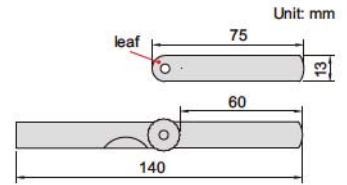


FEELER GAGE

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



4601-25



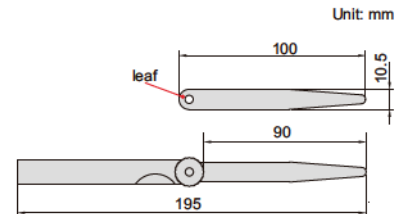
Code	Range	Thickness of leaves included (mm)	Quantity of leaves
4601-25	0.04-1.00mm	0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	25

FEELER GAGES

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



4602-20



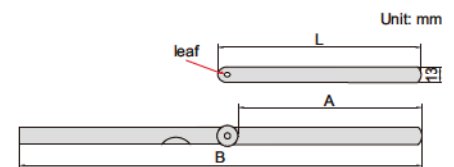
Code	Range	Thickness of leaves included (mm)	Quantity of leaves
4602-13A	0.03-0.50mm	0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.30, 0.40, 0.50	13
4602-13	0.05-1.00mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 1.00	13
4602-17	0.02-1.00mm	0.02, 0.03, 0.04, 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
4602-28	0.05-1.00mm	0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 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	28
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

LONG FEELER GAGES

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

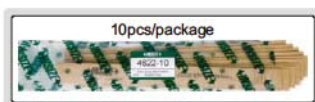


4605-20



Code	Range	Thickness of leaves included (mm)	Quantity of leaves	L	A	B
4605-13	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	150	135	295
4605-131	0.05-1.00mm		13	200	185	395
4605-132	0.05-1.00mm		13	300	285	590
4605-20	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	150	135	295
4605-201	0.05-1.00mm		20	200	185	395
4605-202	0.05-1.00mm		20	300	285	590

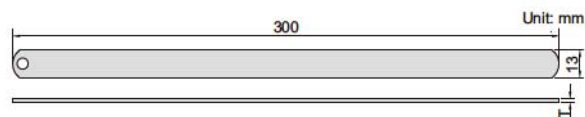
FEELER GAGE STOCKS



- Used as shims to accurately set spacing
- Made of hardened alloy steel
- Length 300mm
- Width 13mm
- 10pcs/package



4622-10



Code	Thickness (T)	Accuracy
4622-02	0.02mm	±3μm
4622-03	0.03mm	±3μm
4622-04	0.04mm	±3μm
4622-05	0.05mm	±3μm
4622-06	0.06mm	±3μm
4622-07	0.07mm	±4μm
4622-08	0.08mm	±4μm
4622-09	0.09mm	±4μm
4622-10	0.10mm	±4μm
4622-12	0.12mm	±5μm

Code	Thickness (T)	Accuracy
4622-15	0.15mm	±5μm
4622-18	0.18mm	±6μm
4622-20	0.20mm	±6μm
4622-25	0.25mm	±6μm
4622-30	0.30mm	±7μm
4622-35	0.35mm	±7μm
4622-40	0.40mm	±8μm
4622-45	0.45mm	±8μm
4622-50	0.50mm	±9μm
4622-55	0.55mm	±9μm

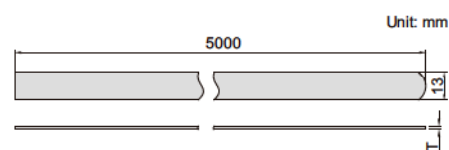
Code	Thickness (T)	Accuracy
4622-60	0.60mm	±9μm
4622-65	0.65mm	±9μm
4622-70	0.70mm	±12μm
4622-75	0.75mm	±12μm
4622-80	0.80mm	±13μm
4622-85	0.85mm	±13μm
4622-90	0.90mm	±14μm
4622-95	0.95mm	±14μm
4622-100	1.00mm	±16μm

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
4621-02	0.02mm	±4μm
4621-03	0.03mm	±4μm
4621-04	0.04mm	±4μm
4621-05	0.05mm	±4μm
4621-06	0.06mm	±4μm
4621-07	0.07mm	±5μm
4621-08	0.08mm	±5μm
4621-09	0.09mm	±5μm
4621-10	0.10mm	±5μm
4621-12	0.12mm	±5μm

Code	Thickness (T)	Accuracy
4621-15	0.15mm	±6μm
4621-18	0.18mm	±7μm
4621-20	0.20mm	±8μm
4621-25	0.25mm	±9μm
4621-30	0.30mm	±9μm
4621-35	0.35mm	±11μm
4621-40	0.40mm	±12μm
4621-45	0.45mm	±12μm
4621-50	0.50mm	±14μm
4621-55	0.55mm	±14μm

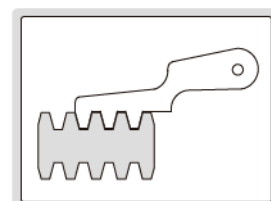
Code	Thickness (T)	Accuracy
4621-60	0.60mm	±14μm
4621-65	0.65mm	±14μm
4621-70	0.70mm	±17μm
4621-75	0.75mm	±17μm
4621-80	0.80mm	±19μm
4621-85	0.85mm	±19μm
4621-90	0.90mm	±22μm
4621-95	0.95mm	±22μm
4621-100	1.00mm	±24μm

PITCH GAGES

- Check the pitch of screw thread
- Accuracy: ±0.07mm
- Made of medium carbon steel



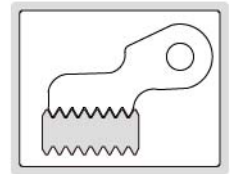
4824-12



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
4824-16	1 -12TPI	ACME 29°	1, 1-1/3, 1-1/2, 1-3/4, 2, 2-1/2, 3, 3-1/2, 4, 5, 6, 7, 8, 9, 10, 12TPI	16

PITCH GAGES

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



4820-122

Metric 60° screw

Code	Range	Pitch of leaves included (mm)	Quantity of leaves
4820-122	0.4-7.0mm	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, 7	22
4820-124	0.25-7.0mm	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, 7	24
4820-1241	0.25-6.0mm	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, 6	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

Whitworth 55° screw

Code	Range	Pitch of leaves included	Quantity of leaves
4820-330	4-42TPI	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42TPI	30
4820-328	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	28

Metric 60° and Whitworth 55° screw

Code	Range	Pitch of leaves included	Quantity of leaves
4820-452	0.25-6.0mm	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	
4820-450	0.4-7.0mm	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	50
	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	

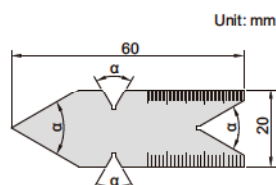
Metric 60° and Unified 60° screw

Code	Range	Pitch of leaves included	Quantity of leaves
4820-552	0.4-7.0mm	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	

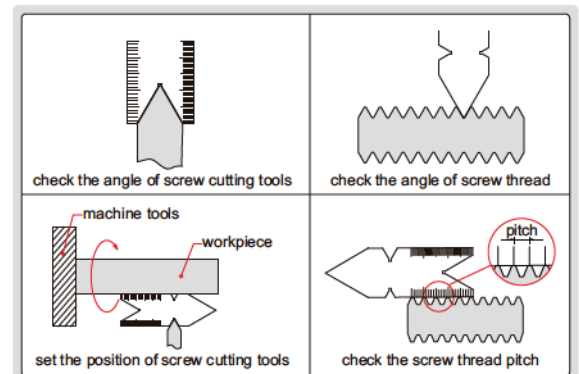
CENTER GAGES



4810-602



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

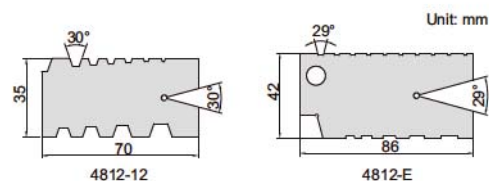


Code	Thread type	Angle (α)	Graduation
4810-601	METRIC 60°	60°	0.5mm and 1mm
4810-602	UNIFIED 60°	60°	14ths and 20ths on front side, 24ths and 32ths on back side
4810-55	WHITWORTH 55°	55°	14ths and 20ths on front side, 24ths and 32ths on back side

