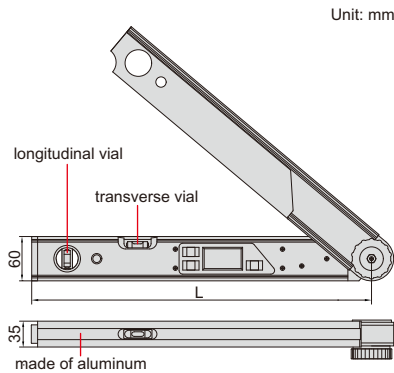


**AUTOMATIC
BACKLIGHT**

**ABSOLUTE
LEVEL**

**IP54
WATERPROOF**

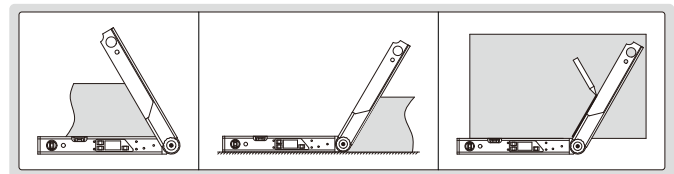
WATERPROOF DIGITAL PROTRACTOR (HEAVY DUTY)



2174-225

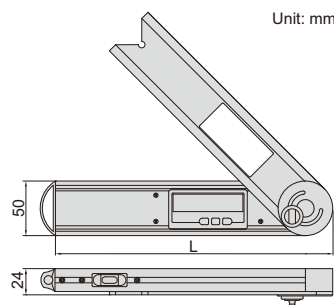
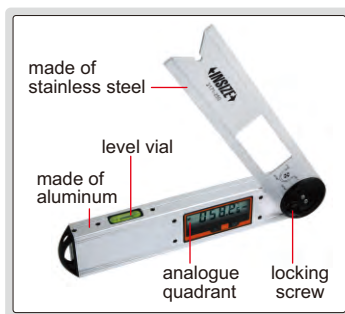
- Suitable for setting horizontal and vertical mitre angles of cutting machines
- Buttons: ON/OFF, HOLD/SUP, SPR/CNR/MTR/BVL
- IP54 dust/waterproof
- With transverse and longitudinal vials
- 2xAAA batteries
- Absolute level, zero setting is not needed when batteries are replaced
- Backlight turns off in one minute after reading is stable, automatic power off in 5 minutes

Code	Size (L)	Range	Resolution	Accuracy
2174-225	460mm	0-225°	0.05°	±0.10°



10

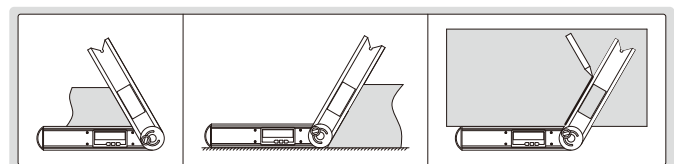
DIGITAL PROTRACTOR



2171-250

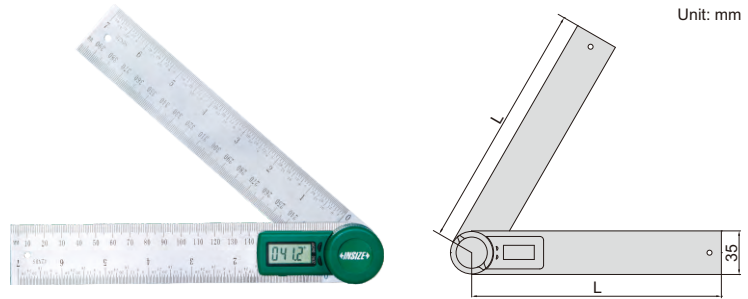
- Buttons: on/off, hold (keep the reading), zero, ABS (absolute and incremental measurement)
- Fix the locking screw at 4 positions for different measuring ranges: 0°~225°, -225°~0°, -45°~180°, -180°~45°
- Remove the locking screw for 360° range
- With level vial
- Battery CR2032, automatic power off

Code	Size (L)	Range	Resolution	Accuracy
2171-250	250mm	0-360°	0.05°	±0.15°



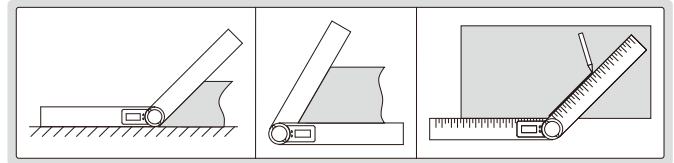
DIGITAL PROTRACTORS

- Buttons: on/off, zero
- With clamping screw to lock the blades
- Graduation of blade: 1mm and 1/32"
- Made of stainless steel
- CR2032 battery
- Automatic power off



2176-200

Code	Size (L)	Range	Resolution	Accuracy
2176-200	200mm	0-360°	0.1°	±0.3°
2176-300	300mm	0-360°	0.1°	±0.3°



10

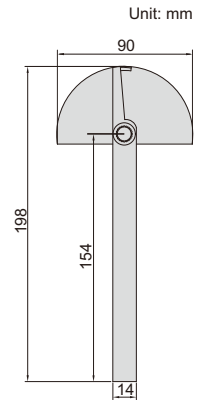
PROTRACTOR (ECONOMIC TYPE)

- Graduation: 1°
- Made of stainless steel
- With clamping screw

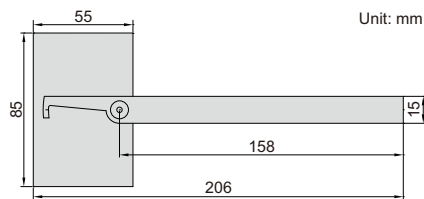


4780-85A

Code	Size	Range	Accuracy
4780-85A	90x154mm	0-180°	±0.5°



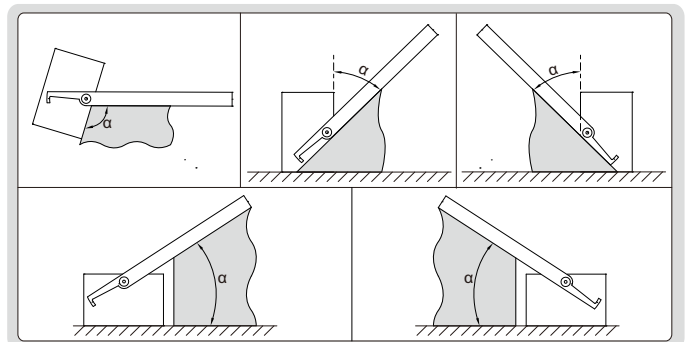
PROTRACTOR



4781-85A

- Made of stainless steel
- Satin chrome plated scale
- With clamping screw

Code	Size	Range	Graduation	Accuracy
4781-85A	85x158mm	0-180°	1°	±0.3°



ATTENTION: NO DATA OUTPUT

DIGITAL PROTRACTORS

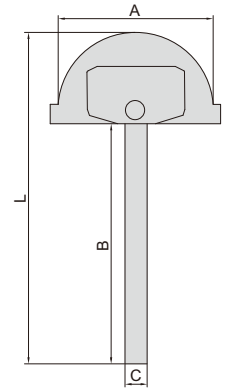
the reading can turn over



4779-120

- Range: 0-180°
- Buttons: on/off, zero, hold/turn
- Made of stainless steel
- With clamping screw

Code	Size (AxB)	Resolution	Accuracy	L	C
4779-120	120x150mm	0.05°	±0.3°	221mm	22mm
4779-150	150x200mm	0.05°	±0.3°	286mm	22mm
4779-200	200x300mm	0.05°	±0.3°	409mm	22mm



10

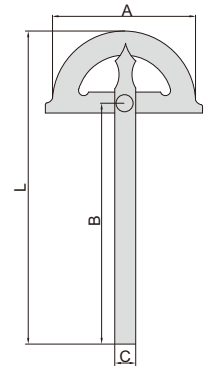
PROTRACTORS

- Graduation: 1°
- Made of stainless steel (4799-1300 is made of carbon steel)
- Satin chrome plated scale
- With clamping screw



4799-180

Code	Size (AxB)	Range	Accuracy	L	C
4799-180	80x120mm	0-180°	±0.3°	168mm	11mm
4799-1120	120x150mm	0-180°	±0.3°	220mm	14mm
4799-1150	150x200mm	0-180°	±0.3°	285mm	16mm
4799-1200	200x300mm	0-180°	±0.3°	413mm	20mm
4799-1300	300x500mm	0-180°	±0.3°	675mm	30mm



DIGITAL PROTRACTORS

the reading can turn over

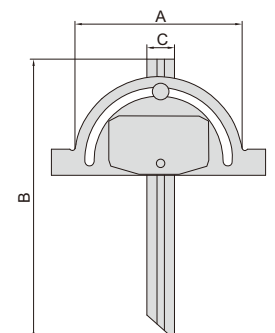
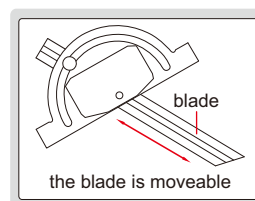


4778-100

- Range: 0-180°
- Buttons: on/off, zero, hold/turn
- Made of stainless steel
- With clamping screw
- The blade is moveable

ATTENTION: NO DATA OUTPUT

Code	Size (AxB)	Resolution	Accuracy	C
4778-100	126x150mm	0.05°	±0.3°	22mm
4778-150	150x300mm	0.05°	±0.3°	22mm
4778-200	200x400mm	0.05°	±0.3°	24mm

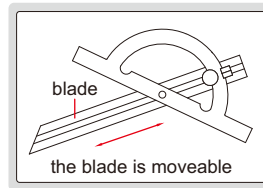
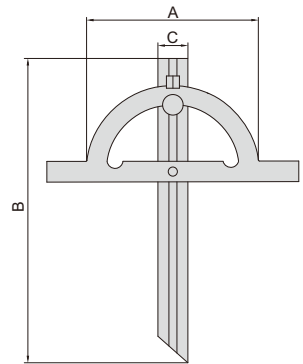


PROTRACTORS

- Graduation: 1°
- Made of carbon steel
- Satin chrome plated
- With clamping screw
- The blade is moveable



4797-100



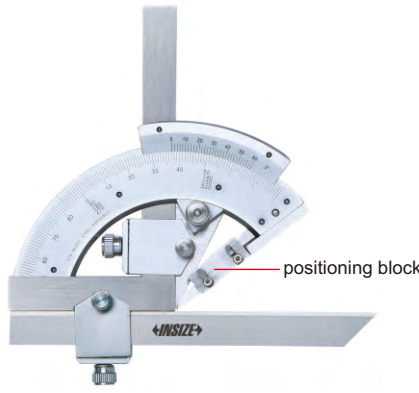
Code	Size (AxB)	Range	Accuracy	C
4797-100	100x150mm	10-170°	±0.3°	18mm
4797-150	150x300mm	10-170°	±0.3°	22mm
4797-200	200x400mm	10-170°	±0.3°	24mm
4797-250	250x500mm	10-170°	±0.3°	28mm
4797-300	300x600mm	10-170°	±0.3°	32mm

10

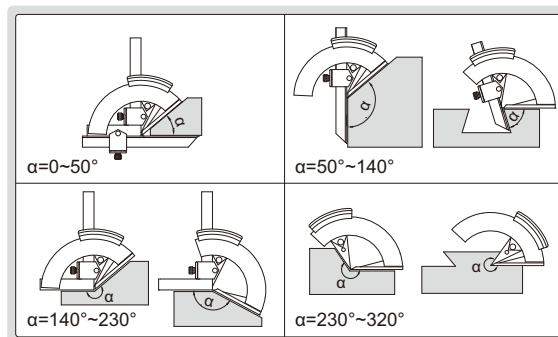
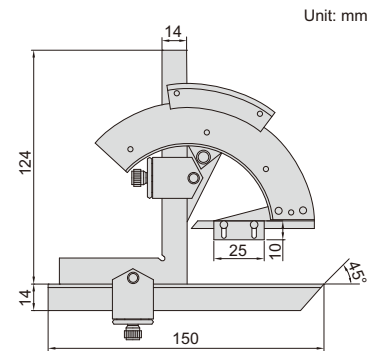
PROTRACTORS



2374-320



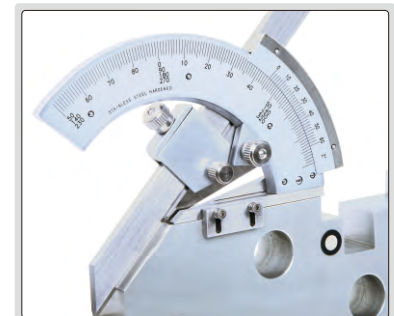
2374-320D



- Made of stainless steel
- Satin chrome plated scale

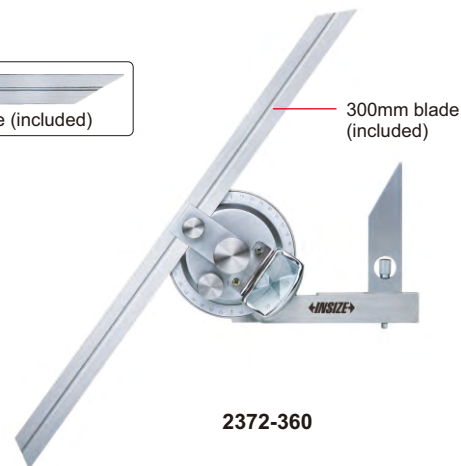
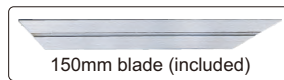
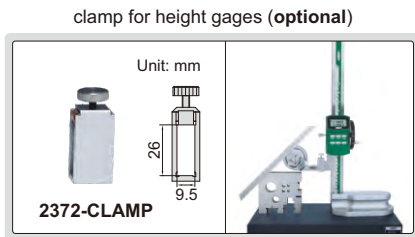
Code	Range	Graduation	Accuracy	Remark
2374-320	0-320°	2'	±2'	without positioning block
2374-320D	0-320°	2'	±2'	with positioning block

application of 2374-320D

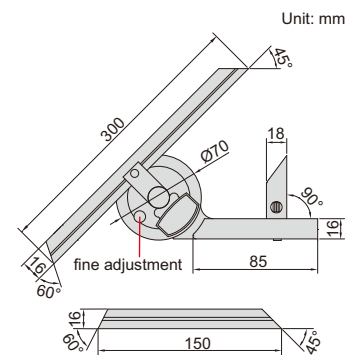


the positioning block can be moved down for positioning, and moved up when not in use

UNIVERSAL PROTRACTOR



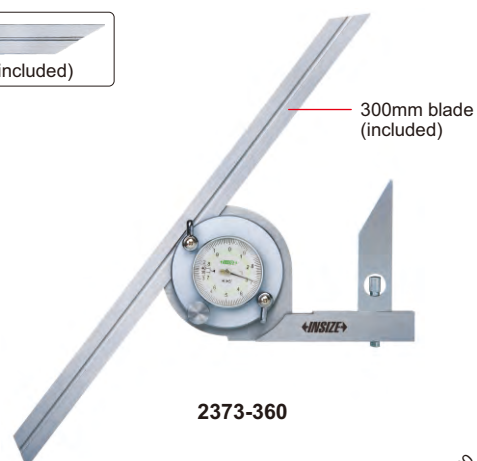
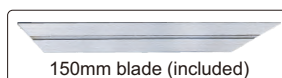
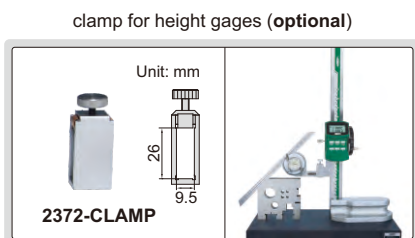
- Parallax-free reading
- Made of stainless steel
- Optional accessory: clamp (code **2372-CLAMP**), suitable for height gages **1156, 1150-300, 1351, 1250** and **1151**



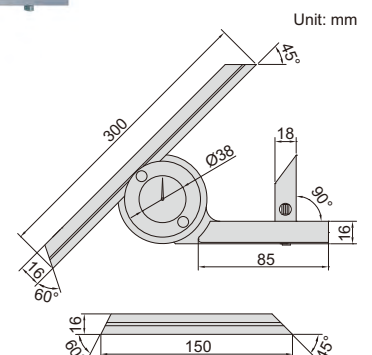
Code	Range	Graduation	Accuracy
2372-360	0-360°	5'	±5'

