TAPER BORE GAUGES
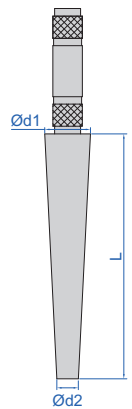
- Quick measurement of bore diameter
- Hardened steel, HRC50-58
- Satin chrome plated surface
- Aluminium oxided handle

(mm)

Code	Range	Graduation	Accuracy	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

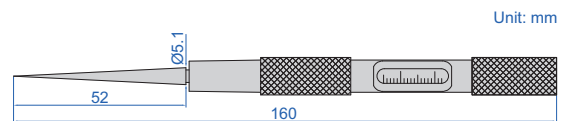# SMALL TAPER BORE GAUGE

4855-5

Unit: mm

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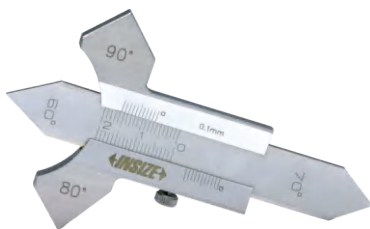- Hardened working face
- Supplied with protection cap

supplied with protection cap

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

WELDING GAUGE

4830

Unit: mm
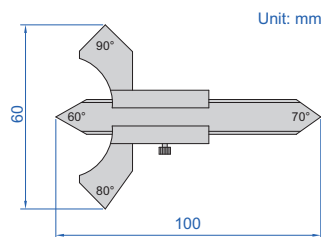
- Made of stainless steel
- Satin chrome plated reading surface

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

crown height

fillet weld throat size

angle

15

458
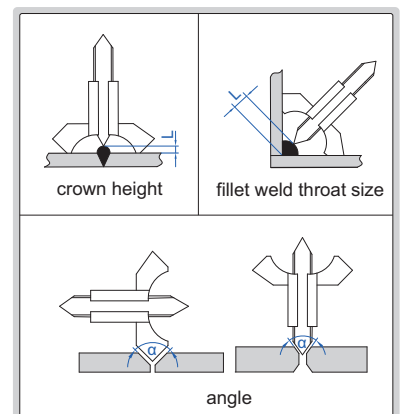
DIGITAL WELDING GAUGE

4831-20A

Unit: mm

60
100
90°
60°
80°
70°
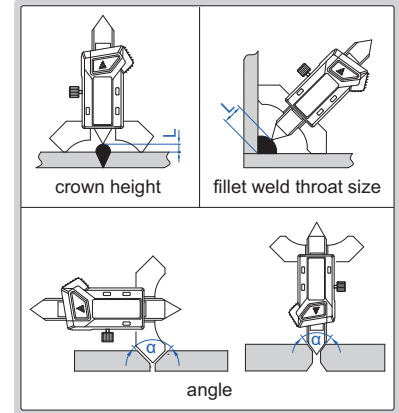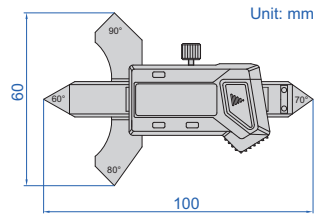
- Non waterproof
- Buttons: zero, mm/inch, on/off
- Battery LR44
- Made of stainless steel

crown height | fillet weld throat size

angle

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°

WELDING GAUGE

- Made of stainless steel

4850-1

Unit: mm

54
58

leg height (b)
theoretical throat size (a) | throat size
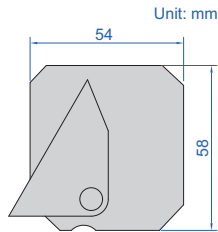
angle of preparation | thickness

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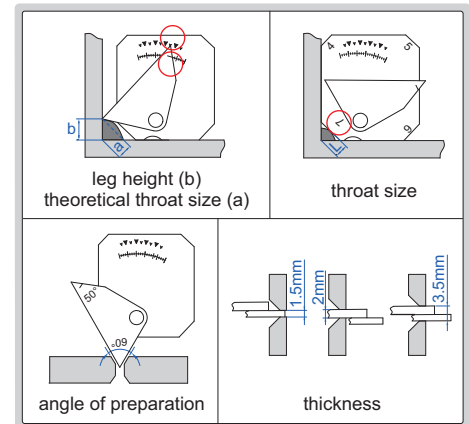
WELDING GAUGE