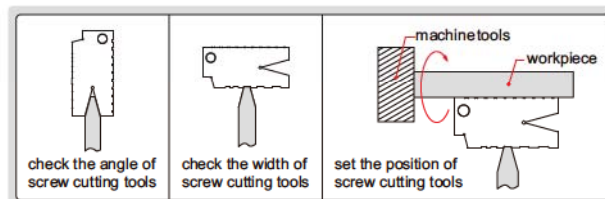
THREAD GAGES



4812-E



- To check and set screw cutting tools
- Angle accuracy: $\pm 10\text{min}$.
- Made of medium carbon steel



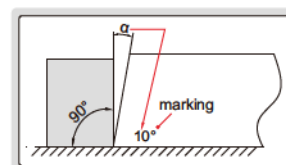
Code	Range	Thread type	Pitch
4812-12	2-12mm	Tr 30°	2, 3, 4, 5, 6, 7, 8, 9, 10, 12mm
4812-E	1-10TPI	ACME 29°	1, 1-1/3, 1-1/2, 1-3/4, 2, 2-1/2, 3, 4, 5, 6, 7, 8, 9, 10TPI

ANGLE GAGE



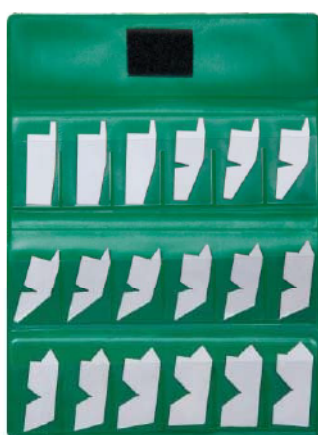
4806-20

- To check complementary angles
- Made of stainless steel



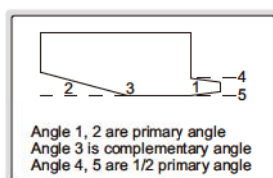
Code	Range	Angle of leaves included	Quantity of leaves	Accuracy
4806-20	1°-45°	1°, 2°, 3°, 4°, 5°, 6°, 7°, 8°, 9°, 10°, 12°, 14°, 16°, 18°, 20°, 25°, 30°, 35°, 40°, 45°	20	$\pm 30'$

ANGLE GAGE SET

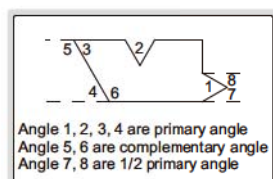


4807

- Each blade checks primary, 1/2 primary and complementary angles
- Made of medium carbon steel



type A



type B

Code	Quantity of leaves	Accuracy
4807	18	$\pm 10'$

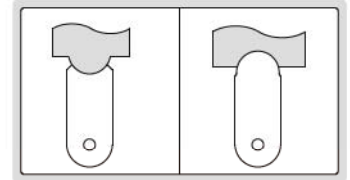
Primary angle	1/2 primary angle	Complementary angle	Type
5°	2°30'	175°	A
10°	5°	170°	A
15°	7°30'	165°	A
20°	10°	160°	B
25°	12°30'	155°	B
30°	15°	150°	B
35°	17°30'	145°	B
40°	20°	140°	B
45°	22°30'	135°	B
50°	25°	130°	B
55°	27°30'	125°	B
60°	30°	120°	B
65°	32°30'	115°	B
70°	35°	110°	B
75°	37°30'	105°	B
80°	40°	100°	B
85°	42°30'	95°	B
90°	45°	90°	B

RADIUS GAGES



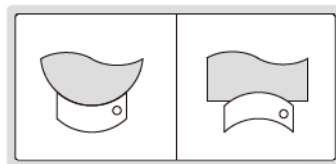
4801-17

- Made of medium carbon steel



Code	Range	Radius of leaves included (mm)	Quantity of leaves (internal + external)	Accuracy
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	±0.03mm
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	±0.035mm
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	±0.042mm

RADIUS GAGE



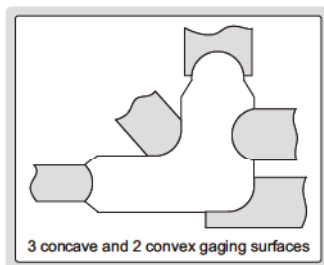
- Made of stainless steel



4802-31

Code	Range	Radius of leaves included (mm)	Quantity of leaves	Accuracy
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	31pcs	±0.06mm

RADIUS GAGE SET



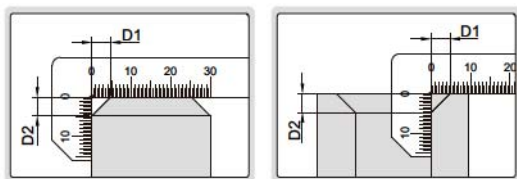
- Each piece has 3 concave and 2 convex gauging surfaces
- Supplied with handle
- Made of medium carbon steel

Code	Range	Radius of leaves included (mm)	Quantity of leaves	Accuracy
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	±0.05mm

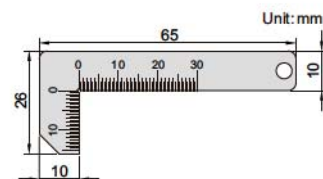


4804-26

CHAMFER GAGE



4844-1



- To measure internal and external chamfers
- Made of stainless steel

Code	Graduation	Accuracy
4844-1	0.5mm	±0.25mm

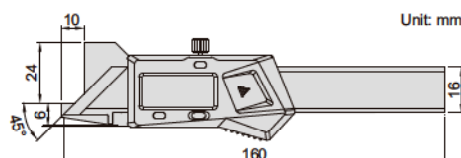
DATA
OUTPUT

DIGITAL CHAMFER GAGE

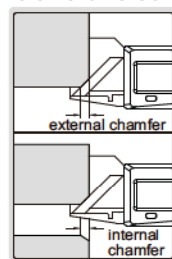
- Measure 45° chamfer dimension
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, set, mm/inch, preset (+, -)
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Data output
- Made of stainless steel
- Optional accessory: data output cable (code 7306-20, 7302-SPC5A/SPC5B, 7305-SPC2A)



1180-6



measure 45°
chamfer dimension



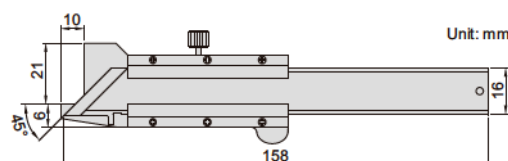
Code	Range	Accuracy
1180-6	0-6mm/0-0.24"	±0.06mm

CHAMFER GAGE

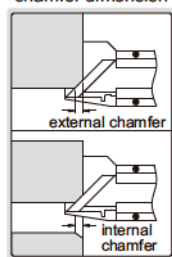
- Measure 45° chamfer dimension
- Graduation 0.02mm
- Made of stainless steel
- Satin chrome plated reading surface



1267-6



measure 45°
chamfer dimension

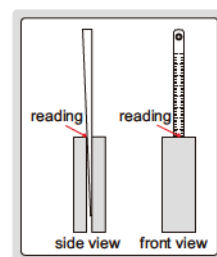
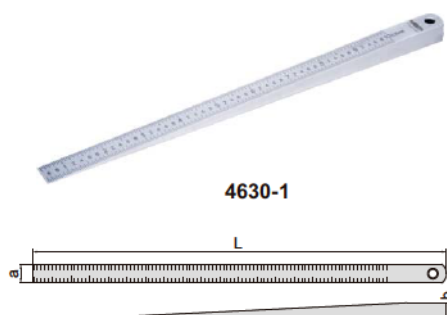