10

DIAL PROTRACTOR



- Made of stainless steel
- Optional accessory: clamp (code **2372-CLAMP**), suitable for height gages **1156, 1150-300, 1351, 1250** and **1151**



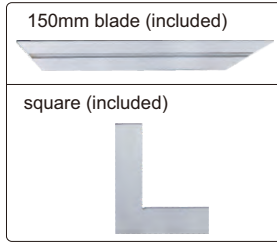
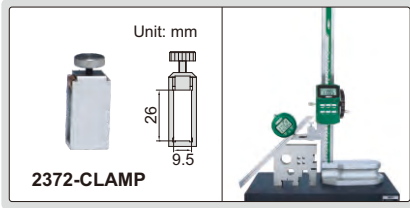
Code	Range	Graduation	Accuracy
2373-360	0-360°	5'	±5'

DIGITAL PROTRACTOR

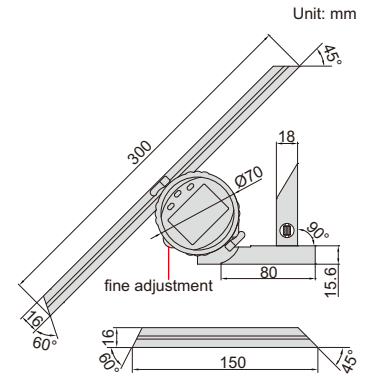
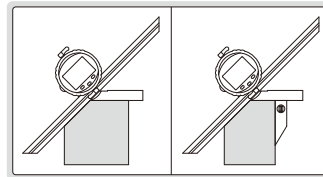
DATA OUTPUT



clamp for height gages (optional)



- Display in degree (for example 32.655°) and degree/minute/second (for example 32°39'30")
- SET button: preset the reading, change measuring direction
- MODE button: choose 0~90°, 0~180° or 0~360° display
- ZERO/ON/OFF button: zero and power on/off
- Battery CR2032, automatic power off
- Data output
- Supplied with square to set 90°
- Made of stainless steel
- Optional accessory: data output cable (code **7315-50**, **7302-SPC3B**), clamp (code **2372-CLAMP**), suitable for height gages **1156**, **1150-300**, **1351**, **1250** and **1151**



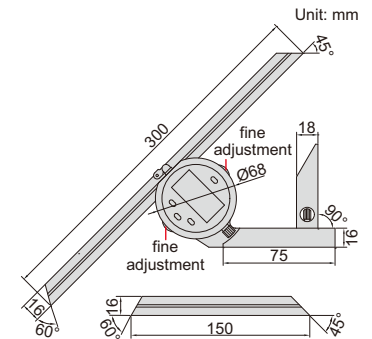
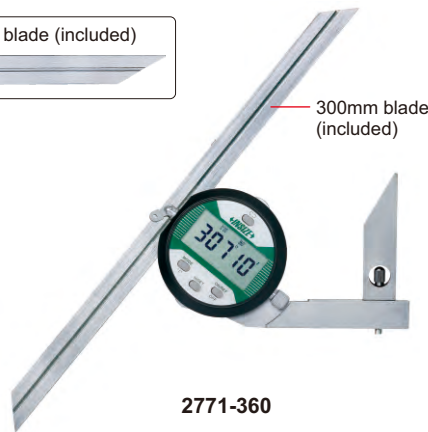
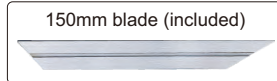
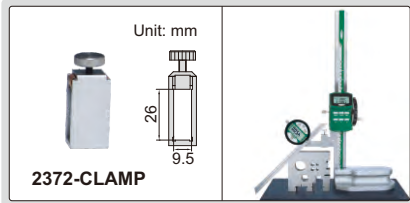
Code	Range	Resolution	Accuracy
2172-360A	0-360°	10"/0.005°	±5'

10

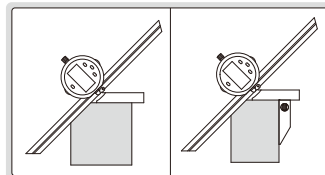
DIGITAL PROTRACTOR (BASIC TYPE)

ABSOLUTE ZERO

clamp for height gages (optional)



- Absolute zero, zero setting is not needed when batteries are replaced
- Button function: choose 0~90°, 0-180° or 0-360° display, change resolution, display flips over, data hold, zero, on/off supplementary angle measurement
- Battery CR2032, automatic power off
- Made of stainless steel
- Optional square for zero setting
- Optional accessory: clamp (code **2372-CLAMP**), suitable for height gages **1156**, **1150-300**, **1351**, **1250** and **1151**



square (optional)



Square (for zero setting, optional)

Code
2771-S90

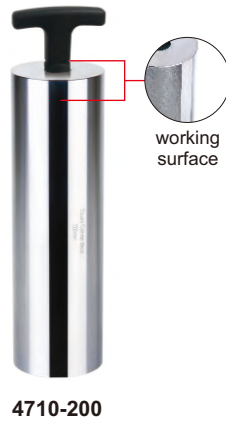
Code	Range	Resolution	Accuracy
2771-360	0-360°	1'/0.01°	±5'

**INSPECTION
CERTIFICATE**

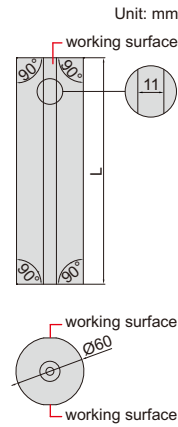
- Made of special alloy steel, hardness HRC58~60
- The handle can be removed

Code	Length (L)	Squareness
4710-200*	200mm	1μm
4710-300*	300mm	2μm

*Supplied with manufacturer inspection certificate

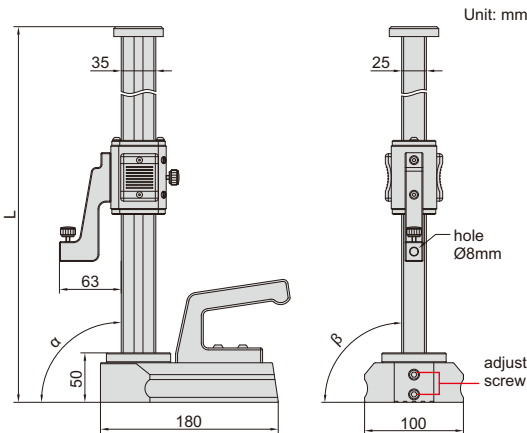
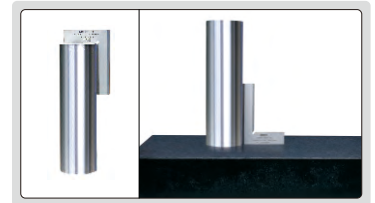


4710-200



CYLINDER SQUARES

inspect 90° internal and external angles



PERPENDICULARITY TESTERS



dial test indicator is optional

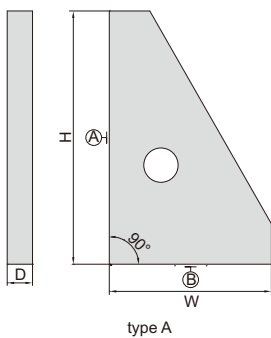


4770-300

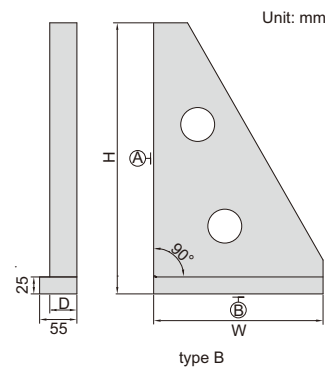
Code	Range (H)	Perpendicularity (α)	Side perpendicularity (β)	L
4770-300	0-300mm	3μm	10μm	460mm
4770-600	0-600mm	5μm	20μm	760mm

- Optional accessory: dial test indicators (graduation: 1μm or 2μm)

CUSTOM-MADE
SUPPLY SPECIAL SIZES ACCORDING
TO CUSTOMER'S REQUEST



4141-250



GRANITE SQUARES



4141-400B

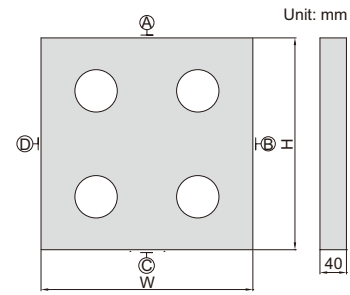
Code	Size (HxW)	Type	Flatness of A	Flatness of B	Squareness of A to B	D
4141-250	250x160mm	A	1μm	1μm	2μm	25mm
4141-400	400x250mm	A	1.5μm	1μm	3μm	40mm
4141-630	630x400mm	A	2μm	1.5μm	4μm	63mm
4141-400B	400x250mm	B	1.5μm	1μm	3μm	40mm

GRANITE SQUARE

CUSTOM-MADE
SUPPLY SPECIAL SIZES ACCORDING
TO CUSTOMER'S REQUEST



4144-315



Code	Size (HxW)	Flatness of A, B, C and D	Squareness and parallelism between A, B, C and D
4144-315	315x315mm	1.1µm	2.6µm

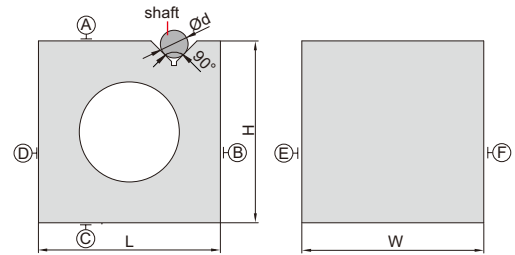
GRANITE SQUARE WITH V GROOVE

10

- Parallelism and squareness of A, B, C, D, E and F: 6µm
- Parallelism and squareness of V groove to A, B, C, D, E and F: 6µm



4142-200



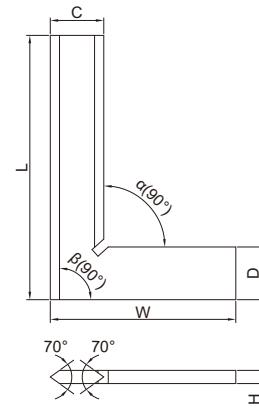
Code	Size (LxWxH)	Range of shaft (Ød)
4142-200	200x200x200mm	9~70mm

90° BEVELED EDGE SQUARES

- Satin chrome plating
- Beveled edges for inside and outside measurements
- Made of hardened stainless steel



4790-0100



DIN875 grade 00

(mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4790-050	50x40mm	2.4µm	2.5µm	13	13	4
4790-075	75x50mm	2.6µm	2.8µm	15	15	4
4790-0100	100x70mm	2.8µm	3.0µm	20	20	5
4790-0150	150x100mm	3.2µm	3.5µm	30	30	6
4790-0200	200x130mm	3.7µm	4.0µm	34	34	7
4790-0250	250x165mm	4.2µm	4.5µm	35	35	7
4790-0300	300x200mm	4.6µm	5.0µm	40	40	8

DIN875 grade 0

(mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4790-500	50x40mm	6µm	6µm	13	13	4
4790-750	75x50mm	6µm	7µm	15	15	4
4790-1000	100x70mm	7µm	7µm	20	20	5
4790-1500	150x100mm	7µm	8µm	30	30	6
4790-2000	200x130mm	8µm	9µm	34	34	7
4790-2500	250x165mm	9µm	10µm	35	35	7
4790-3000	300x200mm	10µm	11µm	40	40	8

90° TOOL MAKER SQUARES

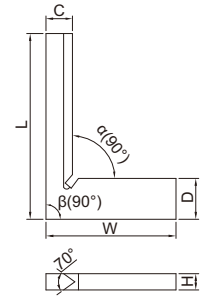
- DIN875 grade 00
- Beveled edge for inside measurement
- Made of hardened stainless steel

(mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4794-025	25x20mm	2.2 μ m	2.3 μ m	4	6.5	3.5
4794-040	40x28mm	2.3 μ m	2.4 μ m	5.5	8.5	3.5



4794-040



90° FLAT EDGE SQUARES

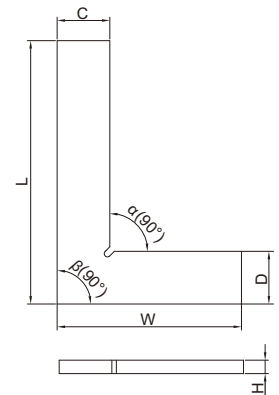
- Made of hardened stainless steel

DIN875 grade 0 (mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4791-50	50x40mm	6 μ m	6 μ m	15	15	4
4791-75	75x50mm	6 μ m	7 μ m	15	15	4
4791-100	100x70mm	7 μ m	7 μ m	20	20	5
4791-150	150x100mm	7 μ m	8 μ m	30	30	6
4791-200	200x130mm	8 μ m	9 μ m	30	30	7
4791-250	250x165mm	9 μ m	10 μ m	35	35	7
4791-300	300x200mm	10 μ m	11 μ m	40	40	8



4791-100



DIN875 grade 1 (mm)

Code	Size (LxW)	Squareness		C	D	H
		Inside (α)	Outside (β)			
4791-501	50x40mm	12 μ m	13 μ m	15	15	4
4791-751	75x50mm	13 μ m	14 μ m	15	15	4
4791-1001	100x70mm	14 μ m	15 μ m	20	20	5
4791-1501	150x100mm	16 μ m	18 μ m	30	30	6
4791-2001	200x130mm	19 μ m	20 μ m	30	30	6

90° FLAT EDGE SQUARES WITH WIDE BASE

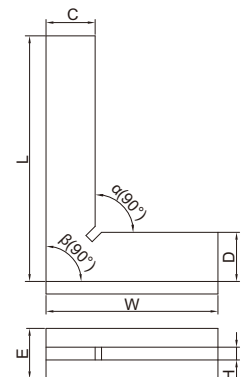
- DIN875 grade 0
- Made of hardened stainless steel

(mm)

Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4793-50	50x40mm	6 μ m	6 μ m	13	13	4	13
4793-75	75x50mm	6 μ m	7 μ m	15	15	4	15
4793-100	100x70mm	7 μ m	7 μ m	20	20	5	20
4793-150	150x100mm	7 μ m	8 μ m	30	30	6	30
4793-200	200x130mm	8 μ m	9 μ m	30	30	7	30
4793-250	250x165mm	9 μ m	10 μ m	35	35	7	35
4793-300	300x200mm	10 μ m	11 μ m	40	40	8	40



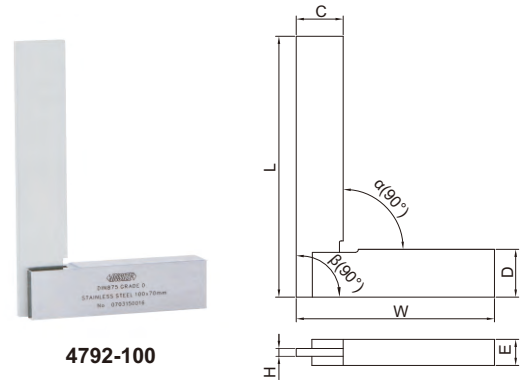
4793-100



90° FLAT EDGE SQUARES WITH WIDE BASE

- DIN875 grade 0
- Made of hardened stainless steel

Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4792-50	50x40mm	6 μ m	6 μ m	12	12	3	10
4792-75	75x50mm	6 μ m	7 μ m	14	14	3	10
4792-100	100x70mm	7 μ m	7 μ m	18	18	3	10
4792-150	150x100mm	8 μ m	8 μ m	22	22	4	12
4792-200	200x130mm	9 μ m	9 μ m	25	25	4	12



4792-100

MACHINIST SQUARES WITH WIDE BASE (ECONOMIC TYPE)

