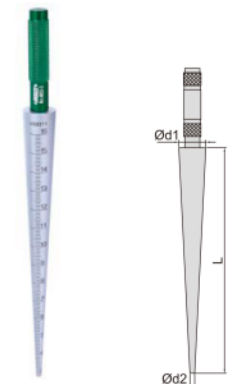


Code	Range	Graduation	Accuracy
4855-5	0.1-5mm	0.01mm	$\pm 0.03$ mm

## TAPER BORE GAGES

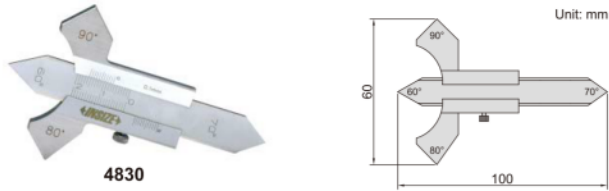
- Graduation: 0.1mm
- Accuracy:  $\pm 0.05$ mm
- Quick measurement of bore diameter
- Hardened steel, HRC50-58
- Satin chrome plated surface
- Aluminium oxidized handle

Code	Range	L	$\varnothing d1$	$\varnothing d2$
4852-1	1-6.5mm	62.5	7	0.8
4852-3	3-16mm	143	17	2.8
4852-15	15-30mm	165	31	14.7
4852-30	30-45mm	165	46	29.6



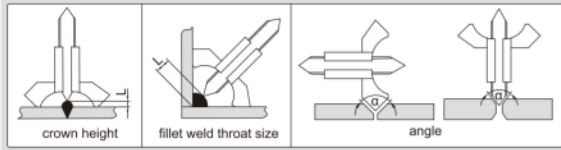
4852-3

### WELDING GAGE



4830

- Made of stainless steel
- Satin chrome plated reading surface



Code	Measurement	Range	Graduation	Accuracy
4830	crown height	0-8mm	0.1mm	±0.1mm
	fillet weld throat size	0-20mm	0.1mm	±0.3mm
	angle	60°, 70°, 80°, 90°	—	±1°

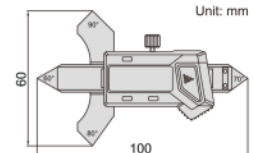
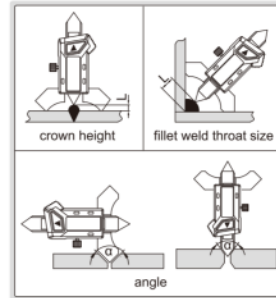
### DIGITAL WELDING GAGE

ATTENTION:  
NO DATA OUTPUT

- Buttons: zero, mm/inch, on/off
- Battery LR44
- Made of stainless steel

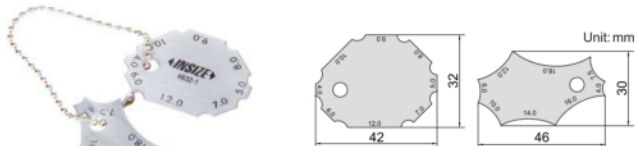


4831-20A



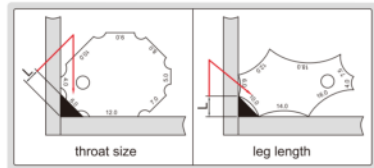
Code	Measurement	Range	Resolution	Accuracy
4831-20A	crown height	0-7mm	0.01mm/0.0005"	±0.03mm
	fillet weld throat size	0-20mm	0.01mm/0.0005"	±0.1mm
	angle	60°, 70°, 80°, 90°	—	±1°

### FILLET WELDING GAGE



4832-1

- Made of stainless steel
- Sizes marked on both faces

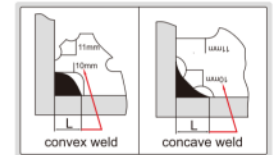
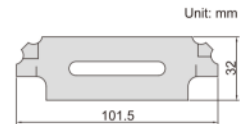


Code	Throat size (mm)	Leg length (mm)	Accuracy
4832-1	4, 5, 6, 7, 8, 9, 10, 12	4, 6, 7.5, 10, 12, 14, 16, 18	±0.5mm

### FILLET WELDING GAGE



4836-1



- Measure concave and convex weld sizes
- 7 blades are included
- Made of stainless steel

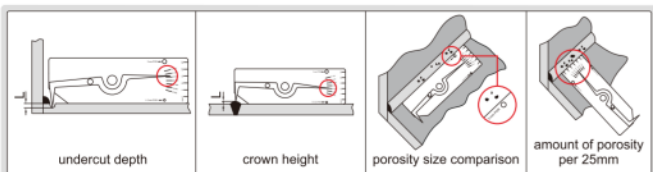
Code	Size (mm)	Accuracy
4836-1	3, 4, 5, 6, 8, 9, 10, 11, 12, 14, 16, 19, 22, 25	±0.5mm

### WELDING GAGE



4834-1

- Pointer can be locked for later reference
- Made of stainless steel

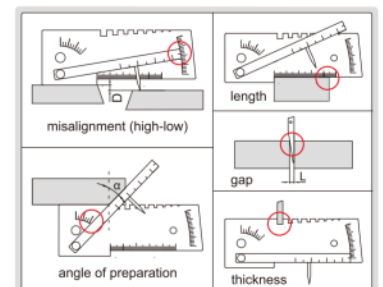
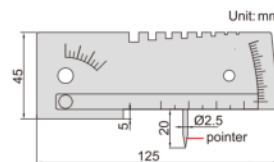


Code	Measurement	Range	Graduation	Accuracy
4834-1	undercut depth	0-6mm	0.5mm	±0.5mm
	crown height	0-6mm	0.5mm	±0.5mm
	porosity size comparison	1.5mm, 3mm	—	±0.2mm
	amount of porosity per 25mm	25mm	1mm	—