4851-1

Unit: mm

80
76

leg height | crown height

theoretical leg height
of convex weld | theoretical leg height
of concave weld
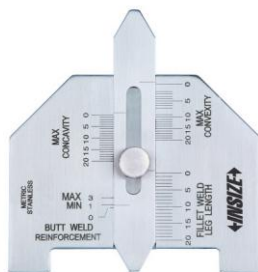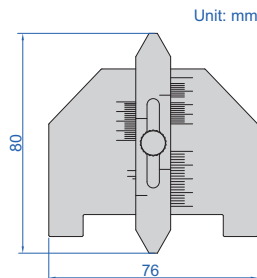
- Made of stainless steel

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 GAUGE

scale B
scale C
scale A
reading line
(on transparent
plastic plate)

scale A
scale B
scale C

Unit: mm

103

50
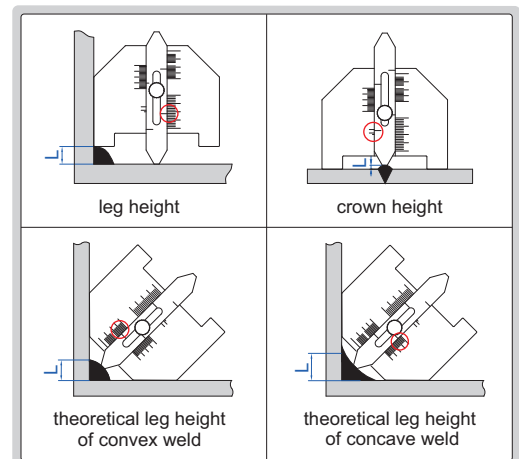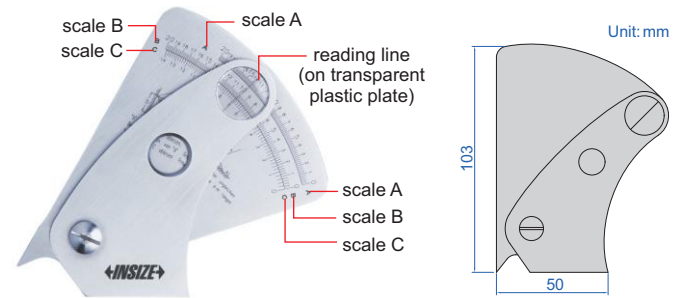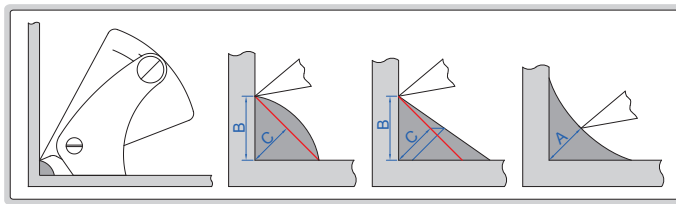
4840-1

Code	Graduation	Accuracy
4840-1	0.2mm	±0.3mm

■ Made of stainless steel

WELDING GAUGE

locking screw

Unit: mm

102

32
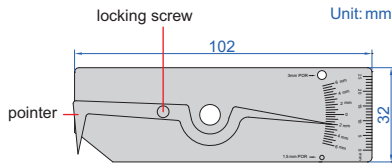
pointer

4834-1

■ Pointer can be locked for later reference
■ Made of stainless steel
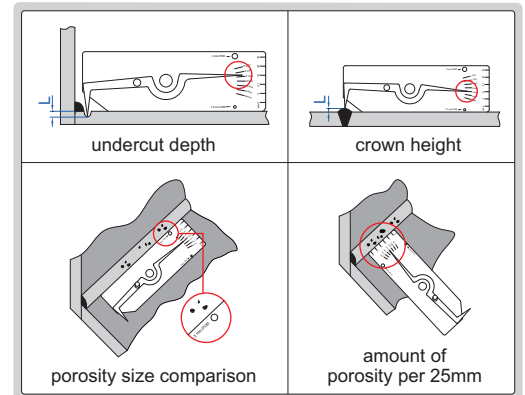
Code	Measurement	Range	Graduation	Accuracy
4834-1	undercut depth	0-6mm	0.5mm	±0.5mm
	crown height	0-6mm	0.5mm	±0.5mm
	porosity size comparison	1.5mm, 3mm	—	±0.2mm
	amount of porosity per 25mm	25mm	1mm	—

undercut depth | crown height
porosity size comparison | amount of porosity per 25mm

WELDING GAUGE

Unit: mm

45

5

20

Ø2.5

pointer

125
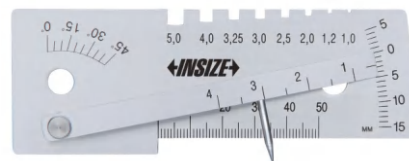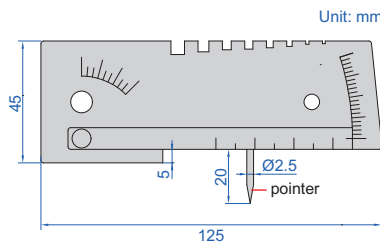
4848-1