ATTENTION: NO ANTI-RUST TREATMENT, NOT HARDEND

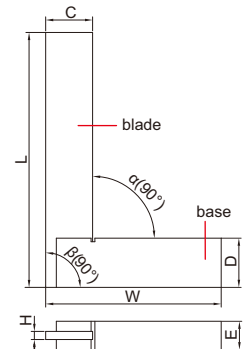
ATTENTION: LOW ACCURACY

- DIN875 grade 2
- Made of carbon steel, no anti-rust treatment, not hardend

Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4707-50	50x40mm	24 μ m	25 μ m	16	12	3	9
4707-75	75x50mm	26 μ m	28 μ m	16	16	3	9
4707-100	100x70mm	28 μ m	30 μ m	19	19	3	12
4707-150	150x100mm	33 μ m	35 μ m	25	25	3	16
4707-200	200x130mm	37 μ m	40 μ m	30	32	4	16
4707-250	250x165mm	42 μ m	45 μ m	30	32	4	19
4707-300	300x200mm	47 μ m	50 μ m	32	32	4	19
4707-400	400x250mm	56 μ m	60 μ m	38	38	5	22
4707-500	500x300mm	65 μ m	70 μ m	45	50	6	25
4707-600	600x350mm	75 μ m	80 μ m	50	50	6	30
4707-750	750x400mm	90 μ m	95 μ m	55	55	6	50
4707-900	900x500mm	103 μ m	110 μ m	65	75	9	50
4707-1000	1000x550mm	113 μ m	120 μ m	65	75	9	50



4707-100



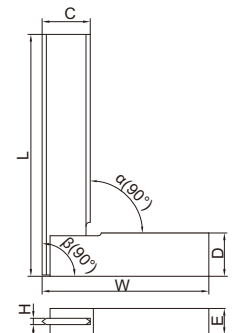
90° BEVELED EDGE SQUARES WITH WIDE BASE

- DIN875 grade 0
- Beveled edges for inside and outside measurements
- Made of hardened stainless steel

Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4795-50	50x40mm	6 μ m	6 μ m	12	12	3	10
4795-75	75x50mm	6 μ m	7 μ m	14	14	3	10
4795-100	100x70mm	7 μ m	7 μ m	18	18	3	10
4795-150	150x100mm	8 μ m	8 μ m	22	22	4	12
4795-200	200x130mm	9 μ m	9 μ m	25	25	4	12



4795-100



ATTENTION: NO ANTI-RUST TREATMENT, NOT HARDEND

ATTENTION: LOW ACCURACY

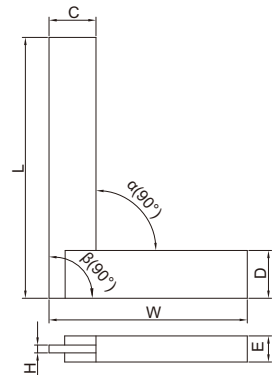
MACHINIST SQUARES WITH WIDE BASE AND SCALE (ECONOMIC TYPE)

- DIN875 grade 2
- Made of carbon steel, no anti-rust treatment, not hardend

Code	Size (LxW)	Squareness		C	D	H	E
		Inside (α)	Outside (β)				
4711-50	50×30mm	24 μ m	25 μ m	16	12	2.5	9
4711-75	75×50mm	26 μ m	28 μ m	16	16	2.5	9
4711-100	100×70mm	28 μ m	30 μ m	19	19	3	12
4711-150	150×100mm	33 μ m	35 μ m	25	25	3	16
4711-200	200×130mm	37 μ m	40 μ m	30	32	3	16
4711-250	250×165mm	42 μ m	45 μ m	30	32	3	19
4711-300	300×200mm	47 μ m	50 μ m	32	32	3	19
4711-400	400×200mm	56 μ m	60 μ m	38	38	4.5	22
4711-500	500×300mm	65 μ m	70 μ m	44	50	6	25
4711-600	600×350mm	75 μ m	80 μ m	50	50	6	30
4711-750	750×400mm	90 μ m	95 μ m	55	55	6	50



4711-100



- Graduation: 1mm
- Stainless steel blade, aluminum base

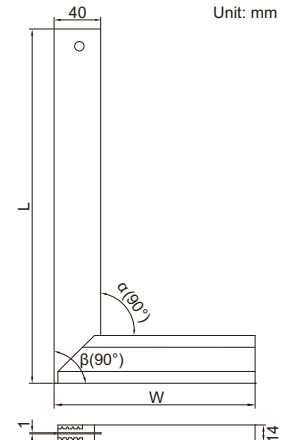
Code	Size (LxW)	Squareness	
		Inside (α)	Outside (β)
2275-300	300x170mm	0.5mm	0.5mm



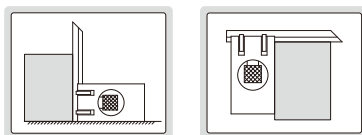
2275-300

TRY SQUARE

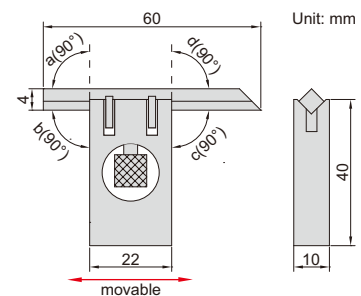
Unit: mm



- The straight edge can move and can be locked by the clamping screw
- Made of hardened stainless steel



4701-1

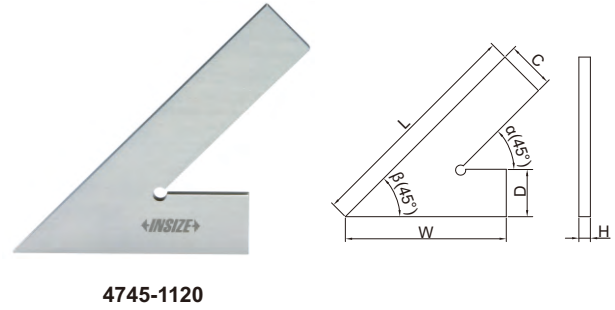


Code	Squareness (a, b, c, d)
4701-1	7 μ m

45° SQUARES

- Made of hardened stainless steel

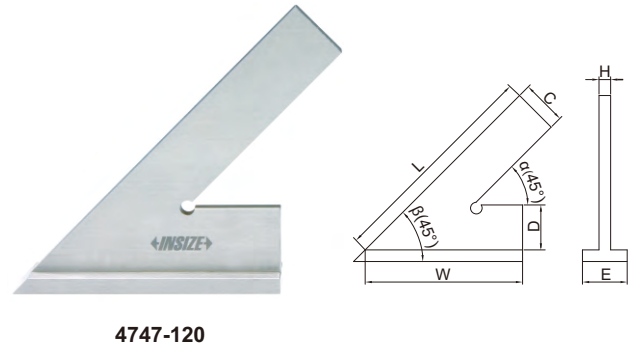
Code	Size (LxW)	Accuracy		(mm)		
		Inside (α)	Outside (β)	C	D	H
4745-1120	120x80mm	29 μ m	32 μ m	20	20	5
4745-1150	150x100mm	32 μ m	35 μ m	20	20	5
4745-1200	200x130mm	36 μ m	40 μ m	25	25	5



45° SQUARES WITH WIDE BASE

- Made of hardened stainless steel

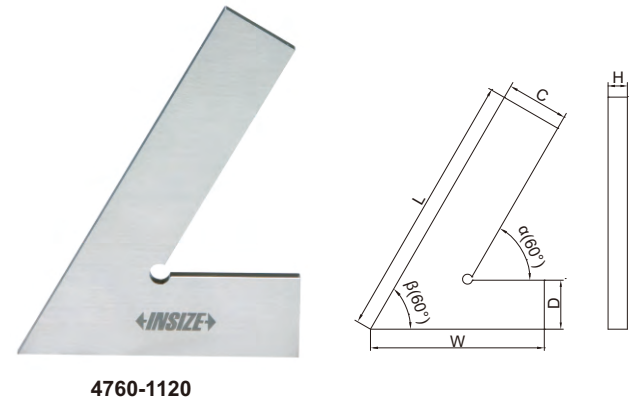
Code	Size (LxW)	Accuracy		(mm)			
		Inside (α)	Outside (β)	C	D	H	E
4747-120	120x80mm	29 μ m	33 μ m	20	20	5	20
4747-150	150x100mm	32 μ m	36 μ m	20	20	5	20
4747-200	200x130mm	36 μ m	41 μ m	25	25	5	25



60° SQUARES

- Made of hardened stainless steel

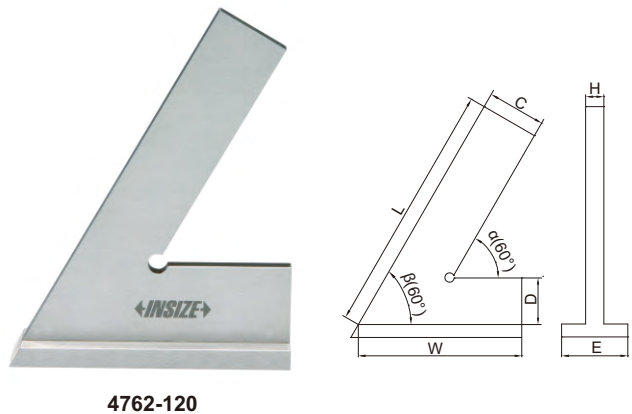
Code	Size (LxW)	Accuracy		(mm)		
		Inside (α)	Outside (β)	C	D	H
4760-1120	120x80mm	30 μ m	32 μ m	20	20	5
4760-1150	150x100mm	32 μ m	35 μ m	20	20	5
4760-1200	200x130mm	37 μ m	40 μ m	25	25	5



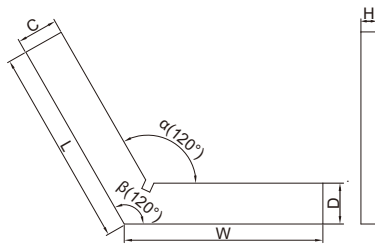
60° SQUARES WITH WIDE BASE

- Made of hardened stainless steel

Code	Size (LxW)	Accuracy		(mm)			
		Inside (α)	Outside (β)	C	D	H	E
4762-120	120x80mm	30 μ m	33 μ m	20	20	5	20
4762-150	150x100mm	33 μ m	36 μ m	20	20	5	20
4762-200	200x130mm	37 μ m	41 μ m	25	25	5	25



120° SQUARES



4706-1100

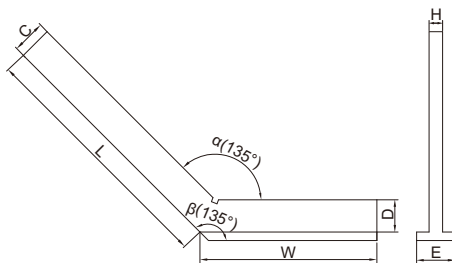
(mm)

Code	Size (LxW)	Accuracy		C	D	H
		Inside (α)	Outside (β)			
4706-150	50x50mm	24 μ m	25 μ m	15	15	5
4706-175	75x75mm	26 μ m	28 μ m	20	20	5
4706-1100	100x100mm	29 μ m	30 μ m	20	20	5
4706-1150	150x150mm	34 μ m	35 μ m	25	25	5
4706-1200	200x200mm	38 μ m	40 μ m	30	30	7

- Made of hardened stainless steel

10

135° SQUARES WITH WIDE BASE



4754-3120

(mm)

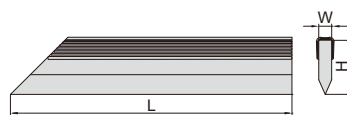
Code	Size (LxW)	Accuracy		C	D	H	E
		Inside (α)	Outside (β)				
4754-3120	120x80mm	31 μ m	33 μ m	20	20	5	20
4754-3150	150x100mm	34 μ m	36 μ m	20	20	5	20
4754-3200	200x130mm	39 μ m	41 μ m	30	30	7	30

- Made of hardened stainless steel

STRAIGHT EDGES



4700-100

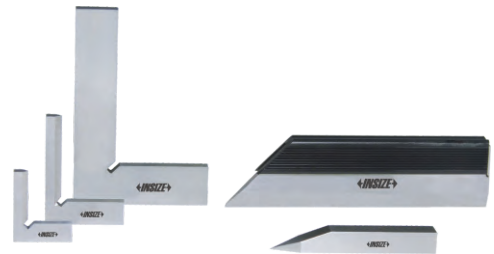
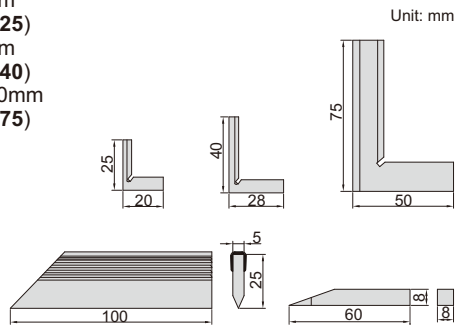


- DIN874
- Beveled edge
- Made of hardened stainless steel
- Satin chrome plating

Code	Size (L)	Straightness	W	H
4700-50	50mm	2.2 μ m	5mm	20mm
4700-75	75mm	2.3 μ m	5mm	25mm
4700-100	100mm	2.4 μ m	5mm	25mm
4700-125	125mm	2.5 μ m	6mm	30mm
4700-150	150mm	2.6 μ m	6mm	30mm
4700-200	200mm	2.8 μ m	6mm	30mm
4700-250	250mm	3.0 μ m	8mm	40mm
4700-300	300mm	3.2 μ m	8mm	40mm
4700-400	400mm	3.6 μ m	10mm	50mm
4700-500	500mm	4.0 μ m	10mm	50mm

SQUARE SET

- Includes:
 - 90° tool maker square 25x20mm
DIN875 grade 00 (code **4794-025**)
 - 90° tool maker square 40x28mm
DIN875 grade 00 (code **4794-040**)
 - 90° beveled edge square 75x50mm
DIN875 grade 00 (code **4790-075**)
 - straight edge 100mm DIN874
(code **4700-100**)
 - scriber
- Made of hardened stainless steel



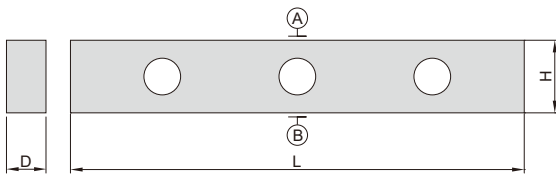
4702-1

Code

4702-1

GRANITE STRAIGHT EDGES

10



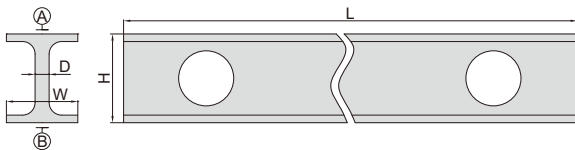
4147-500A

Code	Length (L)	Flatness of A and B	Parallelism between A and B	D	H
4147-500A	500mm	2.1µm	3.2µm	50mm	80mm
4147-1000A	1000mm	3.0µm	4.5µm	60mm	120mm

MAGNALIUM STRAIGHT EDGES

LIGHT WEIGHT

- Made of magnalium, light weight, non-deform, no rusty



4180-1500

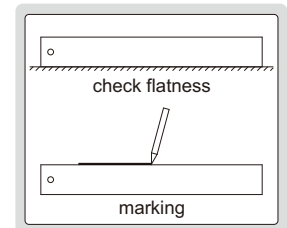
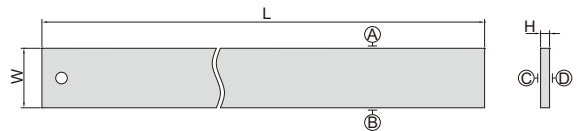
Code	Length (L)	Flatness of A and B	Parallelism between A and B	H	W	D	Weight
4180-500	500mm	3µm	4µm	60mm	30mm	5mm	1kg
4180-1000	1000mm	5µm	8µm	60mm	30mm	5mm	1.5kg
4180-1500	1500mm	15µm	22µm	100mm	40mm	7mm	4.5kg
4180-2000	2000mm	18µm	27µm	100mm	40mm	7mm	6kg
4180-2500	2500mm	22µm	33µm	100mm	40mm	7mm	7.5kg
4180-3000	3000mm	48µm	72µm	150mm	80mm	8mm	21kg

PRECISION STRAIGHT EDGES



7117-300

- Check flatness and for marking
- Made of tool steel



Code	Range (L)	Flatness of A and B	Flatness of C and D	W	H
7117-300	305mm	0.005mm	0.05mm	41mm	6.3mm
7117-600	610mm	0.006mm	0.06mm	51mm	7.9mm
7117-900	914mm	0.007mm	0.06mm	64mm	9.5mm