### WELDING GAGE



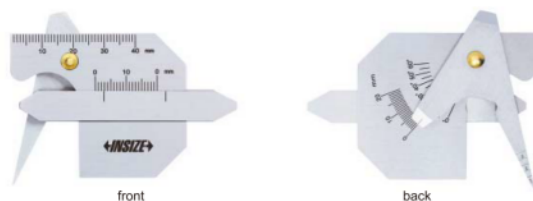
4848-1



- Made of stainless steel

Code	Measurement	Range	Graduation	Accuracy
4848-1	misalignment (high-low)	-5mm~+15mm	1mm	±0.5mm
	angle of preparation	0°-45°	5°	±2.5°
	length	0-50mm	1mm	±0.5mm
	gap	1-4mm	0.5mm	±0.25mm
	thickness	1, 1.2, 2.0, 2.5, 3.0, 3.25, 4.0, 5.0mm	—	±0.1mm

## WELDING GAGE

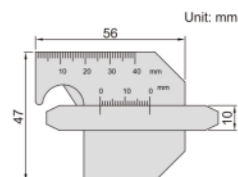


front

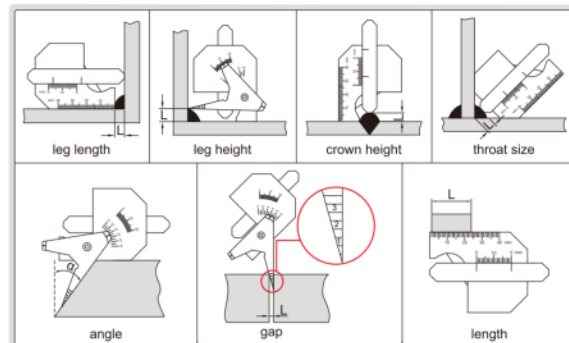
back

6832-1

- Made of stainless steel
- Satin chrome plated surface



Code	Measurement	Range	Graduation	Accuracy
6832-1	leg length	0-20mm	1mm	±0.3mm
	leg height	0-20mm	1mm	±0.3mm
	crown height	0-20mm	1mm	±0.3mm
	throat size	0-10mm	1mm	±0.3mm
	angle	0°-60°	5°	±1°
	gap	1-3.5mm	0.5mm	±0.2mm
	length	0-40mm	1mm	±0.3mm



## WELDING GAGE

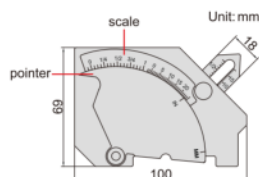


front

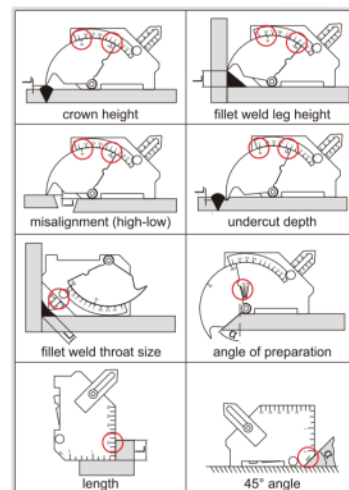
back

4835-1

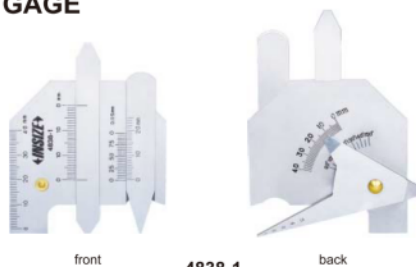
- Adjustable scale to compensate pointer wear
- Made of stainless steel



Code	Measurement	Range	Graduation	Accuracy
4835-1	crown height	0-25mm (0-1")	1mm (1/16")	±0.5mm
	fillet weld leg height	0-25mm (0-1")	1mm (1/16")	±0.5mm
	misalignment (high-low)	0-25mm (0-1")	1mm (1/16")	±0.5mm
	undercut depth	0-2mm (0-1/8")	1mm (1/16")	±0.5mm
	fillet weld throat size	0-20mm (0-3/4")	1mm (1/16")	±0.5mm
	angle of preparation	0-60°	5°	±1°
	length	0-60mm (0-2")	1mm (1/16")	±0.5mm
	45° angle	—	—	±1°



## WELDING GAGE

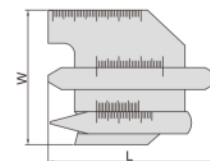


front

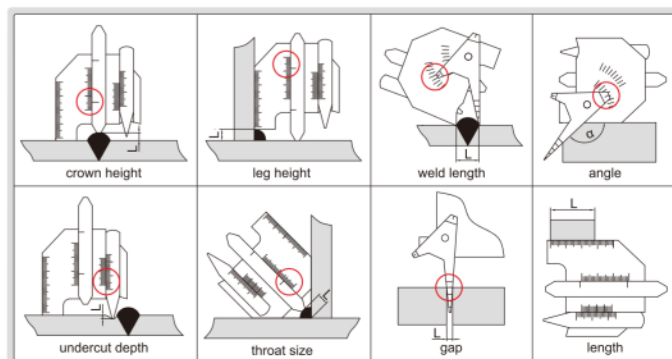
back

4838-1

- Made of stainless steel

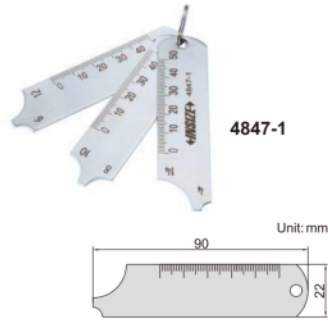
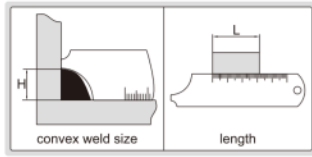