Code	Range	Accuracy
1267-6	0-6mm	±0.06mm

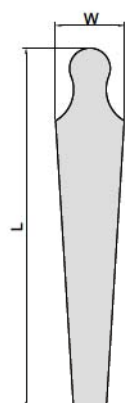
TAPER GAGES

- For quick measurement of gap width
- Stain chrome plated reading surface
- Made of stainless steel

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



TAPER GAGES



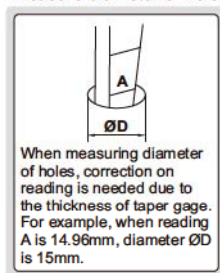
front

4833-2

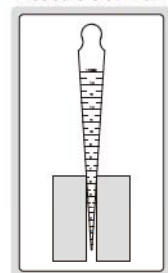


back

measure diameter of hole



measure slot width



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

Code	Range	Graduation	Accuracy	(mm)	
4833-1	0.8-15mm	0.1mm	±0.1mm	L	W
4833-2	15-30mm	0.1mm	±0.1mm	146	17
4833-3	30-45mm	0.1mm	±0.1mm	159	30.4
4833-4	45-60mm	0.1mm	±0.1mm	166	45.4
				170	60.5

TAPER GAGE SET

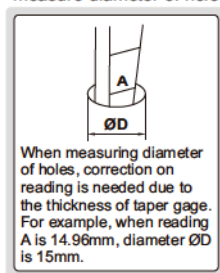


front

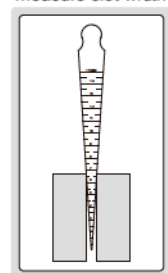
4837-1

back

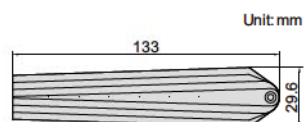
measure diameter of hole



measure slot width



- 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



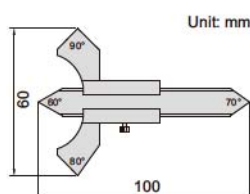
Unit: mm

Code	Range	Graduation	Accuracy
4837-1	1-29mm	0.05mm	±0.05mm

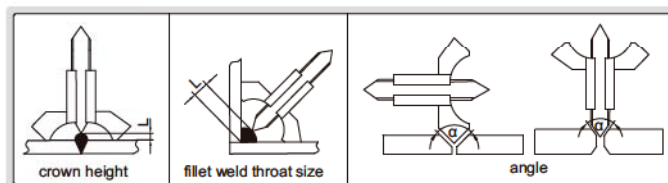
WELDING GAGE



4830



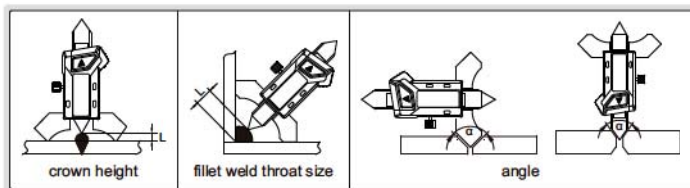
Unit: mm



- Made of stainless steel
- Stain 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



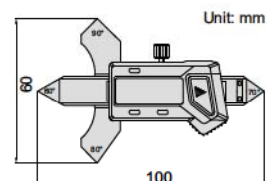
- Buttons: zero, mm/inch, on/off
- Battery LR44
- Made of stainless steel

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°

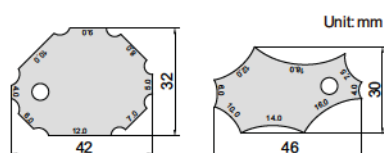


4831-20A

ATTENTION:
NO DATA OUTPUT



FILLET WELDING GAGE

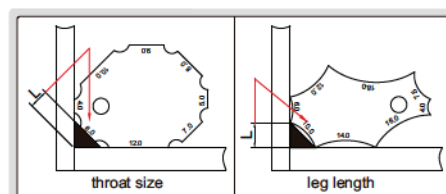


- Made of stainless steel
- Sizes marked on both faces

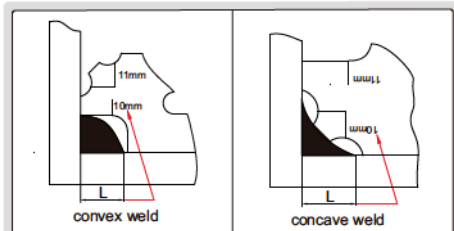
Code	Throat size	Leg length	Accuracy
4832-1	4, 5, 6, 7, 8, 9, 10, 12mm	4, 6, 7.5, 10, 12, 14, 16, 18mm	±0.5mm



4832-1



FILLET WELDING GAGES



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

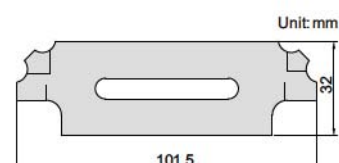
Code	Size	Accuracy
4836-1	3mm, 4mm, 5mm, 6mm, 8mm, 9mm, 10mm, 11mm, 12mm, 14mm, 16mm, 19mm, 22mm, 25mm	±0.5mm
4836-2	1/8" (3.2mm), 3/16" (4.8mm), 1/4" (6.4mm), 5/16" (7.9mm), 3/8" (9.5mm), 7/16" (11.1mm), 1/2" (12.7mm), 5/8" (15.9mm), 3/4" (19.1mm), 7/8" (22.2mm), 1" (25.4mm)	±0.02" (0.5mm)



4836-1

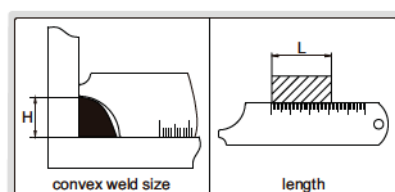


4836-2



FILLET WELDING GAGE

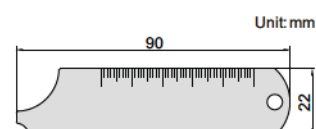
- Measure convex weld sizes
- 3 blades are included
- Made of stainless steel



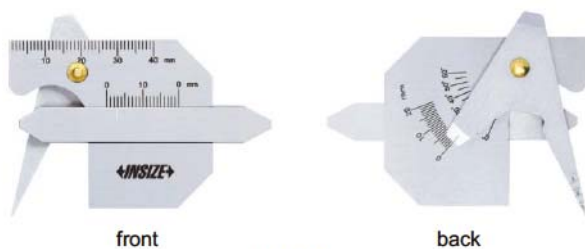
Code	Measurement	Range	Graduation	Accuracy
4847-1	convex weld size	4, 6, 8, 10, 12, 14mm	—	±0.5mm
	length	0 - 50mm	1mm	±0.5mm



4847-1



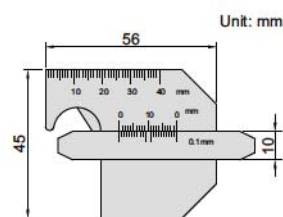
WELDING GAGE



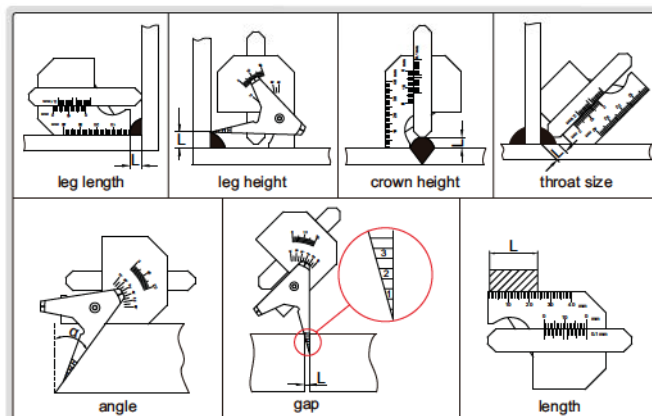
6832-1

- Made of stainless steel
- Stain chrome plated surface

Code	Measurement	Range	Graduation	Accuracy
6832-1	leg length	0-10mm	0.1mm	±0.1mm
	leg height	0-20mm	1mm	±0.5mm
	crown height	0-10mm	0.1mm	±0.1mm
	throat size	0-10mm	0.1mm	±0.1mm
	angle	0°-60°	5°	±1°
	gap	1-3.5mm	0.5mm	±0.5mm
	length	0-40mm	1mm	±0.5mm