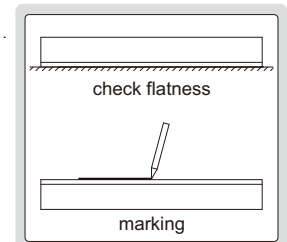
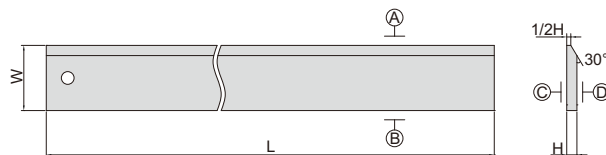
PRECISION STRAIGHT EDGES WITH BEVELED EDGE

10



7118-300

- Check flatness and for marking
- Made of tool steel



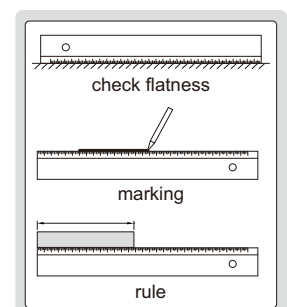
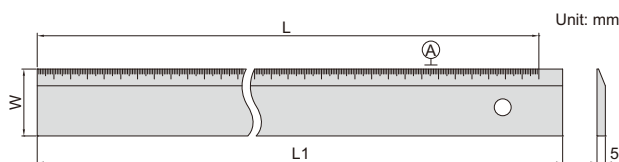
Code	Range (L)	Flatness of A and B	Flatness of C and D	W	H
7118-300	305mm	0.005mm	0.05mm	41mm	6.3mm
7118-600	610mm	0.006mm	0.06mm	51mm	7.9mm
7118-900	914mm	0.007mm	0.06mm	64mm	9.5mm

STRAIGHT EDGES



7111-300A

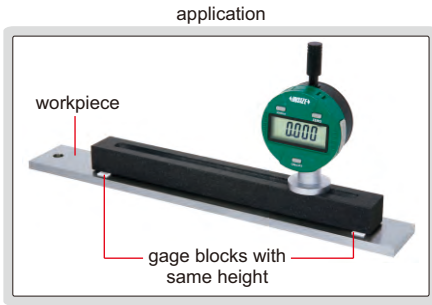
- Check flatness and straightness, as well as for marking
- Graduation on the beveled edge
- Made of hardened tool steel
- Chrome plated



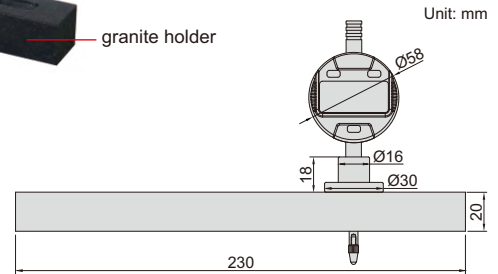
Code	Range (L)	Straightness of A	L1	W
7111-300A	300mm	0.02mm	310mm	40mm
7111-500A	500mm	0.03mm	510mm	40mm
7111-1000A	1000mm	0.04mm	1010mm	50mm

STRAIGHTNESS/FLATNESS GAGE

GRANITE HODLER CAN BE CUSTOMIZED ACCORDING TO WORKPIECES



2144-200



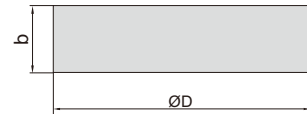
Code	Range	Digital indicator resolution	Straightness measurement accuracy	Parallelism of top and bottom surfaces of granite holder	Flatness of top and bottom surfaces of granite holder
2144-200	200mm	0.001mm/0.00005"	3µm	2µm	1.5µm

OPTICAL FLATS

- Check flatness
- Single working face, the arrow indicates the working face



4191-45B



Code	b	ØD	Flatness
4191-45A	12mm	45mm	0.03µm
4191-60A	15mm	60mm	0.03µm

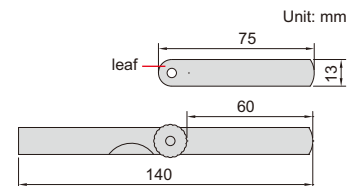
Code	b	ØD	Flatness
4191-45B	12mm	45mm	0.1µm
4191-60B	15mm	60mm	0.1µm

FEELER GAGE

- Made of hardened alloy steel
- Meet DIN2275/grade TC1
- Accuracy: $\pm(3+T/80)$ µm, 'T' is the thickness of leaves in µm



4601-25



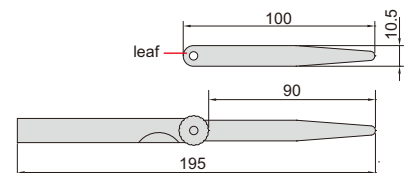
Code	Range	Thickness of leaves included (mm)	Quantity of leaves
4601-25	0.04-1.00mm	0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00	25

FEELER GAGES



4602-20

Unit: mm



- Made of hardened alloy steel
- Meet DIN2275/grade TC1
- Accuracy: $\pm(3+T/80)$ μm ,
'T' is the thickness of leaves in μm

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

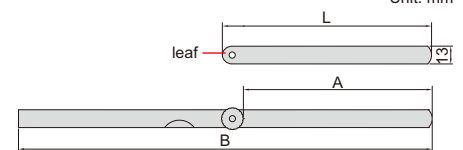
11

LONG FEELER GAGES



4605-20

Unit: mm



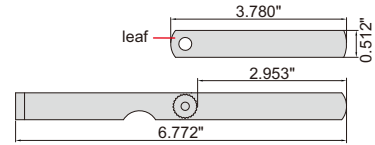
- Made of hardened alloy steel
- Meet DIN2275/grade TC1
- Accuracy: $\pm(3+T/80)$ μm ,
'T' is the thickness of leaves in μm

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	150mm	135mm	295mm
4605-131	0.05-1.00mm		13	200mm	185mm	395mm
4605-132	0.05-1.00mm		13	300mm	285mm	590mm
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	150mm	135mm	295mm
4605-201	0.05-1.00mm		20	200mm	185mm	395mm
4605-202	0.05-1.00mm		20	300mm	285mm	590mm

INCH FEELER GAGE



4608-31



- 0.010" is made of brass, others are made of hardened alloy steel
- Each blade is marked with inch/metric size

Thickness of leaves included	Accuracy
0.010" (brass)	±0.00039"
0.0015", 0.002"	±0.0002"
0.0025", 0.003", 0.004", 0.005", 0.006", 0.007"	±0.00028"
0.008", 0.009"	±0.00035"
0.010", 0.011"	±0.00039"
0.012", 0.013"	±0.00047"
0.014", 0.015"	±0.00051"

Thickness of leaves included	Accuracy
0.016", 0.017"	±0.00055"
0.018", 0.019"	±0.00059"
0.020", 0.021"	±0.00067"
0.022", 0.023"	±0.00071"
0.024", 0.025", 0.026"	±0.00075"
0.028"	±0.00091"
0.030"	±0.00094"
0.032", 0.035"	±0.00102"

Code	Range	Quantity of Leaves
4608-31	0.0015"~0.035"	32

11

FEELER GAGE STOCKS

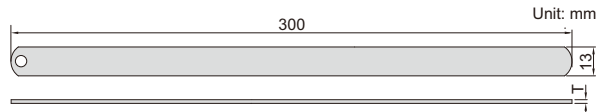


10 pcs per package



4622-10

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



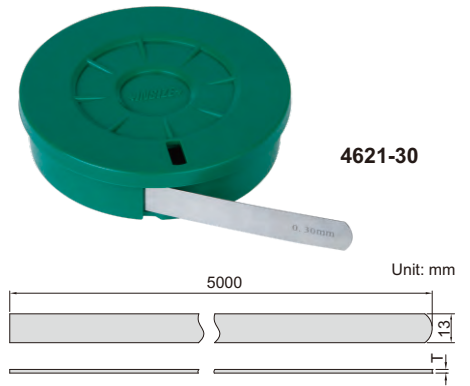
Code	Thickness (T)	Accuracy
4622-02	0.02mm	±3µm
4622-03	0.03mm	±3µm
4622-04	0.04mm	±3µm
4622-05	0.05mm	±3µm
4622-06	0.06mm	±3µm
4622-07	0.07mm	±4µm
4622-08	0.08mm	±4µm
4622-09	0.09mm	±4µm
4622-10	0.10mm	±4µm
4622-12	0.12mm	±5µm

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

Code	Thickness (T)	Accuracy	Code	Thickness (T)	Accuracy
4621-02	0.02mm	±4µm	4621-30	0.30mm	±9µm
4621-03	0.03mm	±4µm	4621-35	0.35mm	±11µm
4621-04	0.04mm	±4µm	4621-40	0.40mm	±12µm
4621-05	0.05mm	±4µm	4621-45	0.45mm	±12µm
4621-06	0.06mm	±4µm	4621-50	0.50mm	±14µm
4621-07	0.07mm	±5µm	4621-55	0.55mm	±14µm
4621-08	0.08mm	±5µm	4621-60	0.60mm	±14µm
4621-09	0.09mm	±5µm	4621-65	0.65mm	±14µm
4621-10	0.10mm	±5µm	4621-70	0.70mm	±17µm
4621-12	0.12mm	±5µm	4621-75	0.75mm	±17µm
4621-15	0.15mm	±6µm	4621-80	0.80mm	±19µm
4621-18	0.18mm	±7µm	4621-85	0.85mm	±19µm
4621-20	0.20mm	±8µm	4621-90	0.90mm	±22µm
4621-25	0.25mm	±9µm	4621-95	0.95mm	±22µm
			4621-100	1.00mm	±24µm



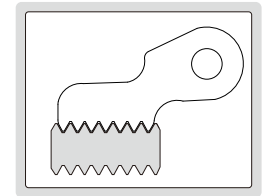
- Used as shims to accurately set spacing
- Made of hardened alloy steel
- Length 5m
- Width 13mm

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



4820-122

PITCH GAGES



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

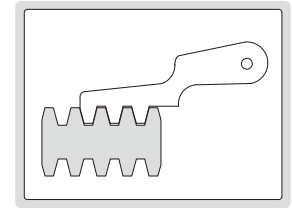
Code	Range	Pitch of leaves included	Quantity of leaves
4820-552	0.4-7.0mm	0.4, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	52
	4-42TPI	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42TPI	

PITCH GAGES

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



4824-12



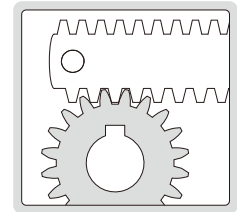
Code	Range	Thread type	Pitch of leaves included	Quantity of leaves
4824-12	2-20mm	Tr30°	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 16, 20mm	12
4824-16	1-12TPI	ACME 29°	1, 1-1/3, 1-1/2, 1-3/4, 2, 2-1/2, 3, 3-1/2, 4, 5, 6, 7, 8, 9, 10, 12TPI	16

GEAR TOOTH PITCH GAGES

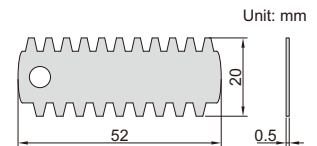
- Check the module pitch of gear tooth
- Accuracy: $\pm 0.05\text{mm}$
- Made of hardened stainless steel



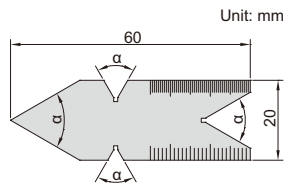
4860-245



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

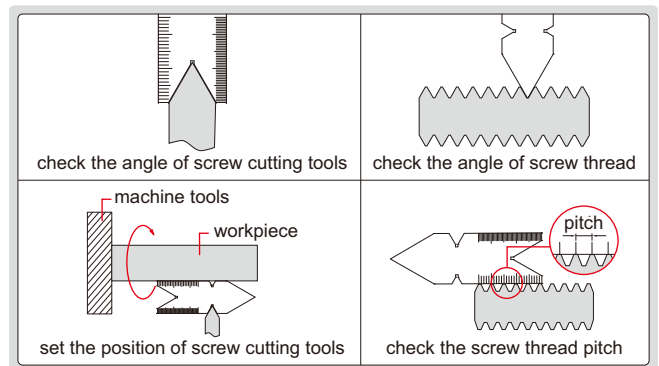


CENTER GAGES



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



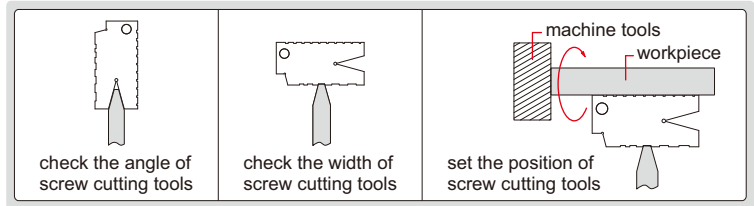
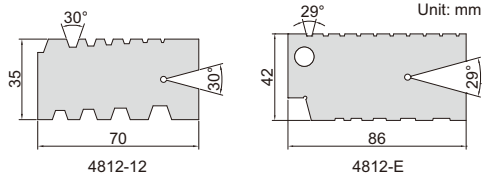
Code	Thread type	Angle (α)	Graduation
4810-601	METRIC 60°	60°	0.5mm and 1mm
4810-602	UNIFIED 60°	60°	14ths and 20ths on front side, 24ths and 32ths on back side
4810-55	WHITWORTH 55°	55°	14ths and 20ths on front side, 24ths and 32ths on back side

THREAD GAGES

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

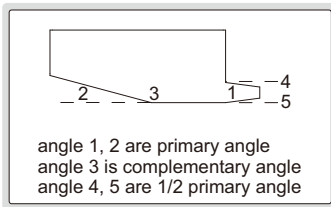


4812-E

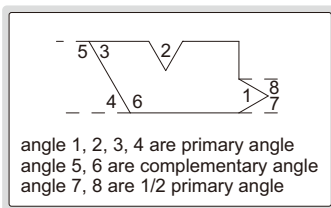


Code	Range	Thread type	Pitch
4812-12	2-12mm	Tr 30°	2, 3, 4, 5, 6, 7, 8, 9, 10, 12mm
4812-E	1-10TPI	ACME 29°	1, 1-1/3, 1-1/2, 1-3/4, 2, 2-1/2, 3, 4, 5, 6, 7, 8, 9, 10TPI

ANGLE GAGE SET



type A



type B



4807

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

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

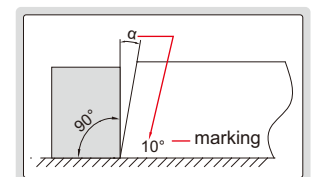
Code	Quantity of leaves	Accuracy
4807	18	±10'

ANGLE GAGE

- To check complementary angles
- Made of stainless steel



4806-20



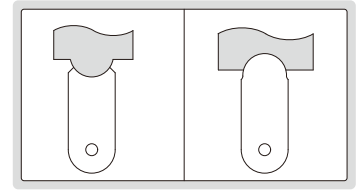
Code	Range (α)	Angle of leaves included	Quantity of leaves	Accuracy
4806-20	1°-45°	1°, 2°, 3°, 4°, 5°, 6°, 7°, 8°, 9°, 10°, 12°, 14°, 16°, 18°, 20°, 25°, 30°, 35°, 40°, 45°	20	±30'

RADIUS GAGES

- Made of medium carbon steel



4801-17

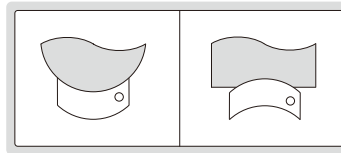


Code	Range	Radius of leaves included (mm)	Quantity of leaves (internal + external)
4801-17	1-7mm	1, 1.25, 1.5, 1.75, 2, 2.25, 2.5, 2.75, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7	17+17
4801-16	7.5-15mm	7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13, 13.5, 14, 14.5, 15	16+16
4801-15	15.5-25mm	15.5, 16,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

RADIUS GAGE

11

- Made of stainless steel

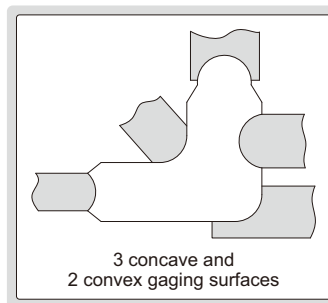


4802-31

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

RADIUS GAGE SET

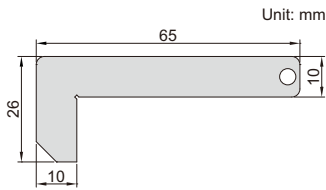
- Each piece has 3 concave and 2 convex gauging surfaces
- Supplied with handle
- Made of medium carbon steel