Code	Measurement	Range	Graduation	Accuracy	LxW
4838-1	crown height	0-10mm	1mm	±0.5mm	62x77mm
	leg height	0-14mm	1mm	±0.5mm	
	undercut depth	0-5mm	0.05mm	±0.05mm	
	throat size	0-13mm	1mm	±0.5mm	
	weld length	0-40mm	1mm	±1mm	
	angle	90°-150°	5°	±1°	
	gap	0.5-5mm	1mm	±0.5mm	
	length	0-40mm	1mm	±0.5mm	



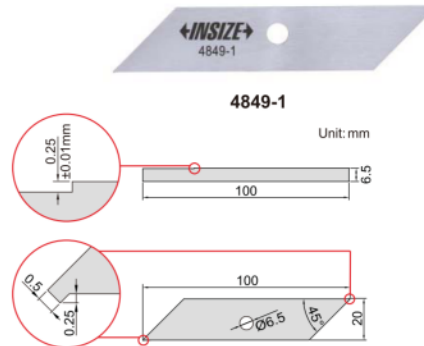
### FILLET WELDING GAGE

- Measure convex weld sizes
- 3 blades are included
- Made of stainless steel

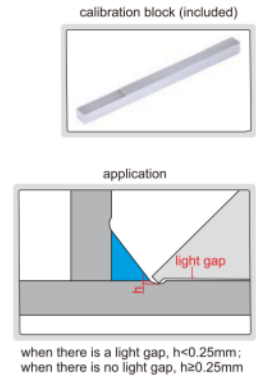


Code	Measurement	Range	Graduation	Accuracy
4847-1	convex weld size	4, 6, 8, 10, 12, 14mm	—	±0.5mm
	length	0-50mm	1mm	±0.5mm

### WELDING UNDERCUT GAGE



- Measure undercut
- Calibration block is included
- Made of stainless steel



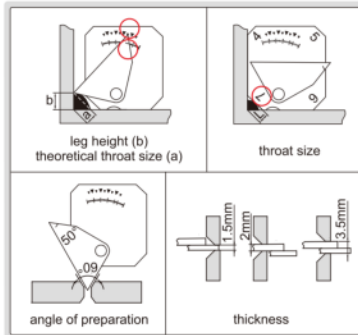
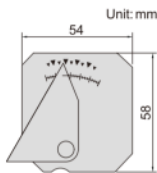
when there is a light gap,  $h < 0.25\text{mm}$ ;  
when there is no light gap,  $h \geq 0.25\text{mm}$

### WELDING GAGE

- Made of stainless steel



4850-1



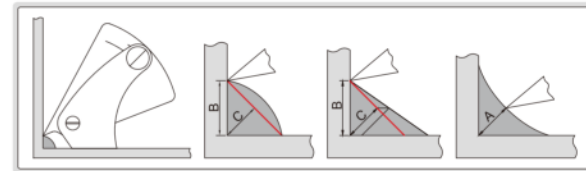
Code	Measurement	Range	Graduation	Accuracy
4850-1	leg height (b)	0-18mm	1mm	±0.5mm
	theoretical throat size (a)	2-12mm	1mm	±0.5mm
	throat size	4, 5, 6, 7mm	—	±0.5mm
	angle of preparation	50°, 60°	—	±1°
	thickness	1.5, 2, 3.5mm	—	±0.2mm

### WELDING GAGE



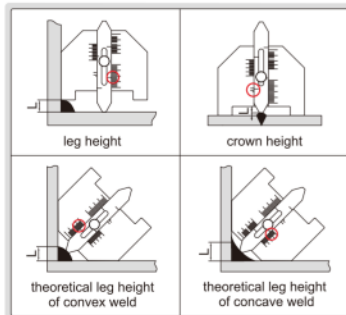
- Made of stainless steel

Code	Graduation	Accuracy
4840-1	0.2mm	±0.3mm

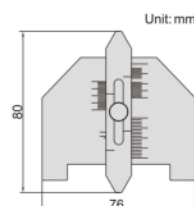


### WELDING GAGE

- Accuracy: ±0.5mm
- Made of stainless steel

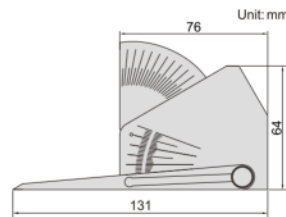


4851-1



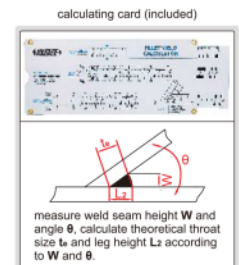
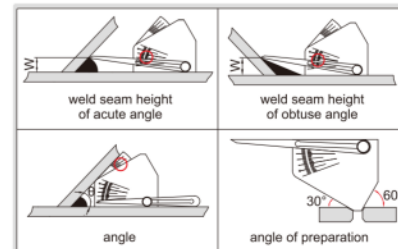
Code	Measurement	Range	Graduation
4851-1	leg height	0-20mm	1mm
	crown height	0-3mm	—
	theoretical leg height of convex weld	0-20mm	1mm
	theoretical leg height of concave weld	0-20mm	1mm