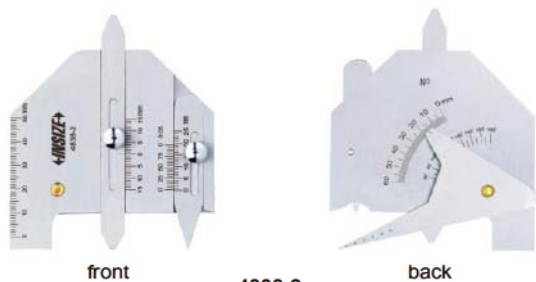
Unit: mm



WELDING GAGES

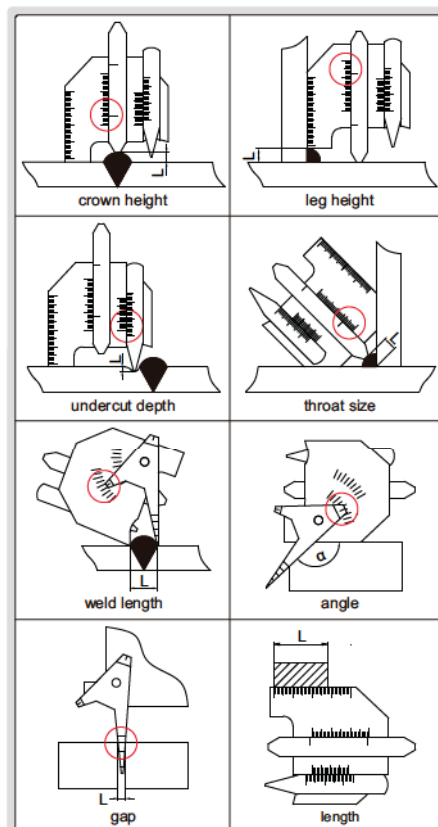


4838-1



4838-2

- Made of stainless steel



Code	4838-1				4838-2		
Measurement	Range	Graduation	Accuracy		Range	Graduation	Accuracy
crown height	0-10mm	1mm	±0.5mm		0-15mm	1mm	±0.5mm
leg height	0-14mm	1mm	±0.5mm		0-15mm	1mm	±0.5mm
undercut depth	0-5mm	0.05mm	±0.05mm		0-5mm	0.05mm	±0.05mm
throat size	0-13mm	1mm	±0.5mm		0-13mm	1mm	±0.5mm
weld length	0-40mm	1mm	±1mm		0-60mm	1mm	±1mm
angle	90°-150°	5°	±1°		80°-160°	5°	±1°
gap	0.5-5mm	1mm	±0.5mm		1-6mm	1mm	±0.5mm
length	0-40mm	1mm	±0.5mm		0-50mm	1mm	±0.5mm
LxW	62x77mm				99x84mm		

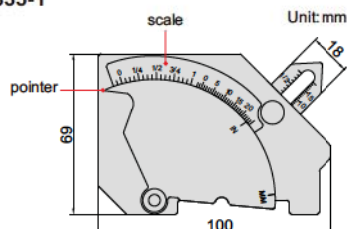
WELDING GAGE



front

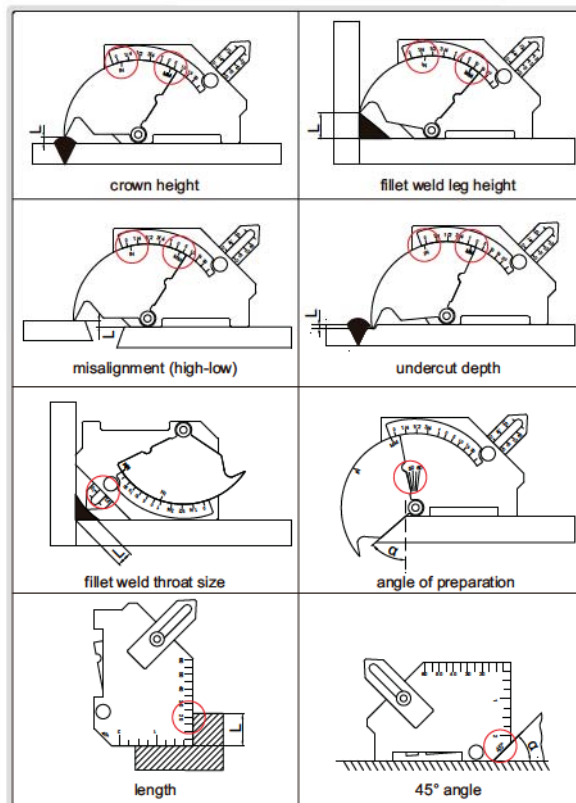
4835-1

back

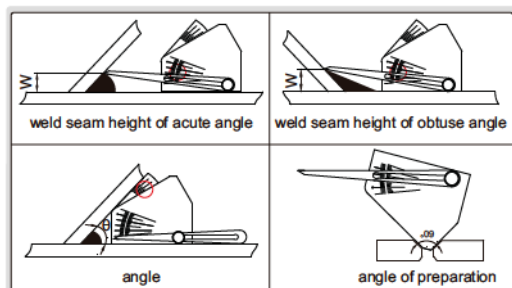


- Adjustable scale to compensate pointer wear
- Made of stainless steel

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°



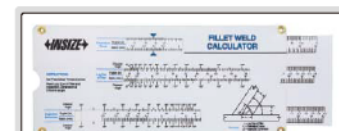
FILLET WELDING GAGE



4846-1

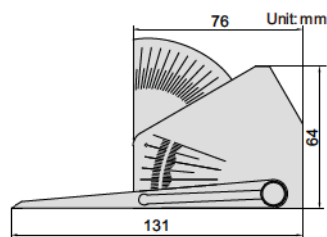
- Calculating card is included
- Made of stainless steel

calculating card (included)

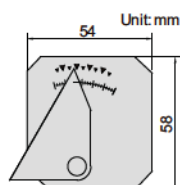


measure weld seam height W and angle θ , calculate theoretical throat size t_e and leg height L_2 according to W and θ .

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



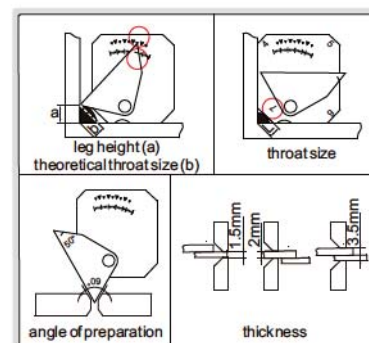
WELDING GAGE



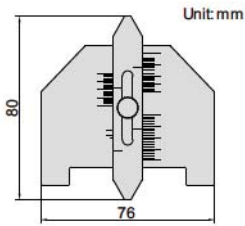
4850-1

- Made of stainless steel

Code	Measurement	Range	Graduation	Accuracy
4850-1	leg height (a)	2-12mm	1mm	±0.5mm
	theoretical throat size (b)	0-18mm	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



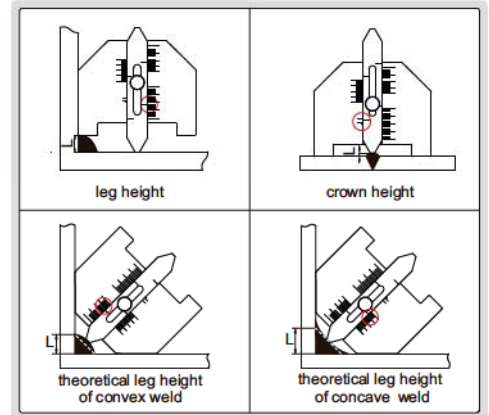
WELDING GAGE



4851-1

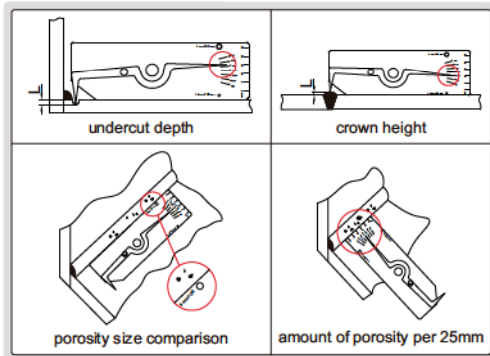
- Made of stainless steel

Code	Measurement	Range	Graduation	Accuracy
4851-1	leg height	0-20mm	1mm	±0.5mm
	crown height	0-3mm	—	±0.5mm
	theoretical leg height of convex weld	0-20mm	1mm	±0.5mm
	theoretical leg height of concave weld	0-20mm	1mm	±0.5mm