4804-26

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 GAGE



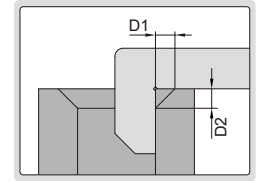
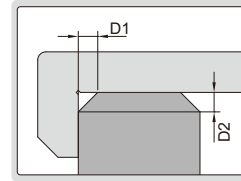
Unit: mm

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

Code	Graduation	Accuracy
4844-1	0.5mm	±0.25mm



4844-1



DATA OUTPUT

DIGITAL CHAMFER GAGES

- Measure 15°/20°/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
- Made of stainless steel



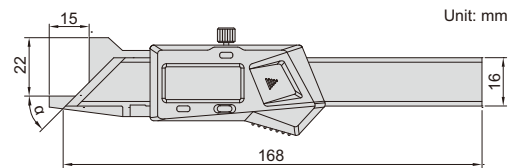
1180-6

With data interface (data output cable code 7315-21, 7302-21, optional)

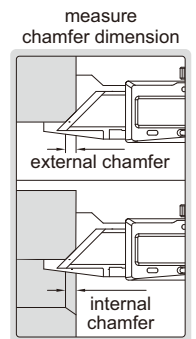
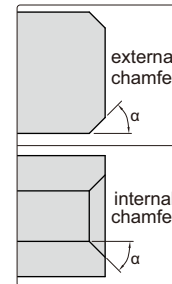
Code	Range	Accuracy	Chamfer (α)
1180-6	0-10mm/0-0.39"	±0.06mm	45°
1180-61	0-10mm/0-0.39"	±0.06mm	15°
1180-62	0-10mm/0-0.39"	±0.06mm	20°
1180-63	0-10mm/0-0.39"	±0.06mm	30°
1180-66	0-10mm/0-0.39"	±0.06mm	60°

Built-in wireless (receiver code 7315-2/3/6/7/8 is required)

Code	Range	Accuracy	Chamfer (α)
1180-6WL	0-10mm/0-0.39"	±0.06mm	45°
1180-61WL	0-10mm/0-0.39"	±0.06mm	15°
1180-62WL	0-10mm/0-0.39"	±0.06mm	20°
1180-63WL	0-10mm/0-0.39"	±0.06mm	30°
1180-66WL	0-10mm/0-0.39"	±0.06mm	60°



Unit: mm



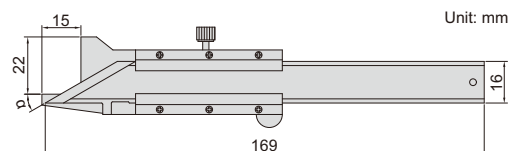
CHAMFER GAGES

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

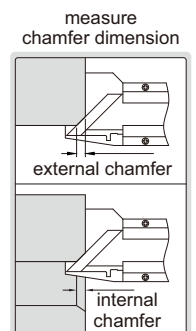


1267-6

Code	Range	Accuracy	Chamfer (α)
1267-6	0-10mm	±0.06mm	45°
1267-63	0-10mm	±0.06mm	30°
1267-66	0-10mm	±0.06mm	60°



Unit: mm



DIGITAL CHAMFER GAGES

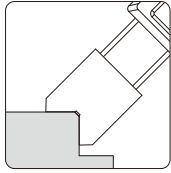


DATA OUTPUT

ATTENTION: THE ACTUAL LENGTH IS 1.414 TIMES OF THE READING

ATTENTION: CHAMFER OF HOLES CANNOT BE MEASURED

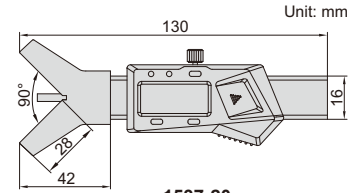
1537-8 can measure small workpieces or workpieces with steps



pin gage (included)



1537-20

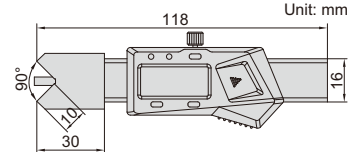


1537-20

- 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

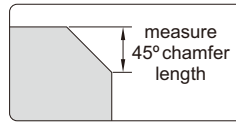


1537-8



1537-8

Code	Range	Accuracy
1537-20	0-20mm/0-0.787"	±0.05mm
1537-8	0-8mm/0-0.315"	±0.05mm



11

DIGITAL TAPER SLOT GAGES

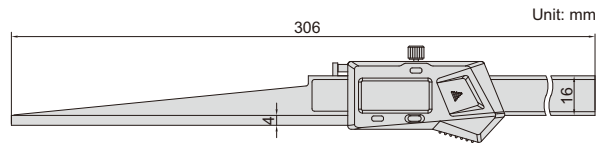
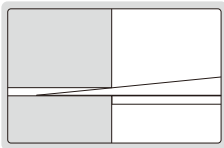
DATA OUTPUT

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



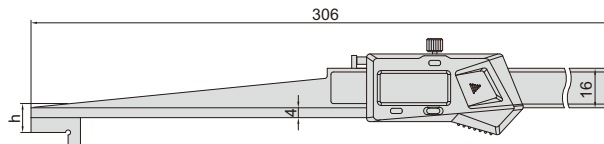
1160-10

measure slot width



1160-10 and 1106-10WL

- Measuring opening, slot width
- Resolution: 0.01mm/0.0005"
- Buttons: on/off, zero, mm/inch
- Automatic power off, move the digital unit to turn on power
- Battery CR2032
- Made of stainless steel



1160-20, 1160-20WL, 1160-30, 1160-30WL, 1160-40 and 1106-40WL

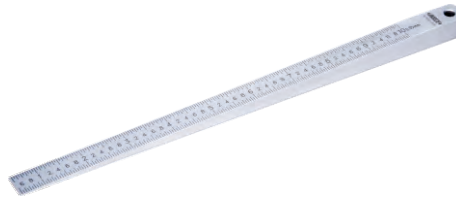
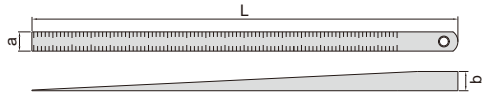
With data interface (data output cable code 7315-21, 7302-21, optional)

Code	Range	Accuracy	h
1160-10	0.2-10mm/0.01-0.39"	±0.03mm	—
1160-20	10-20mm/0.39-0.79"	±0.05mm	10mm
1160-30	20-30mm/0.79-1.18"	±0.05mm	20mm
1160-40	30-40mm/1.18-1.58"	±0.05mm	30mm

Built-in wireless (receiver code 7315-2/3/6/7/8 is required)

Code	Range	Accuracy	h
1160-10WL	0.2-10mm/0.01-0.39"	±0.03mm	—
1160-20WL	10-20mm/0.39-0.79"	±0.05mm	10mm
1160-30WL	20-30mm/0.79-1.18"	±0.05mm	20mm
1160-40WL	30-40mm/1.18-1.58"	±0.05mm	30mm

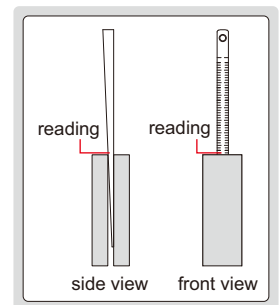
TAPER SLOT GAGES



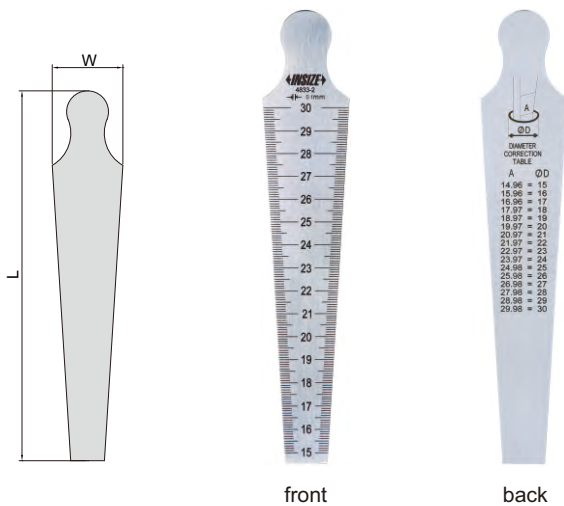
4630-1

- 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	±0.04mm	164mm	12.5mm	6.5mm
4630-1	0.5-10mm	0.05mm	±0.07mm	220mm	10mm	10.5mm
4630-2	0.5-15mm	0.1mm	±0.08mm	184mm	12.5mm	16.5mm



TAPER GAGES

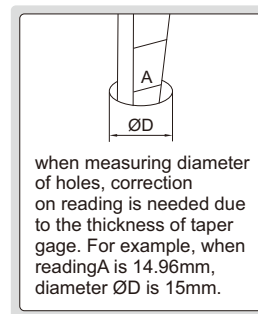


front

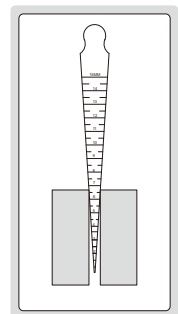
back

4833-2

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	L	W
4833-1	0.8-15mm	0.1mm	±0.05mm	146mm	17mm
4833-2	15-30mm	0.1mm	±0.05mm	159mm	30.4mm
4833-3	30-45mm	0.1mm	±0.05mm	166mm	45.4mm
4833-4	45-60mm	0.1mm	±0.05mm	170mm	60.5mm

TAPER GAGE SET



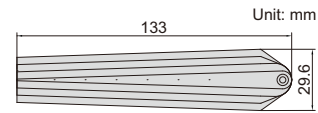
front

back

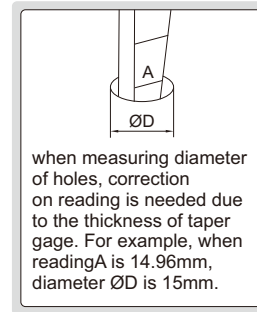
4837-1

- Include 4 pcs (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

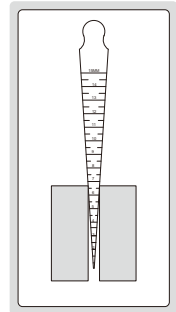
Code	Range	Graduation	Accuracy
4837-1	1-29mm	0.05mm	±0.05mm



measure diameter of hole



measure slot width



11

BORE GAGE

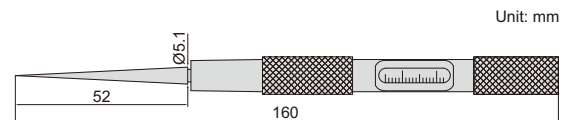
- Quick measurement of small bore diameter
- Hardened working face
- Supplied with protection cap

supplied with protection cap



4855-5

Code	Range	Graduation	Accuracy
4855-5	0.1-5mm	0.01mm	±0.03mm



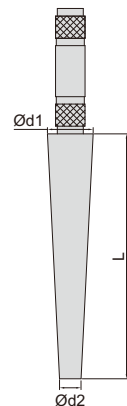
TAPER BORE GAGES

- Quick measurement of bore diameter
- Hardened steel, HRC50-58
- Satin chrome plated surface
- Aluminium oxidized handle

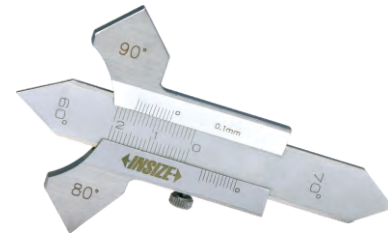
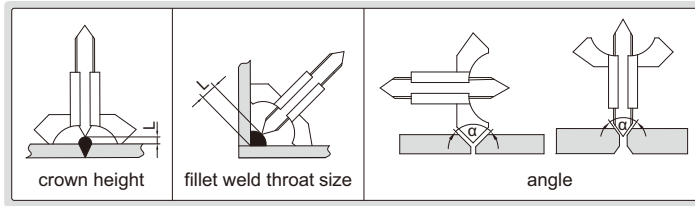
Code	Range	Graduation	Accuracy	(mm)		
				L	Ød1	Ød2
4852-1	1-6.5mm	0.1mm	±0.05mm	62.5	7	0.8
4852-3	3-16mm	0.1mm	±0.05mm	143	17	2.8
4852-15	15-30mm	0.1mm	±0.05mm	165	31	14.7
4852-30	30-45mm	0.1mm	±0.05mm	165	46	29.6
4852-45	45-60mm	0.1mm	±0.05mm	167	61	44.3



4852-15

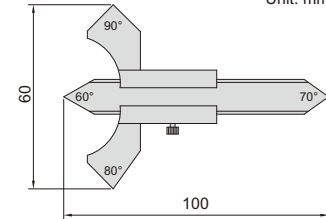


WELDING GAGE



4830

Unit: mm



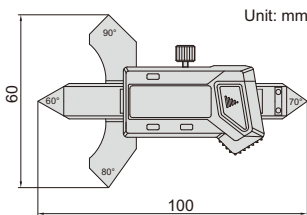
- Made of stainless steel

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°

ATTENTION:
NO DATA OUTPUT

DIGITAL WELDING GAGE

11

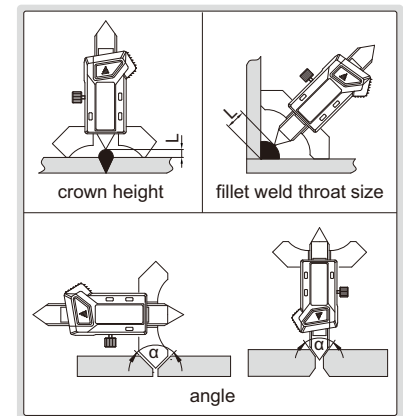


Unit: mm



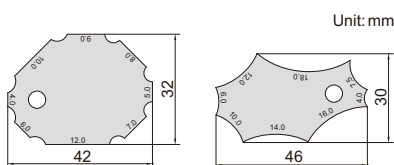
4831-20A

- 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°

FILLET WELDING GAGE



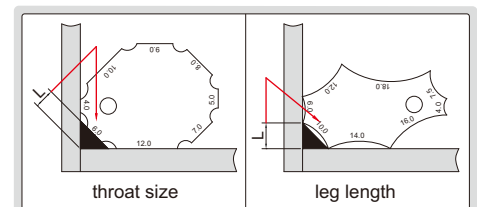
Unit: mm



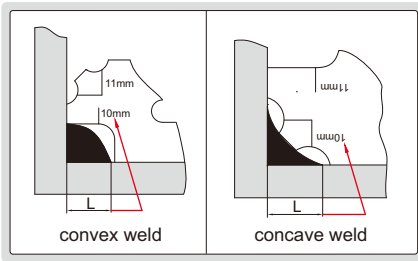
4832-1

- 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



FILLET WELDING GAGES



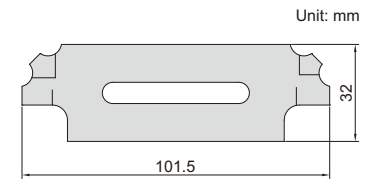
4836-1



4836-2

- 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)



11

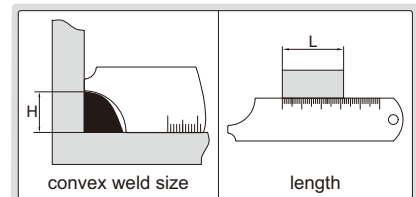
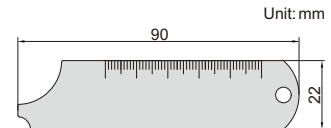
FILLET WELDING GAGE