### FILLET WELDING GAGE



4846-1

- Calculating card is included
- Made of stainless steel

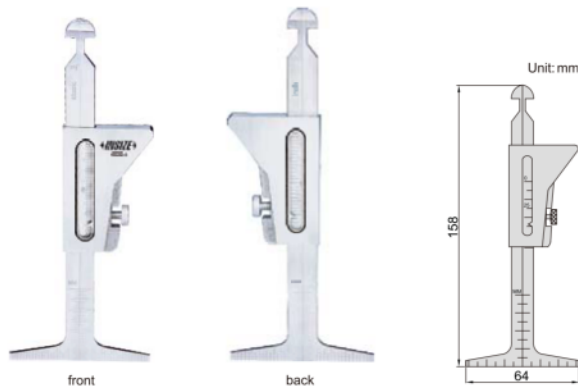


Code	Measurement	Range	Graduation	Accuracy
4846-1	weld seam height $W$	0-50mm/0-2"	2mm/.050"	±1mm
	angle $\theta$	30°-90°	2.5°	±1°
	60° angle	—	—	±0.5°

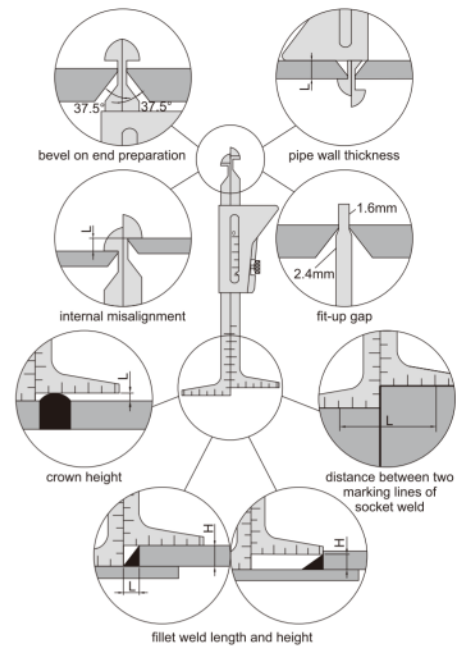


## PIPE WELDING GAGE

- Made of stainless steel

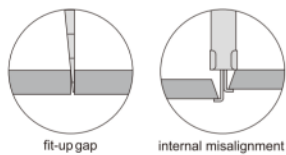


4839-1

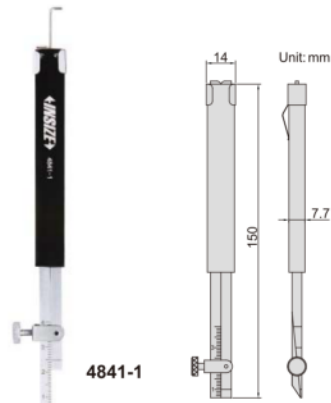


Code	Measurement	Range	Graduation	Accuracy
4839-1	bevel on end preparation	37.5°	—	±1°
	pipe wall thickness	0-45mm (0~1-3/4")	1mm (1/16")	±0.5mm
	internal misalignment	0-35mm (0~1-3/8")	1mm (1/32")	±0.5mm
	fit-up gap	1.6mm, 2.4mm	—	±0.1mm
	crown height	0-35mm (0~1-3/8")	1mm (1/32")	±0.5mm
	distance between two marking lines of socket weld	0-60mm (0~2-3/8")	1mm (1/16")	±0.5mm
	fillet weld length	0-30mm (0~1-1/4")	1mm (1/16")	±0.5mm
	fillet weld height	0-35mm (0~1-3/8")	1mm (1/32")	±0.5mm

## PIPE WELDING GAGE



- Made of stainless steel



4841-1

Code	Measurement	Range	Graduation	Accuracy
4841-1	internal misalignment	0-30mm	1mm	±0.5mm
	fit-up gap	0.7-4mm	0.1mm	±0.1mm

## 6-PIECE WELDING GAGE SET

- Includes:
  - 1) Welding gage (code 4834-1)
  - 2) Fillet welding gage, size 3-25mm, 7 blades (code 4836-1)
  - 3) Pipe welding gage (code 4841-1)
  - 4) Telescoping inspection mirror, size of mirror Ø32mm, length 178-505mm (code 7160-1)
  - 5) Pocket rule with sliding clip, range 150mm/6", graduation 1mm, 1/64" (code 7119-150)
  - 6) LED flashlight (code ISGF-0501)



5064

Code  
5064

## 7-PIECE WELDING GAGE SET

- Includes:
  - 1) Welding gage (code 4834-1)
  - 2) Welding gage (code 4851-1)
  - 3) Fillet welding gage, size 3-25mm, 7 blades (code 4836-1)
  - 4) Outside micrometer, range 0-25mm, graduation 0.01mm (code 3203-25A)
  - 5) Digital caliper, range 0-150mm/0-6", resolution 0.01mm/0.005" (code 1108-150)
  - 6) Pocket rule with sliding clip, range 150mm/6", graduation 1mm, 1/64" (code 7119-150)
  - 7) Magnifier with illumination, magnification 4X (code 7513-4)



5072

Code  
5072

## 7-PIECE WELDING GAGE SET

- Includes:
  - 1) Welding gage (code 4834-1)
  - 2) Welding gage (code 4851-1)
  - 3) Pipe welding gage (code 4839-1)
  - 4) Outside micrometer, range 0-25mm, graduation 0.01mm (code 3203-25A)
  - 5) Telescoping inspection mirror, size of mirror Ø32mm, length 178-505mm (code 7160-1)
  - 6) Magnifier with illumination, magnification 4X (code 7513-4)
  - 7) Steel rule, range 150mm/6", graduation 0.5mm, 1mm, 1/64", 1/32", 1/16" (code 7110-150)