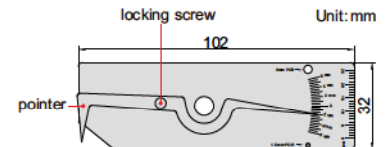


WELDING GAGE

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



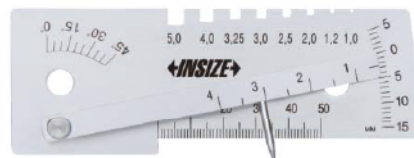
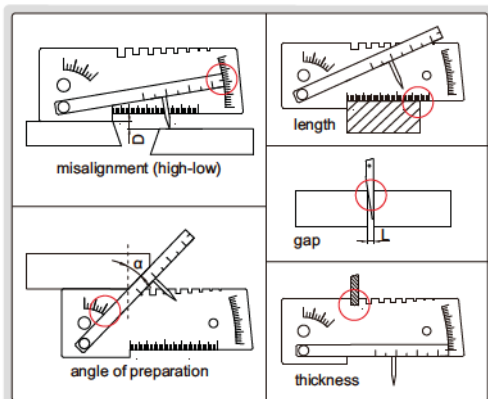
4834-1



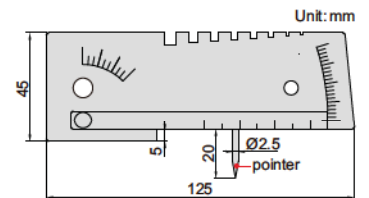
Code	Measurement	Range	Graduation	Accuracy
4834-1	undercut depth	0-6mm	0.5mm	±0.5mm
	crown height	0-6mm	0.5mm	±0.5mm
	porosity size comparison	1.5mm, 3mm	—	±0.2mm
	amount of porosity per 25mm	25mm	1mm	—

WELDING GAGE

- Made of stainless steel

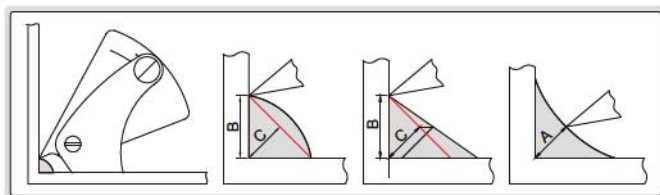


4848-1



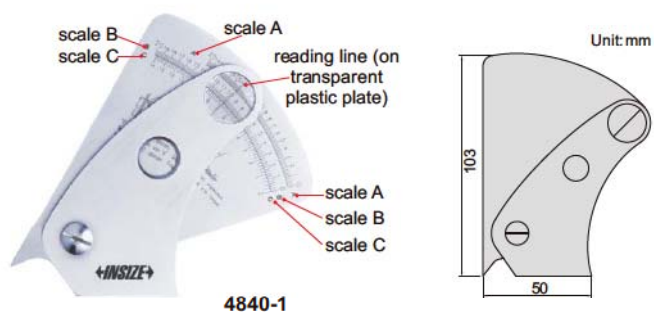
Code	Measurement	Range	Graduation	Accuracy
4848-1	misalignment (high-low)	-5mm~+15mm	1mm	±0.5mm
	angle of preparation	0°-45°	5°	±2.5°
	length	0-50mm	1mm	±0.5mm
	gap	1-4mm	0.5mm	±0.25mm
	thickness	1, 1.2, 2.0, 2.5, 3.0, 3.25, 4.0, 5.0mm	—	±0.1mm

WELDING GAGE



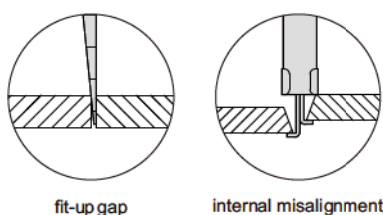
■ Made of stainless steel

Code	Graduation	Accuracy
4840-1	0.2mm	±0.3mm

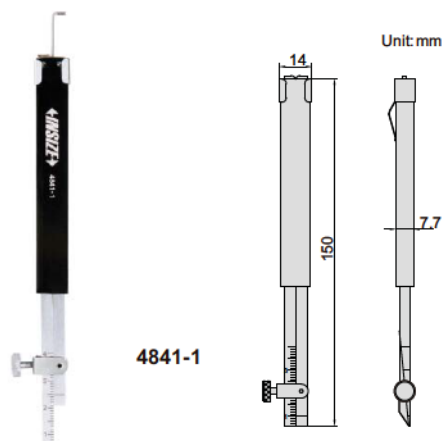


PIPE WELDING GAGE

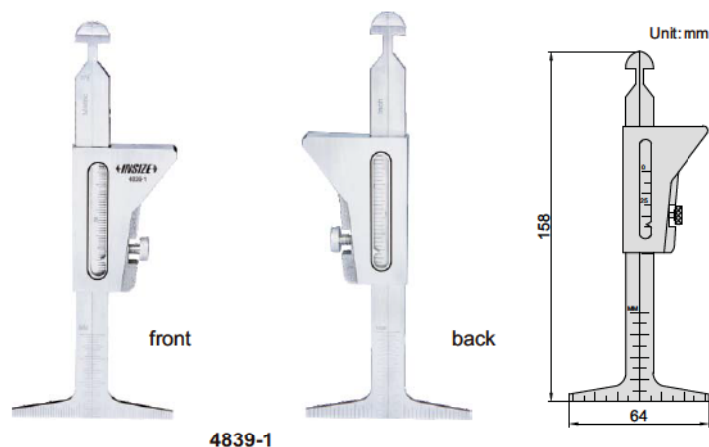
■ Made of stainless steel



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

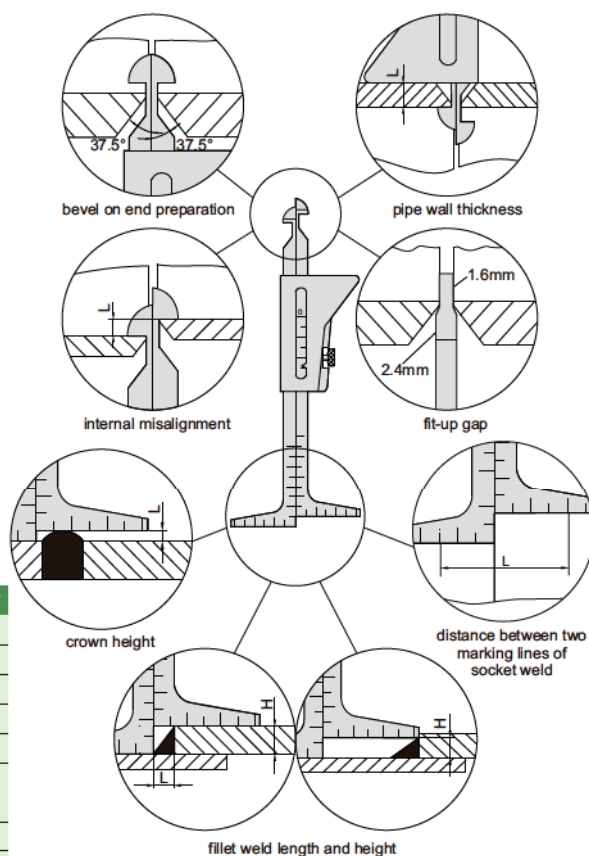


PIPE WELDING GAGE



■ Made of stainless steel

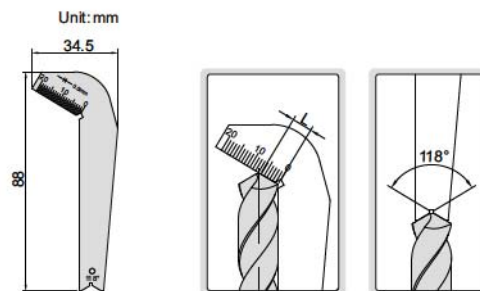
Code	Measurement	Range	Graduation	Accuracy
4839-1	bevel on end preparation	37.5°	—	±1°
	pipe wall thickness	0-45mm (0-1-3/4")	1mm (1/16")	±0.5mm
	internal misalignment	0-35mm (0-1-3/8")	1mm (1/32")	±0.5mm
	fit-up gap	1.6mm, 2.4mm	—	±0.1mm
	crown height	0-35mm (0-1-3/8")	1mm (1/32")	±0.5mm
	distance between 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