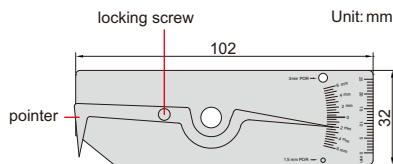
4847-1

- 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



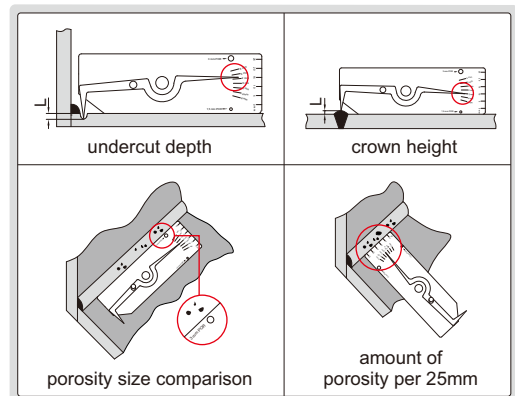
WELDING GAGE



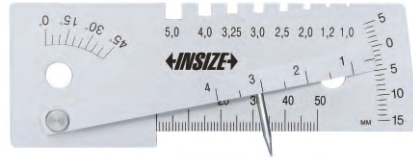
4834-1

- 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	—

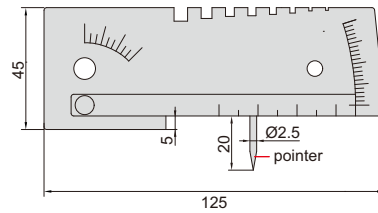


WELDING GAGE



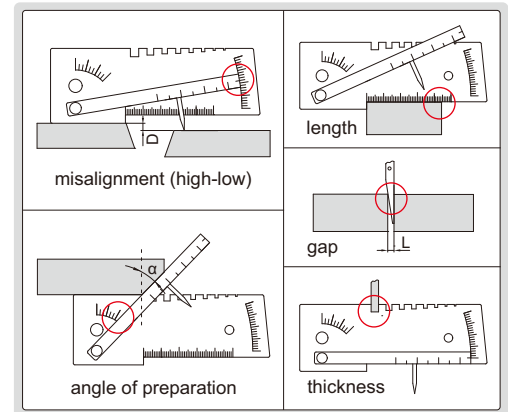
4848-1

Unit: mm



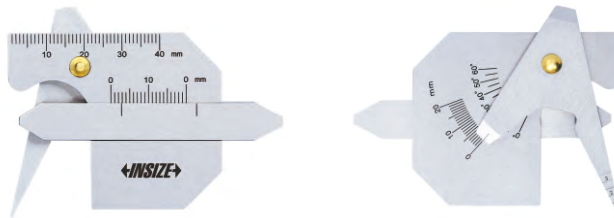
- Made of stainless steel

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	—	—



11

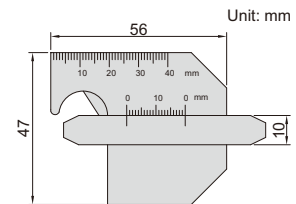
WELDING GAGE



front

back

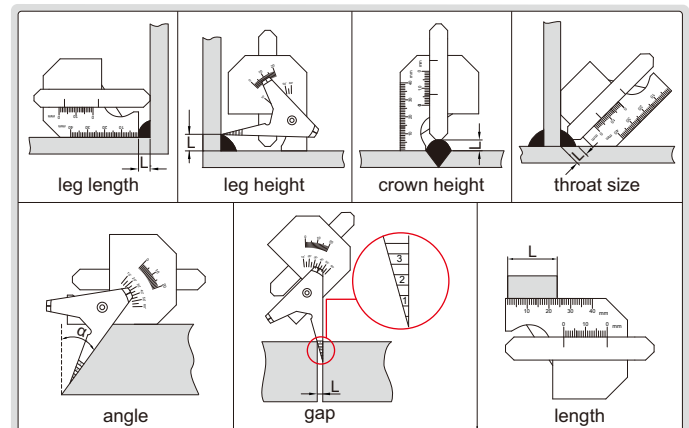
6832-1



Unit: mm

- Made of stainless steel
- Satin chrome plated surface

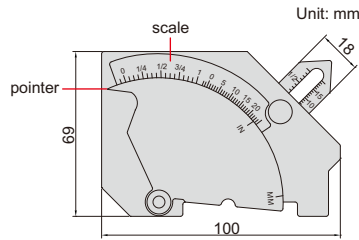
Code	Measurement	Range	Graduation	Accuracy
6832-1	leg length	0-20mm	1mm	±0.3mm
	leg height	0-20mm	1mm	±0.3mm
	crown height	0-20mm	1mm	±0.3mm
	throat size	0-10mm	1mm	±0.3mm
	angle	0°-60°	5°	±1°
	gap	1-3.5mm	0.5mm	±0.2mm
	length	0-40mm	1mm	±0.3mm



WELDING GAGE

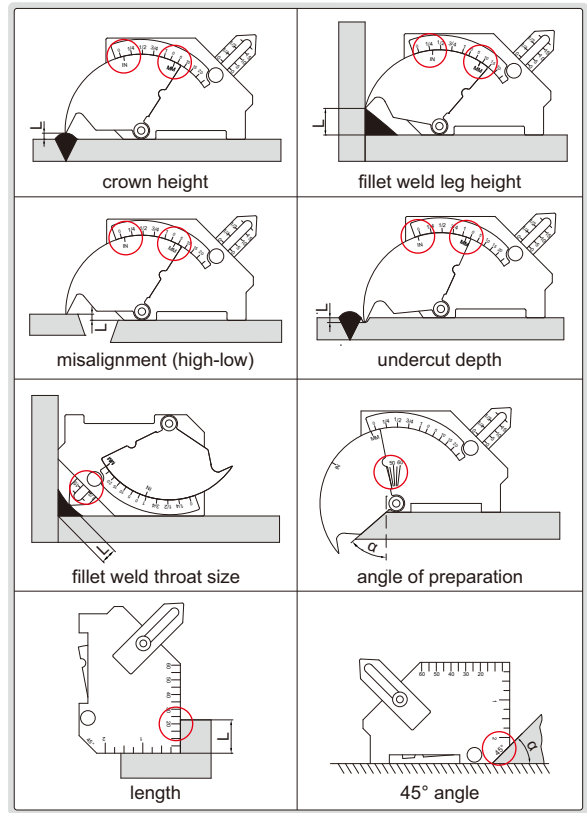


4835-1



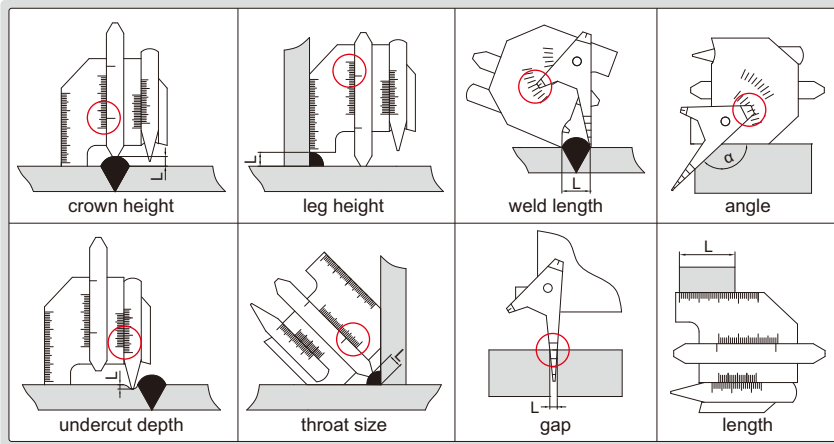
- Adjustable scale to compensate pointer wear
- Made of stainless steel

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°



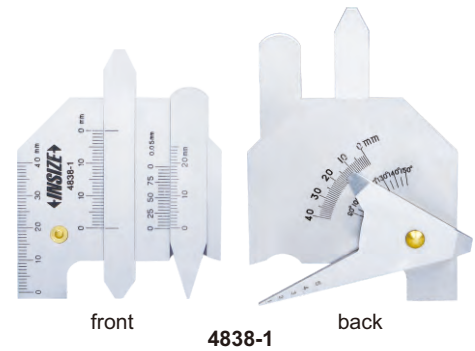
11

WELDING GAGES

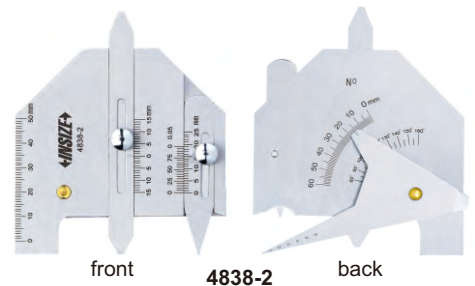


- Made of stainless steel

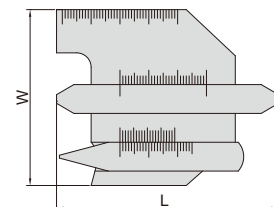
Measurement	Code 4838-1			Code 4838-2		
	Range	Graduation	Accuracy	Range	Graduation	Accuracy
crown height	0-10mm	1mm	±0.5mm	0-15mm	1mm	±0.5mm
leg height	0-14mm	1mm	±0.5mm	0-15mm	1mm	±0.5mm
undercut depth	0-5mm	0.05mm	±0.05mm	0-5mm	0.05mm	±0.05mm
throat size	0-13mm	1mm	±0.5mm	0-13mm	1mm	±0.5mm
weld length	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		



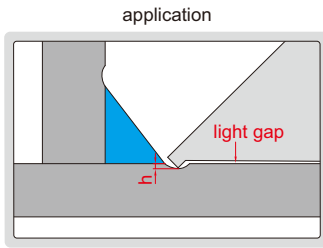
4838-1



4838-2



WELDING UNDERCUT GAGE



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

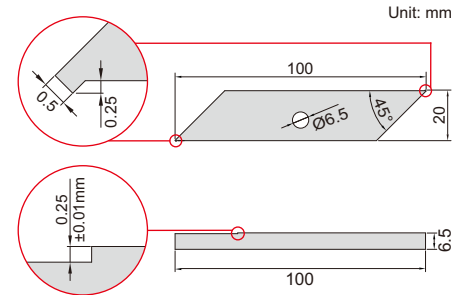
- Measure undercut
- Calibration block is included
- Made of stainless steel

Code
4849-1



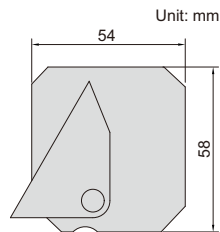
4849-1

calibration block (included)

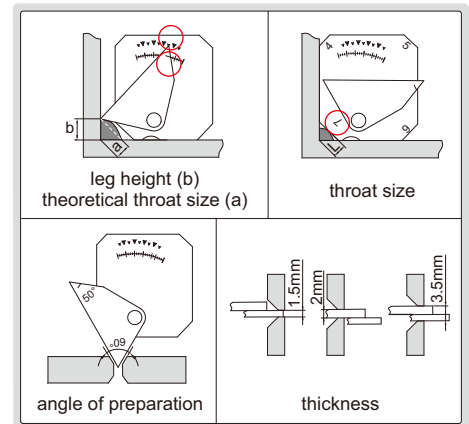


WELDING GAGE

- Made of stainless steel



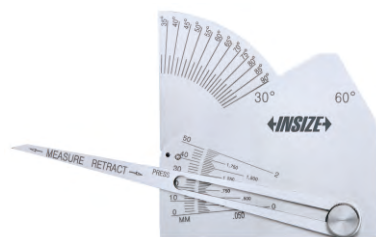
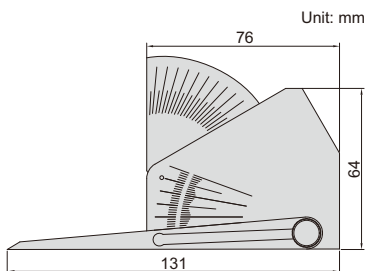
4850-1



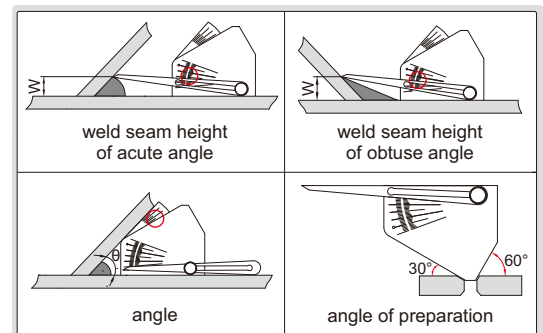
Code	Measurement	Range	Graduation	Accuracy
4850-1	leg height (b)	0-18mm	1mm	±0.5mm
	theoretical throat size (a)	2-12mm	1mm	±0.5mm
	throat size	4, 5, 6, 7mm	—	±0.5mm
	angle of preparation	50°, 60°	—	±1°
	thickness	1.5, 2, 3.5mm	—	±0.2mm

FILLET WELDING GAGE

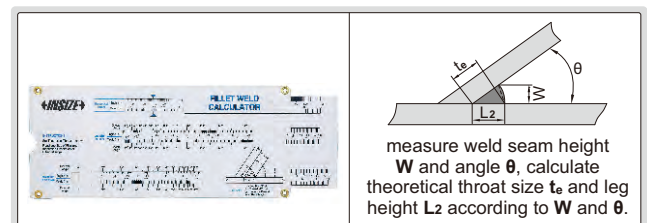
- Calculating card is included
- Made of stainless steel



4846-1

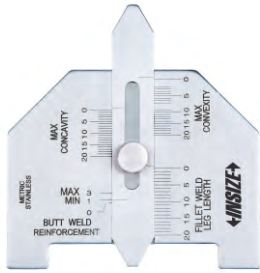


calculating card (included)

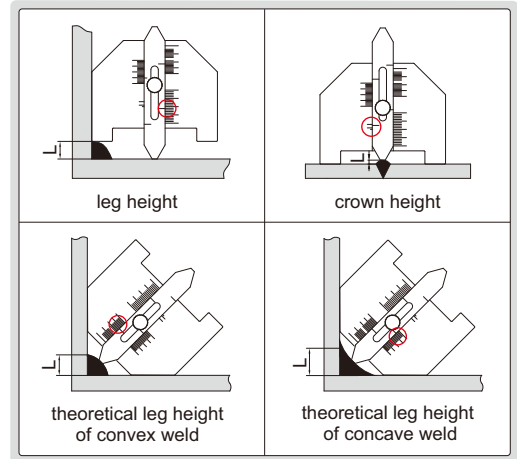
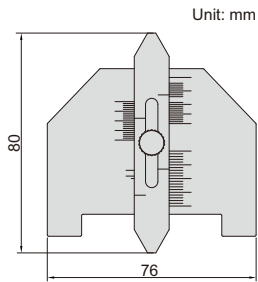


Code	Measurement	Range	Graduation	Accuracy
4846-1	weld seam height W	0-50mm/0-2"	2mm/0.05"	±1mm
	angle θ	30°-90°	2.5°	±1°
	60° angle	—	—	±0.5°

WELDING GAGE



4851-1

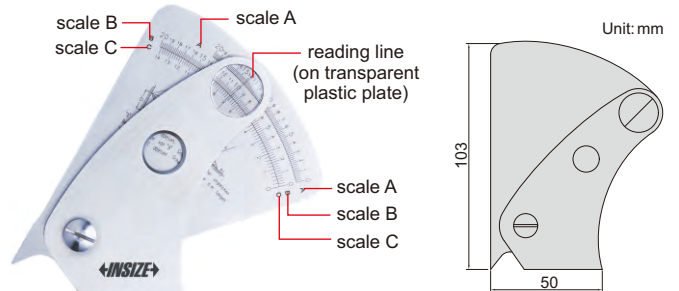
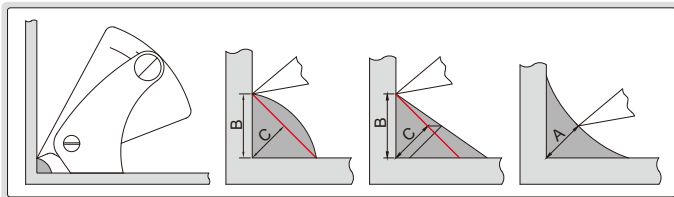