5071

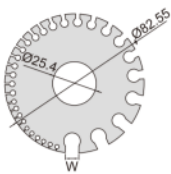
Code  
5071

### AMERICAN STANDARD WIRE GAGE



4808

Unit: mm



No.	W	No.	W
0	8.250mm/0.3249"	18	1.020mm/0.0403"
1	7.350mm/0.2893"	19	0.912mm/0.0359"
2	6.540mm/0.2576"	20	0.813mm/0.0320"
3	5.830mm/0.2294"	21	0.724mm/0.0285"
4	5.190mm/0.2043"	22	0.643mm/0.0253"
5	4.620mm/0.1819"	23	0.574mm/0.0226"
6	4.110mm/0.1620"	24	0.511mm/0.0201"
7	3.670mm/0.1443"	25	0.440mm/0.0179"
8	3.260mm/0.1285"	26	0.404mm/0.0159"
9	2.910mm/0.1144"	27	0.361mm/0.0142"
10	2.590mm/0.1019"	28	0.320mm/0.0126"
11	2.300mm/0.0907"	29	0.287mm/0.0113"
12	2.050mm/0.0808"	30	0.254mm/0.0100"
13	1.820mm/0.0720"	31	0.226mm/0.0089"
14	1.630mm/0.0641"	32	0.203mm/0.0080"
15	1.450mm/0.0571"	33	0.180mm/0.0071"
16	1.290mm/0.0508"	34	0.160mm/0.0063"
17	1.150mm/0.0453"	35	0.142mm/0.0056"
		36	0.127mm/0.0050"

- For gaging non-ferrous wire and metals such as copper, brass and aluminum
- Hardened to HRC50-57

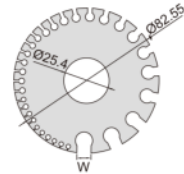
Code	Range
4808	0-36 (8.250-0.127mm/0.3249-0.0050")

### U.S. STANDARD SHEET METAL GAGE



4809

Unit: mm

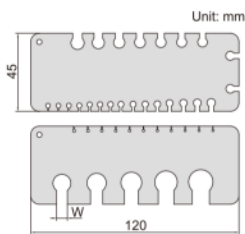


No.	W	No.	W
0	7.938mm/0.3125"	18	1.270mm/0.0500"
1	7.144mm/0.2813"	19	1.111mm/0.0438"
2	6.747mm/0.2656"	20	0.953mm/0.0375"
3	6.350mm/0.2500"	21	0.873mm/0.0344"
4	5.953mm/0.2344"	22	0.794mm/0.0313"
5	5.556mm/0.2188"	23	0.714mm/0.0281"
6	5.159mm/0.2031"	24	0.635mm/0.0250"
7	4.763mm/0.1875"	25	0.556mm/0.0219"
8	4.366mm/0.1719"	26	0.476mm/0.0188"
9	3.969mm/0.1563"	27	0.437mm/0.0172"
10	3.572mm/0.1406"	28	0.397mm/0.0156"
11	3.175mm/0.1250"	29	0.357mm/0.0141"
12	2.778mm/0.1094"	30	0.318mm/0.0125"
13	2.381mm/0.0938"	31	0.278mm/0.0109"
14	1.984mm/0.0781"	32	0.258mm/0.0102"
15	1.786mm/0.0703"	33	0.238mm/0.0094"
16	1.588mm/0.0625"	34	0.218mm/0.0086"
17	1.429mm/0.0563"	35	0.198mm/0.0078"
		36	0.179mm/0.0070"

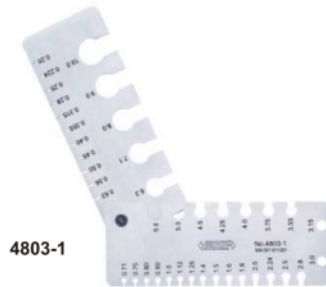
- For gaging sheet metal, plate iron and steel
- Hardened to HRC50-57

Code	Range
4809	0-36 (7.938-0.179mm/0.3125-0.0070")

### WIRE GAGE



Unit: mm



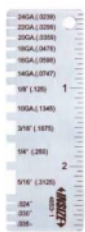
4803-1

- For gaging non-ferrous wire and metals such as copper, brass and aluminum
- Hardened to HRC51-53
- Including 2 pcs wire gages

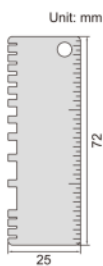
Code	Range
4803-1	0.2-10mm

wire diameter (W)	wire diameter (W)	wire diameter (W)
0.200mm	0.900mm	3.55mm
0.224mm	1.000mm	3.75mm
0.250mm	1.120mm	4.00mm
0.280mm	1.250mm	4.25mm
0.315mm	1.400mm	4.50mm
0.355mm	1.500mm	5.00mm
0.400mm	1.60mm	5.60mm
0.450mm	1.80mm	6.30mm
0.500mm	2.00mm	7.10mm
0.560mm	2.24mm	8.00mm
0.630mm	2.50mm	9.00mm
0.710mm	2.80mm	10.00mm
0.750mm	3.00mm	
0.800mm	3.15mm	

### THICKNESS GAGE

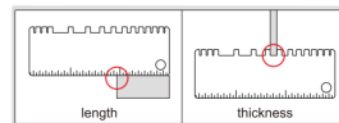


4853-1



Unit: mm

- Made of stainless steel



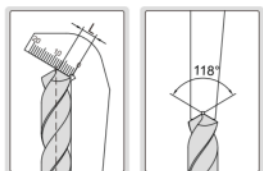
Code	Measurement	Range	Graduation	Accuracy
4853-1	length	0-2 3/4"	1/16"	1/32"
	thickness	24GA. (0.0239"), 22GA. (0.0299"), 20GA. (0.0359")	—	±0.002"
		18GA. (0.0478"), 16GA. (0.0598"), 14GA. (0.0747"), 1/8" (0.125"), 10GA. (0.1345"), 3/16" (0.1875"), 1/4" (0.250"), 5/16" (0.3125")		±0.004"
		0.024", 0.030", 0.035"		±0.002"

### DRILL POINT GAGE



4843-1

- For twist drills with 118° angle, to check if the center of tip is concentric with the drill body
- Made of stainless steel