DRILL POINT GAGE

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

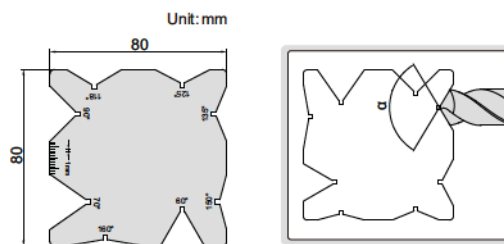
Code	Accuracy	
	Angle	Length
4843-1	±0.5°	±0.5mm



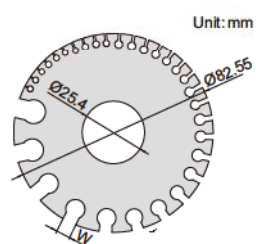
DRILL ANGLE GAGE

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

Code	Accuracy
4842-1	±0.5°



AMERICAN STANDARD WIRE GAGE



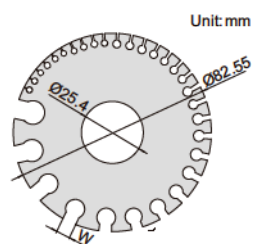
4808

- For gaging non-ferrous wire and metals such as copper, brass and aluminum
- Hardened and satin chrome finish

Code	Range
4808	0-36 (8.250-0.127mm/ .3249-.0050")

No.	W	No.	W	No.	W
0	8.250mm (.3249")	13	1.820mm (.0720")	26	0.404mm (.0159")
1	7.350mm (.2893")	14	1.630mm (.0641")	27	0.361mm (.0142")
2	6.540mm (.2576")	15	1.450mm (.0571")	28	0.320mm (.0126")
3	5.830mm (.2294")	16	1.290mm (.0508")	29	0.287mm (.0113")
4	5.190mm (.2043")	17	1.150mm (.0453")	30	0.254mm (.0100")
5	4.620mm (.1819")	18	1.020mm (.0403")	31	0.226mm (.0089")
6	4.110mm (.1620")	19	0.912mm (.0359")	32	0.203mm (.0080")
7	3.670mm (.1443")	20	0.813mm (.0320")	33	0.180mm (.0071")
8	3.260mm (.1285")	21	0.724mm (.0285")	34	0.160mm (.0063")
9	2.910mm (.1144")	22	0.643mm (.0253")	35	0.142mm (.0056")
10	2.590mm (.1019")	23	0.574mm (.0226")	36	0.127mm (.0050")
11	2.300mm (.0907")	24	0.511mm (.0201")		
12	2.050mm (.0808")	25	0.440mm (.0179")		

U.S. STANDARD SHEET METAL GAGE



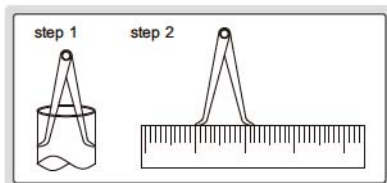
4809

- For gaging sheet metal, plate iron and steel
- Hardened and satin chrome finish

Code	Range
4809	0-36 (7.938-0.179mm/.3125-.0070")

No.	W	No.	W	No.	W
0	7.938mm (.3125")	13	2.381mm (.0938")	26	0.476mm (.0188")
1	7.144mm (.2813")	14	1.984mm (.0781")	27	0.437mm (.0172")
2	6.747mm (.2656")	15	1.786mm (.0703")	28	0.397mm (.0156")
3	6.350mm (.2500")	16	1.588mm (.0625")	29	0.357mm (.0141")
4	5.953mm (.2344")	17	1.429mm (.0563")	30	0.318mm (.0125")
5	5.556mm (.2188")	18	1.270mm (.0500")	31	0.278mm (.0109")
6	5.159mm (.2031")	19	1.111mm (.0438")	32	0.258mm (.0102")
7	4.763mm (.1875")	20	0.953mm (.0375")	33	0.238mm (.0094")
8	4.366mm (.1719")	21	0.873mm (.0344")	34	0.218mm (.0086")
9	3.969mm (.1563")	22	0.794mm (.0313")	35	0.198mm (.0078")
10	3.572mm (.1406")	23	0.714mm (.0281")	36	0.179mm (.0070")
11	3.175mm (.1250")	24	0.635mm (.0250")		
12	2.778mm (.1094")	25	0.556mm (.0219")		

INSIDE CALIPERS

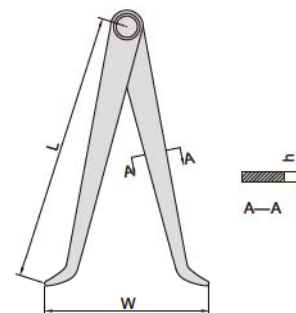


■ Made of carbon steel

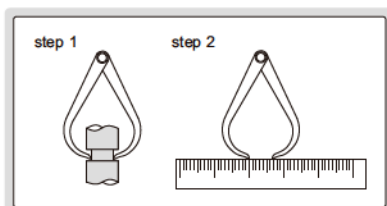
Code	Size (L)	Range (W)	h
7240-150	150mm	17-150mm	2mm
7240-200	200mm	17-200mm	3mm
7240-300	300mm	18-300mm	3mm



7240-150



OUTSIDE CALIPERS

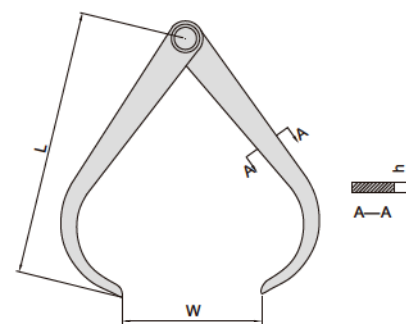


■ Made of carbon steel

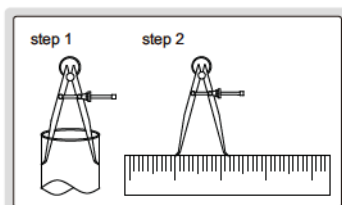
Code	Size (L)	Range (W)	h
7241-150	150mm	0-150mm	2mm
7241-200	200mm	0-200mm	3mm
7241-300	300mm	0-300mm	3mm



7241-150



INSIDE SPRING CALIPERS



Code	Size (L)	Range (W)
7261-150	150mm	20-170mm
7261-200	200mm	22-220mm
7261-250	245mm	30-270mm
7261-300	300mm	30-320mm