- Made of stainless steel

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

- Made of stainless steel

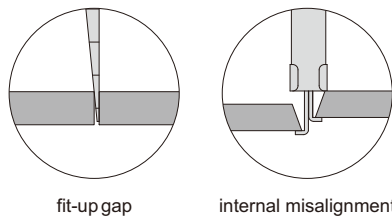


4840-1

Code	Graduation	Accuracy
4840-1	0.2mm	±0.3mm

PIPE WELDING GAGE

- Made of stainless steel

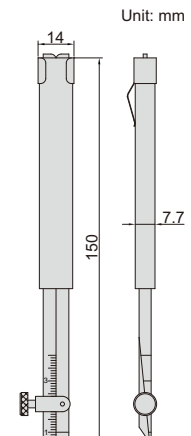


fit-up gap

internal misalignment

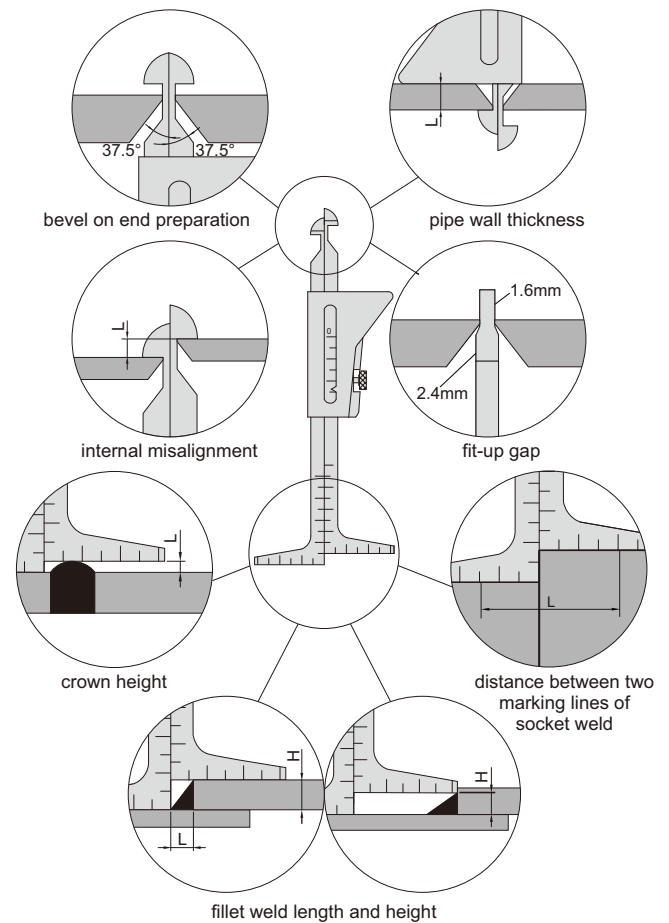
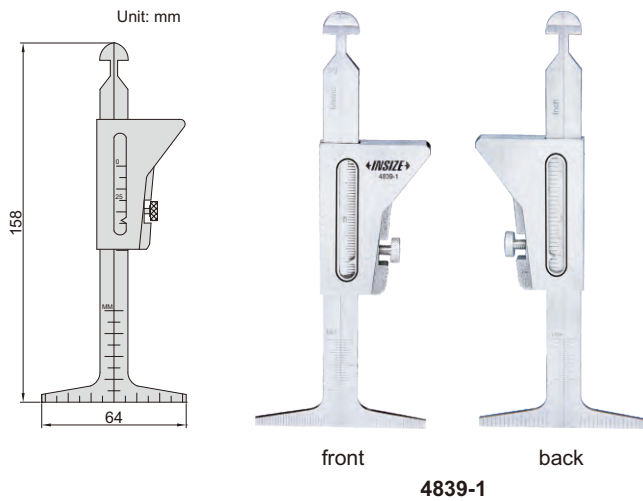


4841-1



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

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

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) 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

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**)

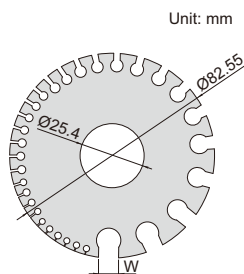


5072

Code

5072

AMERICAN STANDARD WIRE GAGE



4808

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

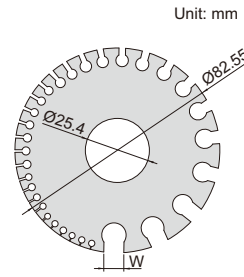
Code Range

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

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"

U.S. STANDARD SHEET METAL GAGE

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"



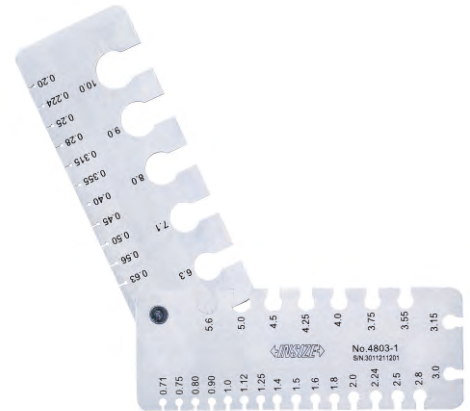
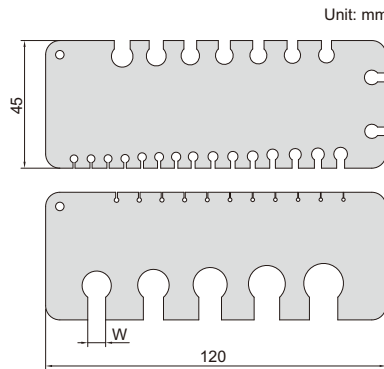
4809

- 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")

SQUARE WIRE GAGE

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

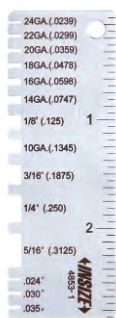


4803-1

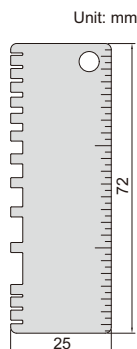
- For gaging non-ferrous wire and metals such as copper, brass and aluminum
- Hardened to HRC51-53
- Including 2 pcs wire gages

Code	Range
4803-1	0.2-10mm

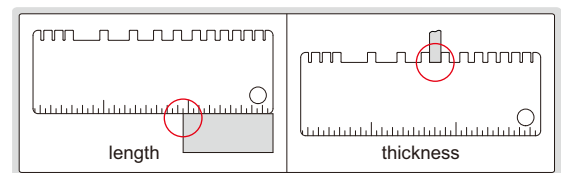
THICKNESS GAGE



4853-1



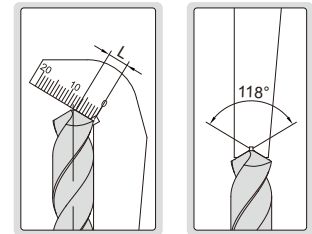
- Made of stainless steel



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

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

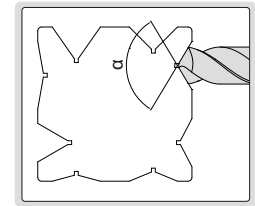
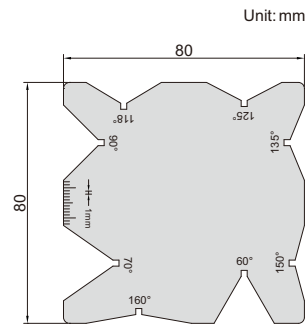


Code	Accuracy	
	Angle	Length
4843-1	±0.5°	±0.5mm

4843-1

DRILL ANGLE GAGE

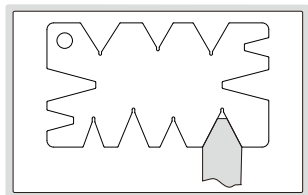
- Check drills with angle 60°, 70°, 90°, 118°, 125°, 135°, 150° or 160°
- Made of stainless steel



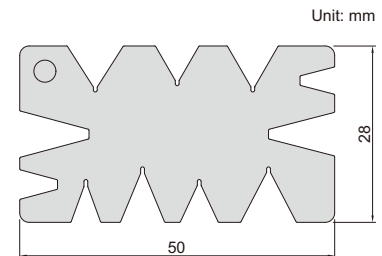
Code	Accuracy
4842-1	±0.5°

4842-1

ANGLE GAGE



check the angle of screw cutting tools

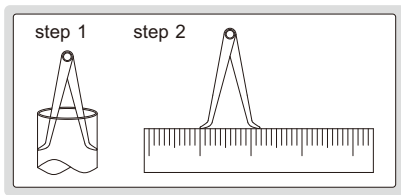


4854-1

- Made of stainless steel

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

INSIDE CALIPERS

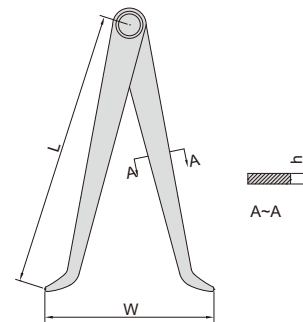


- Made of carbon steel

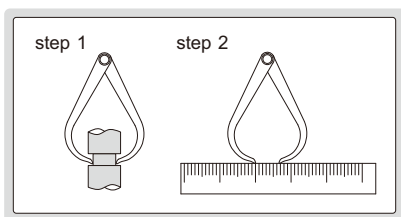
Code	Size (L)	Range (W)	h
7240-150	150mm	17-150mm	2mm
7240-200	200mm	17-200mm	3mm
7240-300	300mm	18-300mm	3mm



7240-150



OUTSIDE CALIPERS

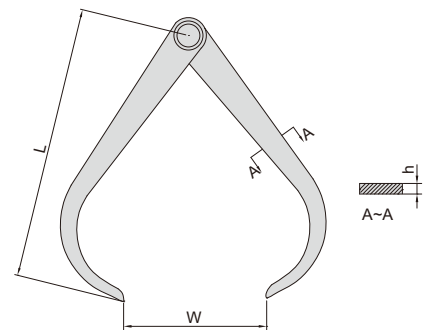


- Made of carbon steel

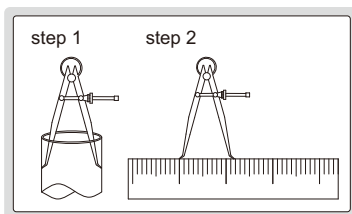
Code	Size (L)	Range (W)	h
7241-150	150mm	0-150mm	2mm
7241-200	200mm	0-200mm	3mm
7241-300	300mm	0-300mm	3mm



7241-150



INSIDE SPRING CALIPERS

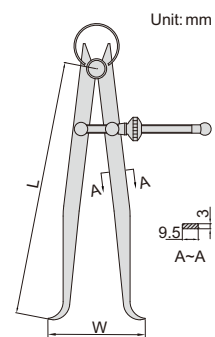


- Made of carbon steel

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



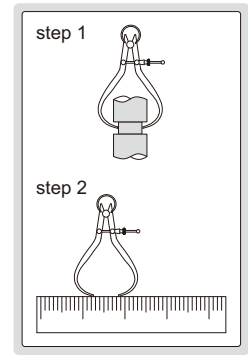
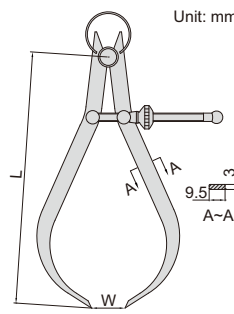
7261-150



OUTSIDE SPRING CALIPERS

- Made of carbon steel

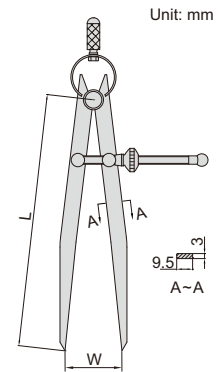
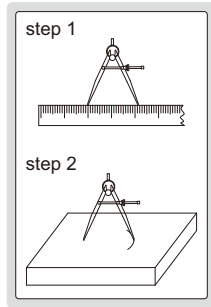
Code	Size (L)	Range (W)
7262-150	155mm	0-140mm
7262-200	210mm	0-210mm
7262-250	265mm	0-270mm
7262-300	310mm	0-320mm



SPRING DIVIDERS

- Made of carbon steel
- Hardened points

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

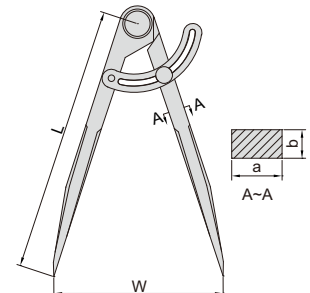
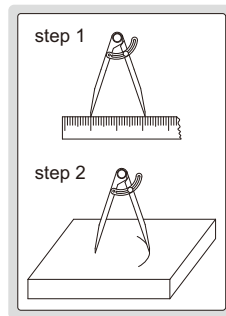


7260-150

DIVIDERS

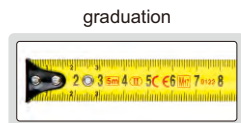
- Made of carbon steel
- Hardened points

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

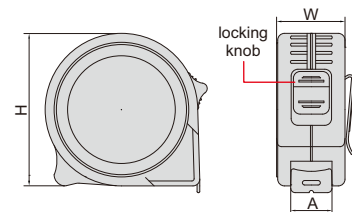
MEASURING TAPES



EG II

- Non-glare nylon surface for wear resistance

7140-5



Individual (1 pc per package)

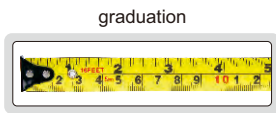
Code	Range	Graduation	Width of tape A	W	H
7140-3	0-3m	1mm	16mm	28mm	62mm
7140-5	0-5m	1mm	19mm	30mm	68mm
7140-8	0-8m	1mm	25mm	38mm	78mm

Set (12 pcs per package)

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

EG II

MEASURING TAPES (BASIC TYPE)



7142-5

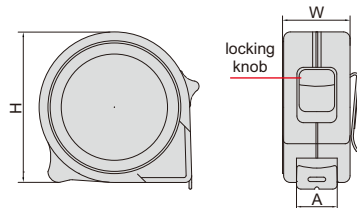
- Non-glare nylon coating tape, wear resistance

Individual (1 pc per package)

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

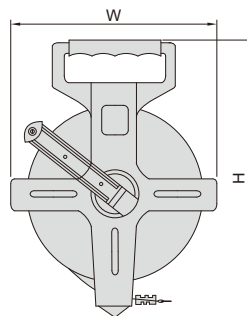
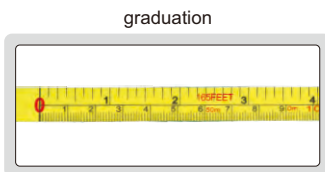
Set (12 pcs per package)

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



EG II

LONG MEASURING TAPE



7143-50

- 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

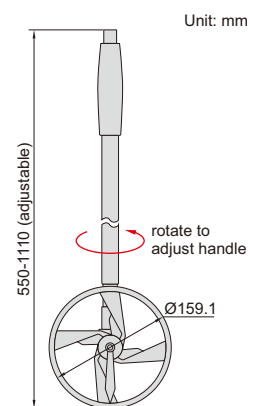
11

MEASURING WHEEL (BASIC TYPE)

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



7144-1



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

MEASURING WHEEL

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



after folding

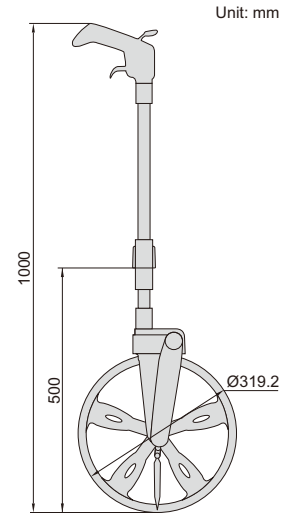


backpack (included)

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



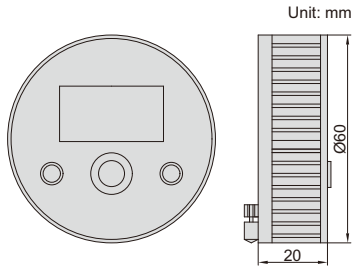
7145-1



Unit: mm

DIGITAL MEASURING WHEEL

IP40
WATERPROOF



Unit: mm



7146-10



scriber



- IP40 dust/waterproof
- Measuring length of curve
- Four measurement modes: length, rectangle area, diameter of circle, cube
- Resolution: 0.001m/0.01ft
- Button function: on/off, mm/inch, one or two sides set, measurement mode conversion, measurement
- Battery CR2032, automatic power off

Code	Range	Accuracy
7146-10	0-10m/0-32.8ft	±0.3%L (L is the measured length)