Code	Accuracy	
	Angle	Length
4843-1	±0.5°	±0.5mm

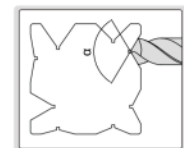
### DRILL ANGLE GAGE



4842-1

- Check drills with angle 60°, 70°, 90°, 118°, 125°, 135°, 150° or 160°
- Made of stainless steel

Code	Accuracy
4842-1	±0.5°



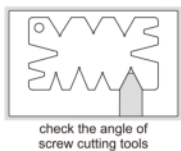
### ANGLE GAGE



4854-1

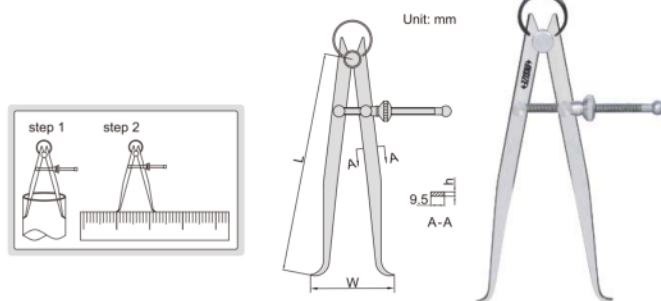
- Made of stainless steel

Code	Range	Accuracy
4854-1	29°, 30°, 40°, 45°, 50°, 55°, 60°	±10'



check the angle of screw cutting tools

### INSIDE SPRING CALIPERS



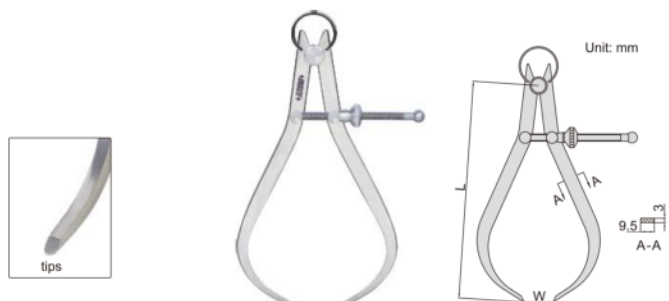
7261-150

- Made of carbon steel

Code	Size (L)	Range (W)	h
7261-150	150mm	17-150mm	2mm
7261-200	200mm	17-200mm	3mm
7261-300	300mm	18-300mm	3mm



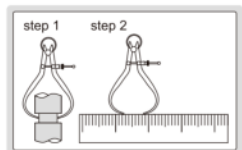
### OUTSIDE SPRING CALIPERS



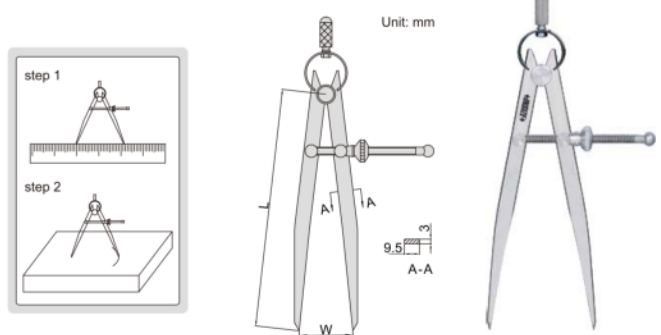
7262-150

- Made of carbon steel

Code	Size (L)	Range (W)
7262-150	155mm	0-140mm
7262-200	210mm	0-210mm
7262-250	265mm	0-270mm
7262-300	310mm	0-320mm



### SPRING DIVIDERS



7260-150

Code	Size (L)	Range (W)
7260-150	150mm	0-150mm
7260-200	200mm	0-210mm
7260-250	245mm	0-260mm
7260-300	300mm	0-320mm

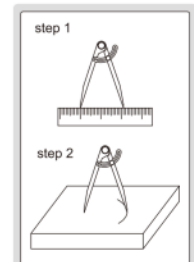
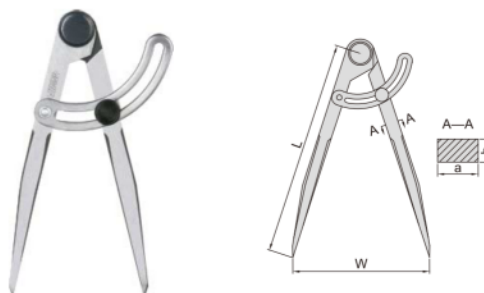
- Made of carbon steel
- Hardened points

### DIVIDERS

- Made of carbon steel
- Hardened points

Code	Size (L)	Range (W)	(mm)	
			a	b
7247-150	150mm	0-140mm	8.5	7
7247-200	200mm	0-190mm	10	7
7247-300	300mm	0-290mm	12	7

7247-150





## MEASURING TAPES

EG II

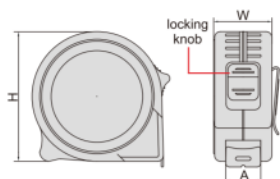


7140-5

graduation



- Non-glare nylon surface for wear resistance



Code	Range	Graduation	Width of tape A	W	H
7140-3	0-3m	1mm	16mm	28mm	62mm
7140-5	0-5m	1mm	19mm	30mm	68mm
7140-8	0-8m	1mm	25mm	38mm	78mm

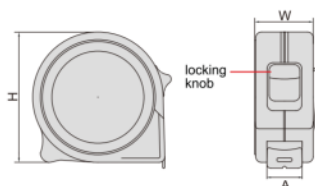
## MEASURING TAPE (BASIC TYPE)