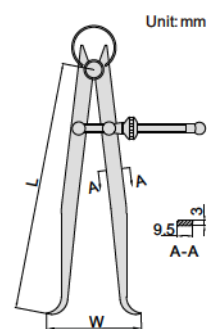
■ Made of carbon steel



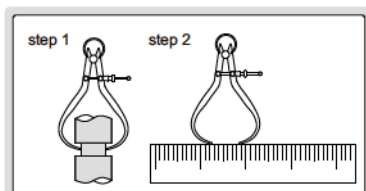
tips



7261-150



OUTSIDE SPRING CALIPERS



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

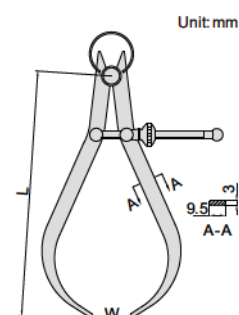
■ Made of carbon steel



tips



7262-150

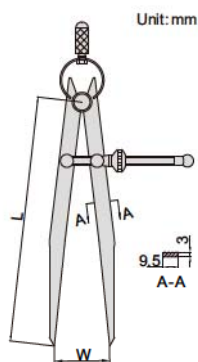


SPRING DIVIDERS

- Made of carbon steel
- Hardened points



7260-150



step 1

step 2



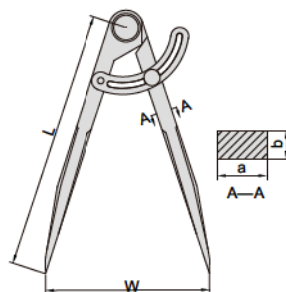
Code	Size (L)	Range (W)
7260-150	150mm	0-150mm
7260-200	200mm	0-210mm
7260-250	245mm	0-260mm
7260-300	300mm	0-320mm

DIVIDERS

- Made of carbon steel
- Hardened points

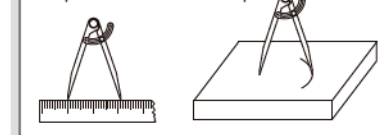


7247-150



step 1

step 2



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

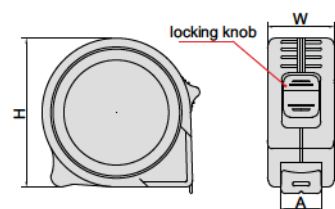
MEASURING TAPES

EG II

packaging



7140-5



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

WOODEN FOLDING RULE

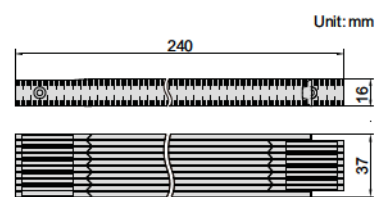
closed



- 10 sections
- Graduation on both sides



7124-210



Code	Range	Graduation
7124-210	2m	1mm

FLEXIBLE RULES

INSIZE PLUS
MADE IN USA

flexible use

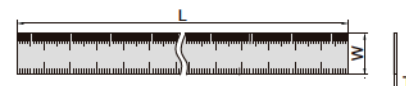


7121-150

- Flexible use
- Graduation on both sides
- Made of special alloy steel
- Satin chrome plated

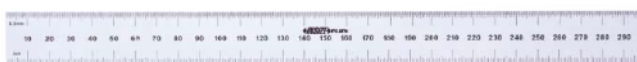


Code	Range (L)	Graduation	Accuracy	W	T
7121-150	150mm	0.5mm/1mm	+0.10/-0.09mm	12.50mm	0.40mm
7121-300	300mm	0.5mm/1mm	+0.13/-0.09mm	12.50mm	0.40mm
7121-600	600mm	0.5mm/1mm	+0.18/-0.09mm	19.50mm	0.50mm



RIGID RULES

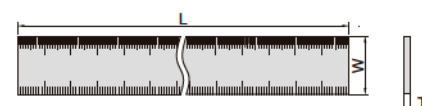
INSIZE PLUS
MADE IN USA



7122-300

- Rigid rule
- Graduation on both sides
- Made of special alloy steel
- Satin chrome plated

Code	Range (L)	Graduation	Accuracy	W	T
7122-150	150mm	0.5mm/1mm	+0.10/-0.09mm	18.50mm	1mm
7122-300	300mm	0.5mm/1mm	+0.13/-0.09mm	24.50mm	1mm
7122-600	600mm	0.5mm/1mm	+0.18/-0.09mm	29.50mm	1mm



RIGID RULE



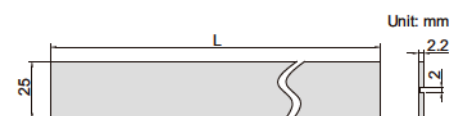
7113-300A

- Rigid rules
- With groove on the back, suitable for combination square set (code 2278-180)
- Satin chrome plated



groove on the back

Code	Range	Graduation		Accuracy	L
		front	back		
7113-300A	300mm/12"	0.5mm and 1/32"	1mm and 1/64"	±0.15mm	300mm



Unit: mm

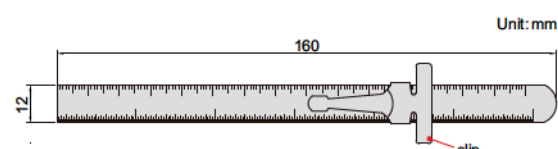
POCKET RULE WITH SLIDING CLIP



7119-150

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

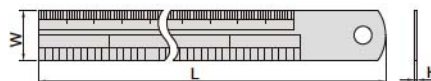
Code	Range	Graduation	Accuracy
7119-150	150mm/6"	1mm, 1/64"	±0.15mm



Unit: mm

STEEL RULES

ATTENTION:
BASIC MODEL

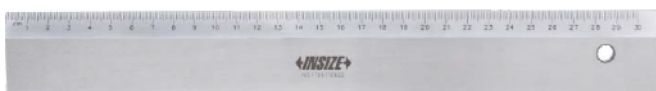


7110-300

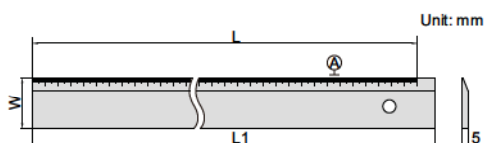
- Graduation: 0.5mm, 1mm, 1/64", 1/32", 1/16"
- Semi-flexible rules
- Made of stainless steel
- Non-glare surface

Code	Range	Accuracy	L	W	H	Remark
7110-150	150mm/6"	±0.15mm	170	18	1.0	graduation on front and back
7110-200	200mm/8"	±0.15mm	220	18	1.0	graduation on front and back
7110-300	300mm/12"	±0.15mm	330	25	1.0	graduation on front and back
7110-3001	300mm/12"	±0.15mm	325	30	1.0	graduation on front and back
7110-500	500mm/20"	±0.15mm	530	30	1.2	graduation on front and back
7110-600	600mm/24"	±0.20mm	630	30	1.2	graduation on front and back
7110-1000	1000mm/40"	±0.20mm	1040	32	1.5	graduation on front and back
7110-1200	1200mm/48"	±0.22mm	1240	35	1.8	graduation on front
7110-1500	1500mm/60"	±0.25mm	1550	38	1.8	graduation on front
7110-2000	2000mm/80"	±0.30mm	2065	40	2.0	graduation on front

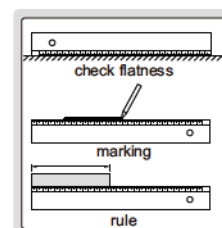
STRAIGHT EDGES



7111-300A



- Check flatness and straightness, as well as for marking
- Graduation on the beveled edge
- Made of hardened tool steel
- Chrome plated



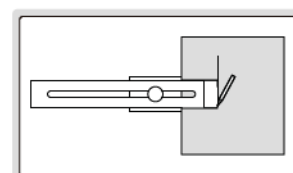
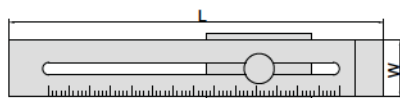
Code	Range (L)	Straightness of A	L1	W
7111-300A	300mm	0.02mm	320	40
7111-500A	500mm	0.03mm	520	40
7111-1000A	1000mm	0.04mm	1020	50

MARKING GAGES



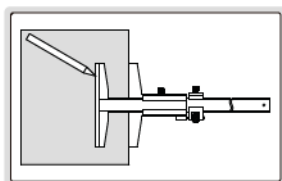
7120-200A

- Made of carbon steel
- Satin chrome plated

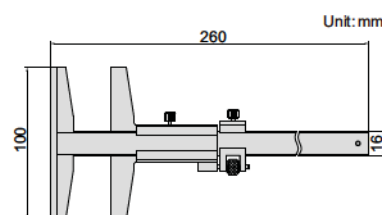


Code	Range	Graduation	Accuracy	L	W
7120-200A	0-200mm	0.1mm	±0.1mm	250	40
7120-250A	0-250mm	0.1mm	±0.1mm	300	40
7120-300A	0-300mm	0.1mm	±0.1mm	350	40