RIGID RULE



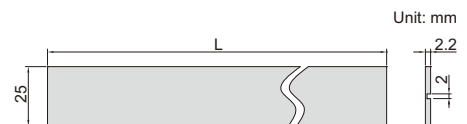
7113-300A



groove on the back

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

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



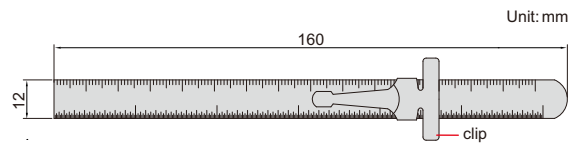
Unit: mm

POCKET RULE WITH SLIDING CLIP

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



7119-150

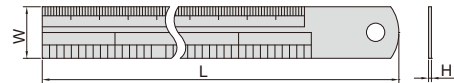


Code	Range	Graduation	Accuracy
7119-150	150mm/6"	1mm, 1/64"	±0.15mm

STEEL RULES



7110-300



Individual (1 pc per package)

(mm)

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
7110-1200	1200mm/48"	±0.63mm	1240	35	1.8	graduation on front
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

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

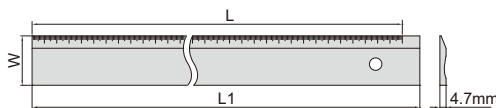
Set

(mm)

Code	Range	Accuracy	L	W	H	Remark	Quantity per package
7110-150A	150mm/6"	±0.18mm	170	18	1.0	graduation on front and back	10 pcs
7110-200A	200mm/8"	±0.18mm	220	18	1.0	graduation on front and back	10 pcs
7110-300A	300mm/12"	±0.27mm	330	25	1.0	graduation on front and back	5 pcs
7110-3001A	300mm/12"	±0.27mm	325	30	1.0	graduation on front and back	5 pcs
7110-500A	500mm/20"	±0.27mm	530	30	1.2	graduation on front and back	5 pcs
7110-600A	600mm/24"	±0.45mm	630	30	1.2	graduation on front and back	5 pcs
7110-1000A	1000mm/40"	±0.45mm	1040	32	1.5	graduation on front and back	5 pcs
7110-1200A	1200mm/48"	±0.63mm	1240	35	1.8	graduation on front	5 pcs
7110-1500A	1500mm/60"	±0.63mm	1550	38	1.8	graduation on front	5 pcs
7110-2000A	2000mm/80"	±0.80mm	2065	40	2.0	graduation on front	5 pcs

ALUMINUM RULES

- Made of aluminum, oxidized surface



7123-300

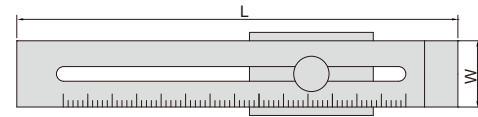
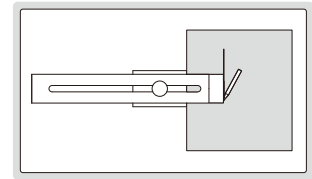
Code	Range (L)	Graduation	Accuracy	L1	W
7123-300	300mm	1mm	±0.5mm	321mm	50mm
7123-600	600mm	1mm	±0.9mm	624mm	50mm
7123-1000	1000mm	1mm	±0.9mm	1024mm	50mm

MARKING GAGES

- Made of carbon steel
- Satin chrome plated

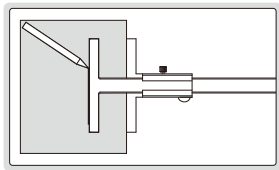


7120-200A

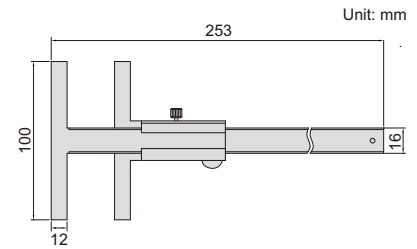


Code	Range	Graduation	Accuracy	L	W
7120-200A	0-200mm	0.1mm	±0.1mm	250mm	40mm
7120-250A	0-250mm	0.1mm	±0.1mm	300mm	40mm
7120-300A	0-300mm	0.1mm	±0.1mm	350mm	40mm

T-SHAPE MARKING GAGE



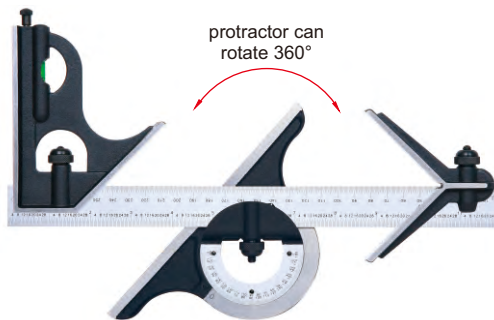
1275-150B



- Made of stainless steel
- Satin chrome plated reading surface

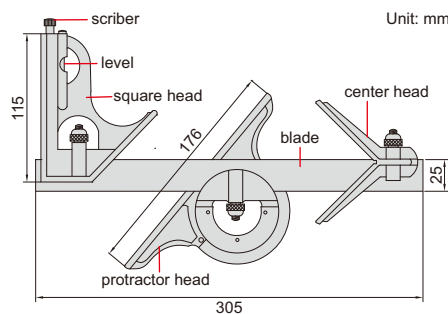
Code	Range	Graduation	Accuracy
1275-150B	0-150mm	0.02mm	±0.04mm

COMBINATION SQUARE SET



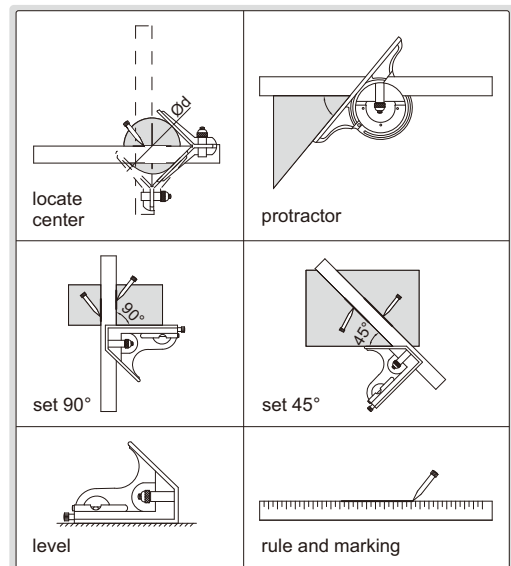
2274-4

- Center head (made of cast iron): to locate center of cylinders with diameter (Ød): 30-100mm accuracy: ±0.15mm
- Protractor head (made of cast iron): 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): 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)



Unit: mm

Code	Remark
2274-4	4-piece set



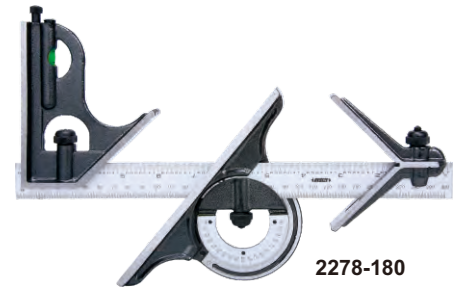
COMBINATION SQUARE SETS



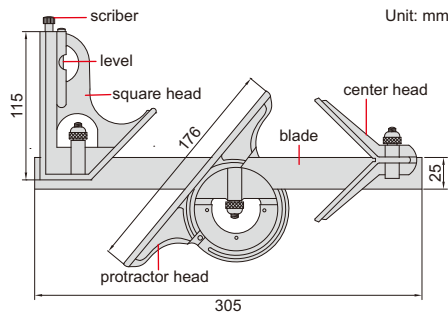
2278-2



2278-3

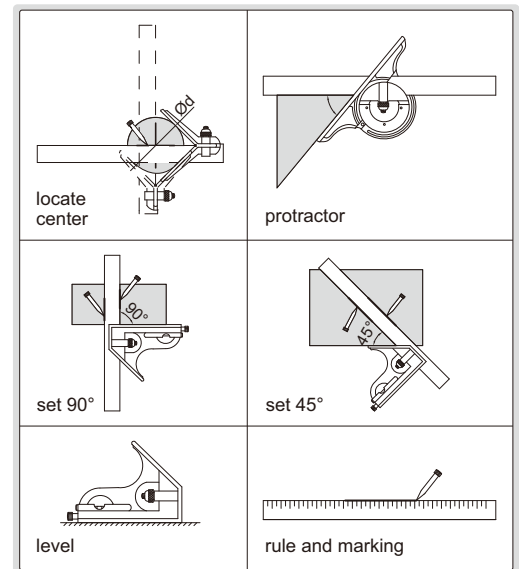


2278-180



- Center head (made of cast iron): to locate center of cylinders with diameter (\varnothing): 30-100mm accuracy: ± 0.15 mm
- Protractor head (made of cast iron): set the blade at desired angle to an edge of a workpiece, and can be used to measure angles range: 0-180° accuracy: ± 20 min.
- Square head (made of cast iron): 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)

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

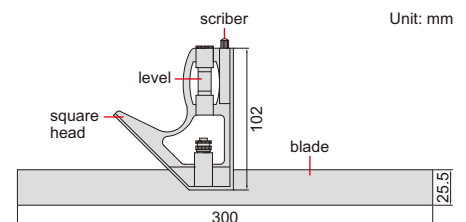
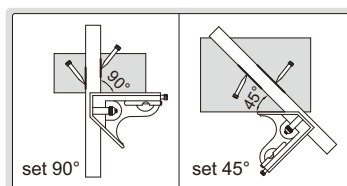


COMBINATION SQUARE (ECONOMIC TYPE)



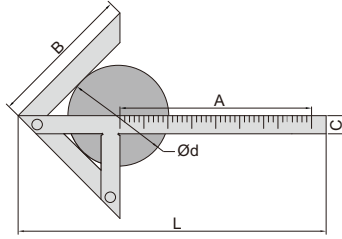
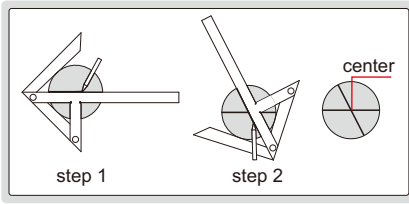
2276-300

- Square head (made of zinc): 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/12", graduation: 1mm and 1/32" on front face, 1mm and 1/16" on back face



Code
2276-300

CENTER MARKING GAGES



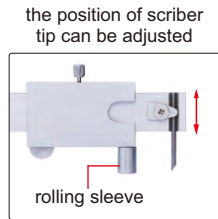
7205-100

Code	Size (AxB)	Diameter of shafts ($\varnothing d$)	Accuracy	C	L
7205-100	100x70mm	4-90mm	$\pm 0.15\text{mm}$	12mm	153mm
7205-150	150x130mm	4-190mm	$\pm 0.15\text{mm}$	15mm	245mm
7205-200	200x150mm	6-220mm	$\pm 0.15\text{mm}$	15mm	310mm
7205-300	300x180mm	6-270mm	$\pm 0.15\text{mm}$	20mm	435mm

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

SCRIBING CALIPER

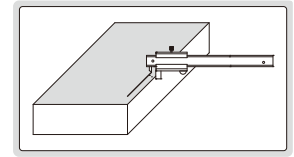
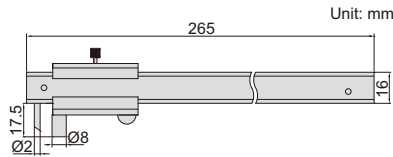
- Made of stainless steel
- Satin chrome plated reading surface
- Carbide scriber tip
- Optional accessory: carbide scriber tip (code SP-SCRIBER-7202)



the position of scriber tip can be adjusted



7202-200A



Code	Range	Graduation	Accuracy
7202-200A	0-200mm/0-8"	0.1mm, 1/128"	$\pm 0.1\text{mm}$

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
- Made of stainless steel

DATA OUTPUT

With data interface (data output cable code 7315-21, 7302-21, optional)

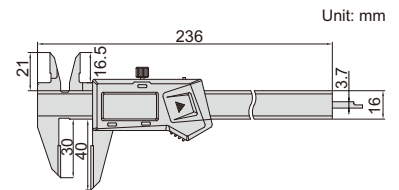
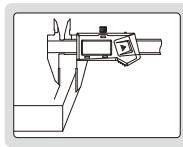
Code	Range	Accuracy
1166-150A	0-150mm/0-6"	$\pm 0.03\text{mm}$

Built-in wireless (receiver code 7315-2/3/6/7/8 is required)

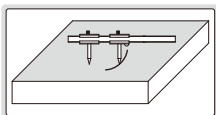
Code	Range	Accuracy
1166-150AWL	0-150mm/0-6"	$\pm 0.03\text{mm}$



1166-150A



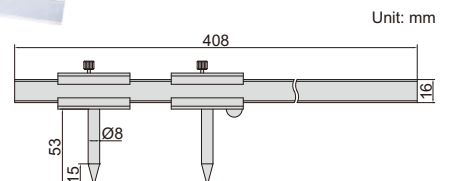
SCRIBING CALIPER



7203-300A

Code	Range	Graduation	Accuracy
7203-300A	51-300mm	0.1mm	$\pm 0.1\text{mm}$

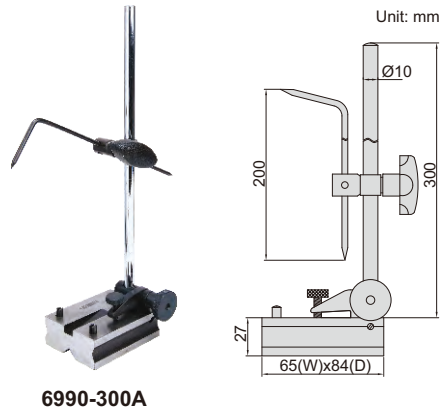
- Made of stainless steel
- Satin chrome plated reading surface
- Hardened scriber tips



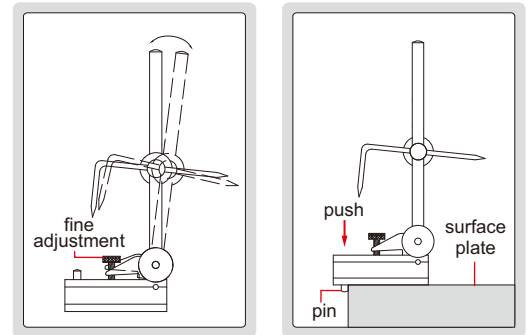
HEIGHT SCRIBER

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

Code
6990-300A



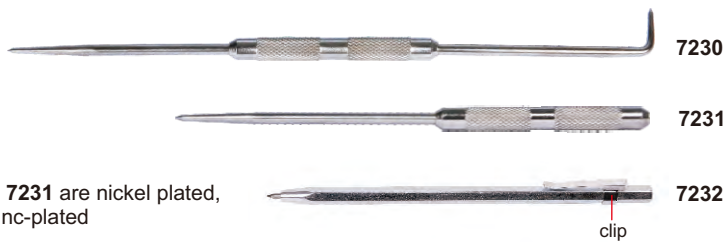
6990-300A



SCRIBERS

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

Code	Tip
7230	hardened tips
7231	hardened tip
7232	carbide tip

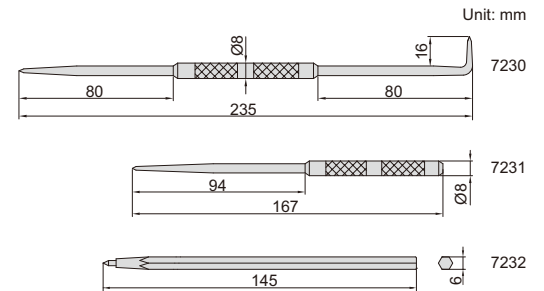


7230

7231

7232

clip



Unit: mm

7230

7231

7232

PRECISION SCREWDRIVER SET CODE ISGF-0901

packaging



ISGF-0901

- Includes:
 - 4 pcs "-": 1.4mm, 2.0mm, 2.4mm, 3.0mm
 - 2 pcs "+": 0#, 1#
- Rotating cap
- Material: CRV, hardness: HRC52~56

packaging



ISGF-0501

LED FLASHLIGHT CODE ISGF-0501

- Toshiba high performance LED
- Powered by 3x AAA batteries (batteries are not included)
- Max output: 120 lumens
- Battery life: 4 hours
- Beam distance: 70 meters
- IP54 dust/waterproof