EG II



7142-5

- Non-glare nylon coating tape, wear resistance



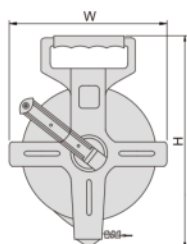
graduation



Code	Range	Graduation	Width of tape A	W	H
7142-5	0-5m/0-16ft	1mm, 1/16"	19mm	31mm	64mm

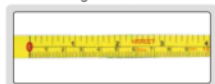
## LONG MEASURING TAPE

EG II



7143-50

graduation

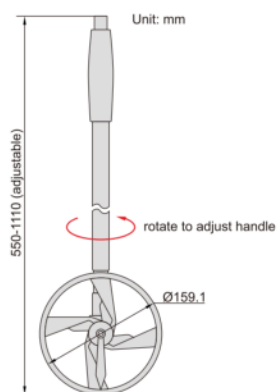


- High tensile strength fibreglass tape
- Nylon coating tape, wear resistance

Code	Range	Graduation	Width of tape	W	H
7143-50	0-50m/0-165ft	1mm, 1/8"	13mm	220mm	320mm

## MEASURING WHEEL (BASIC TYPE)

Unit: mm



7144-1

- ABS plastic frame, wear-resistant PU tire
- Three-section adjustable handle

Code	Range	Resolution
7144-1	0.1-9999.9m	0.1m

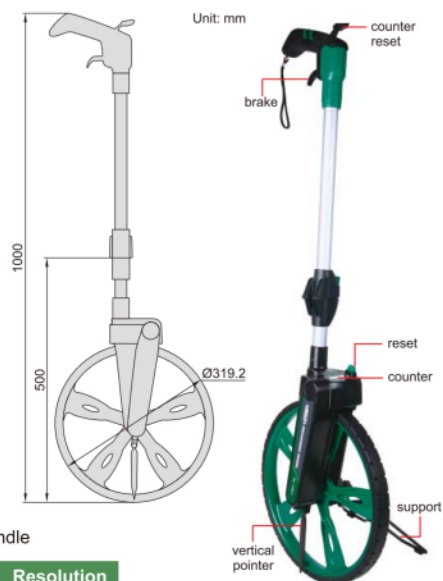
## MEASURING WHEEL



after folding



backpack (included)



Unit: mm

counter reset

brake

reset

counter

vertical pointer

support

7145-1

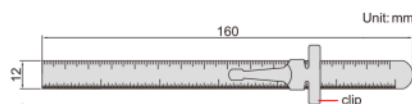
- ABS plastic frame, wear-resistant PU tire
- Two-section foldable handle

Code	Range	Resolution
7145-1	0.1-9999.9m	0.1m

## POCKET RULE WITH SLIDING CLIP



7119-150



Unit: mm

- With sliding clip, clip also can be used as depth gage base
- Inch/metric conversion table on the back
- Made of stainless steel

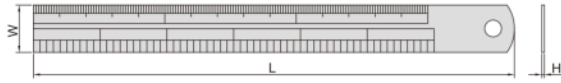
Code	Range	Graduation	Accuracy
7119-150	150mm/6"	1mm, 1/64"	±0.15mm



## STEEL RULES



7110-300



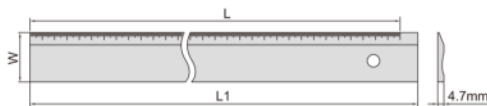
- Graduation: 0.5mm, 1mm, 1/64", 1/32", 1/16"
- Rigid rules
- Made of stainless steel
- Non-glare surface

Code	Range	Accuracy	L	W	H	Remark
7110-150	150mm/6"	±0.18mm	170	18	1.0	graduation on front and back
7110-200	200mm/8"	±0.18mm	220	18	1.0	graduation on front and back
7110-300	300mm/12"	±0.27mm	330	25	1.0	graduation on front and back
7110-3001	300mm/12"	±0.27mm	325	30	1.0	graduation on front and back
7110-500	500mm/20"	±0.27mm	530	30	1.2	graduation on front and back
7110-600	600mm/24"	±0.45mm	630	30	1.2	graduation on front and back
7110-1000	1000mm/40"	±0.45mm	1040	32	1.5	graduation on front and back
7110-1500	1500mm/60"	±0.63mm	1550	38	1.8	graduation on front
7110-2000	2000mm/80"	±0.80mm	2065	40	2.0	graduation on front

## ALUMINUM RULES



7123-300



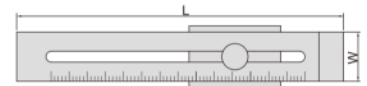
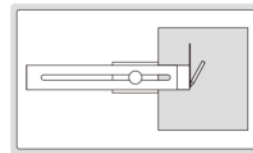
- Made of aluminum, oxidized surface

Code	Range (L)	Accuracy	Graduation	L1	W
7123-300	300mm	±0.5mm	1mm	321mm	50mm
7123-600	600mm	±0.9mm	1mm	624mm	50mm
7123-1000	1000mm	±0.9mm	1mm	1024mm	50mm

## MARKING GAGES



7120-200A



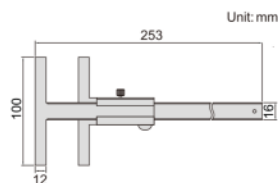
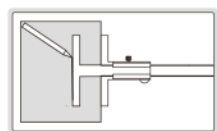
- Made of carbon steel
- Satin chrome plated

Code	Range	Graduation	Accuracy	L	W
7120-200A	0-200mm	0.1mm	±0.1mm	250mm	40mm
7120-250A	0-250mm	0.1mm	±0.1mm	300mm	40mm
7120-300A	0-300mm	0.1mm	±0.1mm	350mm	40mm