T-SHAPE MARKING GAGE



1275-150A



- Made of stainless steel
- Satin chrome plated reading surface

Code	Range	Graduation	Accuracy
1275-150A	0-150mm	0.05mm	±0.05mm

COMBINATION SQUARE SETS



2278-2

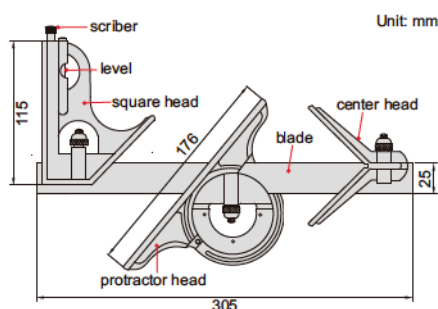


2278-3



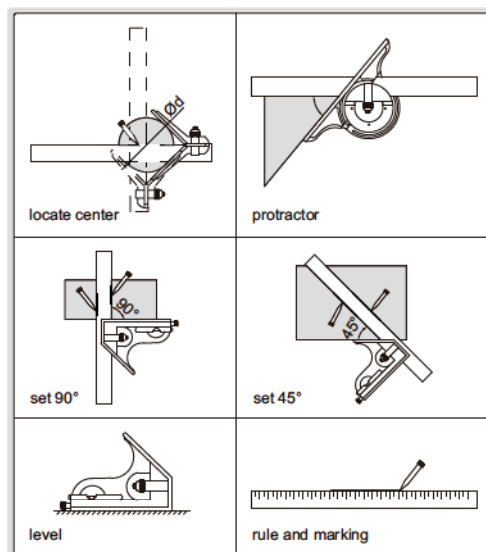
2278-180

- Center head (made of cast iron):
To locate center of cylinder with diameter (\varnothing d): 30-100mm
Accuracy: ± 0.15 mm
- 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: ± 7 min.
- Square head (made of cast iron):
To set the blade at 90° or 45° to an edge of a workpiece
Accuracy: ± 8 min for 90° square, ± 10 min 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)

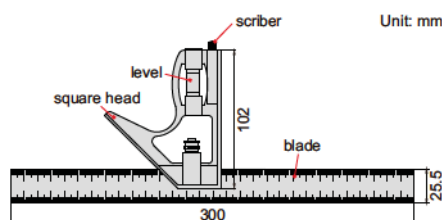
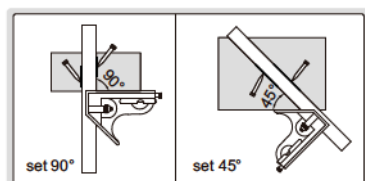


Unit: mm

Code	Remark
2278-2	2-piece set
2278-3	3-piece set
2278-180	4-piece set



- Square head (made of zinc):
To set the blade at 90° or 45° to an edge of a workpiece
Accuracy: $\pm 0.5^\circ$
- Blade (made of stainless steel):
Range: 300mm,
Graduation: 0.5mm and 1mm on front and back sides



Unit: mm

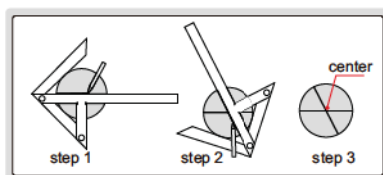
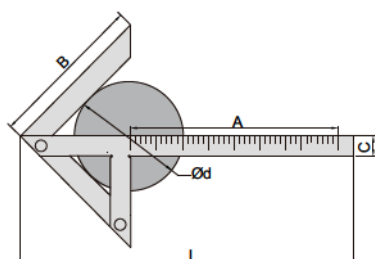
Code
2276-300

LIGHT DUTY COMBINATION SQUARE



2276-300

CENTER MARKING GAGES



(mm)

Code	Size (AxB)	Diameter of shafts (\varnothing d)	Accuracy	C	L
7205-100	100X70mm	4-90mm	± 0.15 mm	12	153
7205-150	150x130mm	4-190mm	± 0.15 mm	15	245
7205-200	200x150mm	6-220mm	± 0.15 mm	15	310



7205-100

- Marking the center of round plates and shafts
- Made of stainless steel
- Satin chrome plated

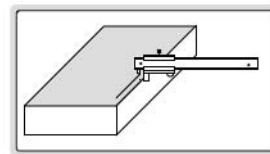
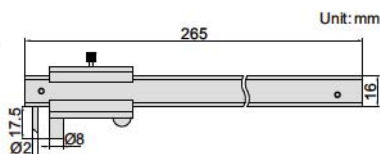
SCRIBING CALIPER

- Made of stainless steel
- Satin chrome plated reading surface
- Carbide scriber tip
- Optional accessory: carbide scriber tip (code SP-SCRIBER-7202)

the position of scriber tip can be adjusted



7202-200A



Code	Range	Graduation	Accuracy
7202-200A	0-200mm/0-8"	0.1mm, 1/128"	±0.1mm

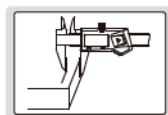
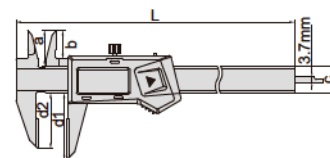
DIGITAL SCRIBING CALIPERS

- The carbide-tipped jaws facilitate scribing on workpieces
- 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 7306-20, 7302-SPC5A/SPC5B, 7305-SPC2A)



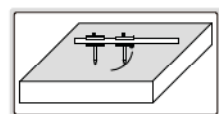
1166-150A

DATA OUTPUT

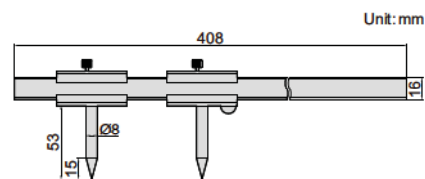


Code	Range	Accuracy	L	a	b	c	d1	d2
1166-150A	0-150mm/0-6"	±0.03mm	236	21	16.5	16	40	33
1166-200A	0-200mm/0-8"	±0.03mm	286	24	19.5	16	50	43
1166-300A	0-300mm/0-12"	±0.04mm	400	25	20.5	17	60	53

SCRIBING CALIPER



7203-300A



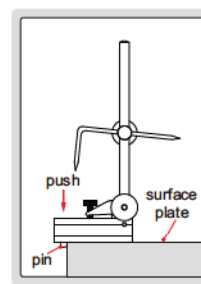
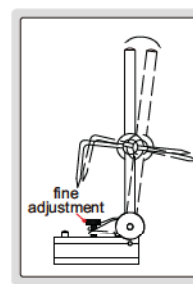
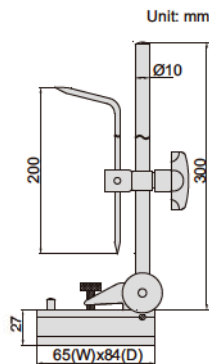
- Made of stainless steel
- Satin chrome plated reading surface
- Hardened scriber tips

Code	Range	Graduation	Accuracy
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

6990-300A



Code
6990-300A

SCRIBERS

- Nickel plated

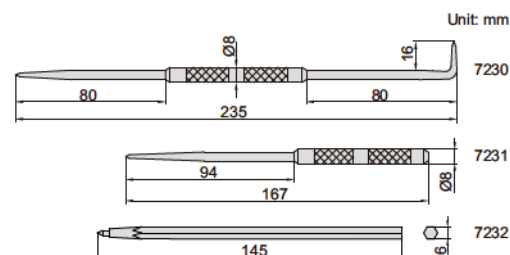
Code	Tip
7230	hardened tips
7231	hardened tip
7232	carbide tip



7230

7231

7232



Unit: mm

7230

7231

7232