## T-SHAPE MARKING GAGE



1275-150B



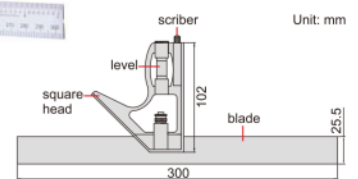
- Made of stainless steel
- Satin chrome plated reading surface

Code	Range	Graduation	Accuracy
1275-150B	0-150mm	0.02mm	±0.04mm

## COMBINATION SQUARE (ECONOMIC TYPE)

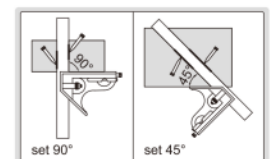


2276-300



- Square head (made of zinc):  
to set the blade at 90° or 45°  
to an edge of a workpiece  
accuracy: ±0.5°
- Blade (made of stainless steel):  
range: 300mm/12",  
graduation: 1mm and 1/32" on front  
face, 1mm and 1/16" on back face

Code
2276-300



### COMBINATION SQUARE SETS

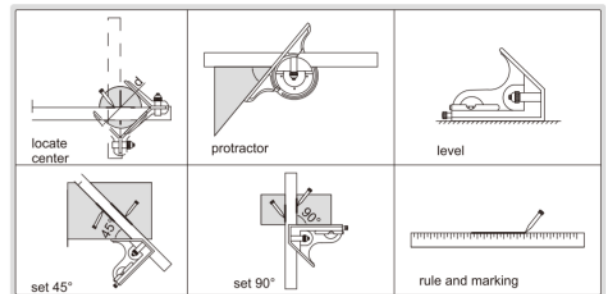
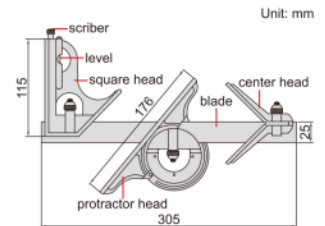
- Center head (made of cast iron): to locate center of cylinder with diameter (Ød): 30-100mm accuracy: ±0.15mm
- Protractor head (made of cast iron): to set the blade at desired angle to an edge of a workpiece, and can be used to measure angles range: 0-180°, accuracy: ±20min.
- Square head (made of cast iron): to set the blade at 90° or 45° to an edge of a workpiece accuracy: ±8min for 90° square, ±10min for 45° square
- Blade (made of stainless steel): range: 300mm/12", graduation: 0.5mm and 1/32" on front face, 1mm and 1/64" on back face
- Optional accessory: rigid rule (code 7113)



2278-2



2278-180

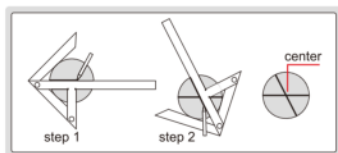
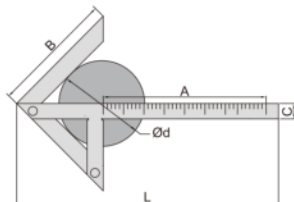


Code	Remark
2278-2	2-piece set
2278-180	4-piece set

### CENTER MARKING GAGES



7205-100



- Accuracy: ±0.15mm
- Marking the center of round plates and shafts
- Made of stainless steel
- Satin chrome plated

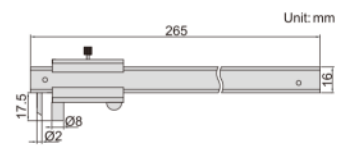
Code	Size (AxB)	Diameter of shafts (Ød)	C	L
7205-100	100x70mm	4-90mm	12mm	153mm
7205-150	150x130mm	4-190mm	15mm	245mm
7205-200	200x150mm	6-220mm	15mm	310mm

### SCRIBER CALIPER



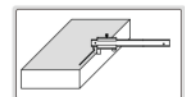
7202-200A

the position of scriber tip can be adjusted



- Graduation: 0.1mm, 1/128"
- Made of stainless steel
- Satin chrome plated reading surface
- Carbide scriber tip
- Optional accessory: carbide scriber tip (code SP-SCRIBER-7202)

Code	Range	Accuracy
7202-200A	0-200mm/0-8"	±0.1mm



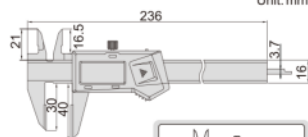
### DIGITAL SCRIBING CALIPER

DATA OUTPUT



1166-150A

carbide measuring faces



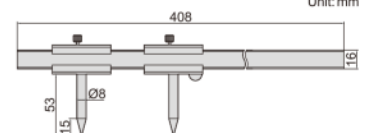
- The carbide-tipped jaws facilitate scribing on workpieces
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032, data output
- Made of stainless steel
- Optional accessory: data output cable (code 7315-21, 7302-21)

Code	Range	Accuracy	Resolution
1166-150A	0-150mm/0-6"	±0.03mm	0.01mm/0.0005"

### SCRIBING CALIPER

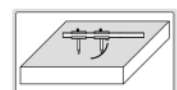


7203-300A



- Made of stainless steel
- Satin chrome plated reading surface
- Hardened scriber tips

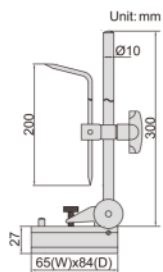
Code	Range	Accuracy	Graduation
7203-300A	51-300mm	±0.1mm	0.1mm



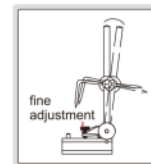
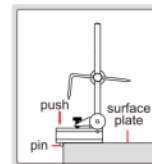
## HEIGHT SCRIBER

- Grooved bottom for cylinder
- Two pins to be set against the edge of surface plate

**Code**  
6990-300A



6990-300A



## SCRIBERS



- 7230 and 7231 are nickel plated, 7232 is zinc-plated

Code	Tip
7230	hardened tips
7231	hardened tip
7232	carbide tip