■ Made of stainless steel

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

misalignment (high-low) | length
angle of preparation | gap
 | thickness

15
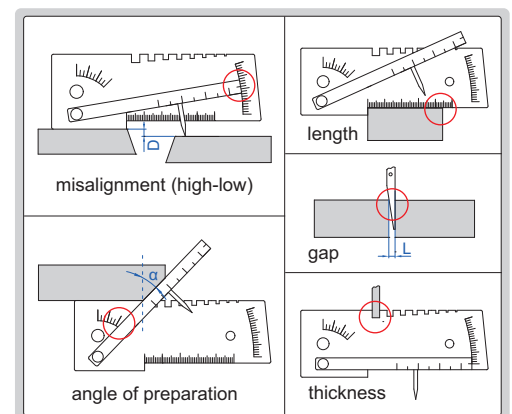
FILLET WELDING GAUGE
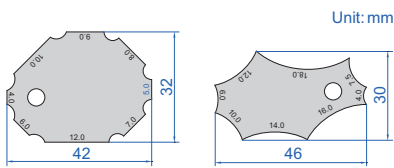
Unit: mm

4832-1

- Made of stainless steel
- Sizes marked on both faces
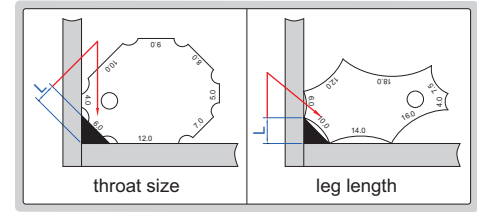
Code	Throat size	Leg length	Accuracy
4832-1	4, 5, 6, 7, 8, 9, 10, 12mm	4, 6, 7.5, 10, 12, 14, 16, 18mm	±0.5mm

throat size | leg length

FILLET WELDING GAUGES
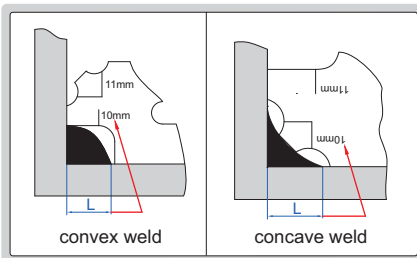
convex weld | concave weld

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

4836-1   **4836-2**

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)
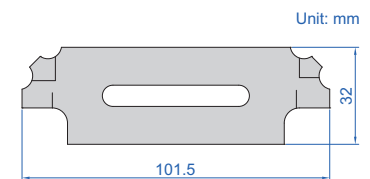
Unit: mm

FILLET WELDING GAUGE

Unit: mm

4846-1

weld seam height of acute angle | weld seam height of obtuse angle

angle | angle of preparation
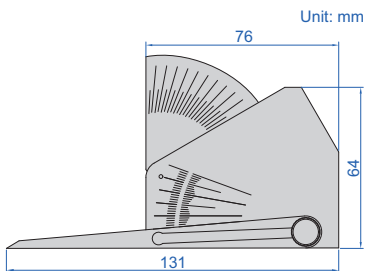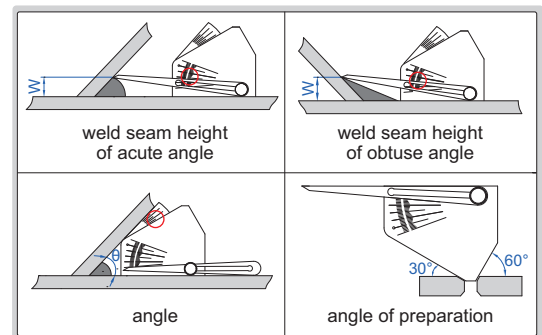
calculating card (included)

- Calculating card is included
- Made of stainless steel

FILLET WELD CALCULATOR

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

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

461

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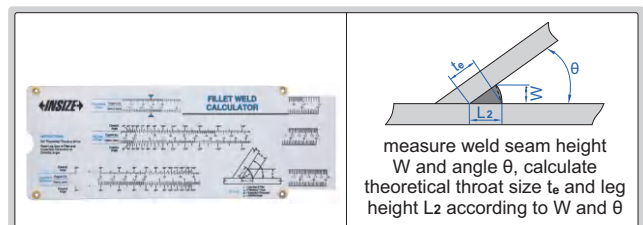
- Measure convex weld sizes
- 3 blades are included
- Made of stainless steel

Unit: mm

90
22

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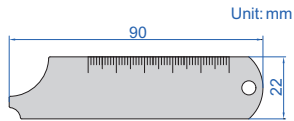
convex weld size | length
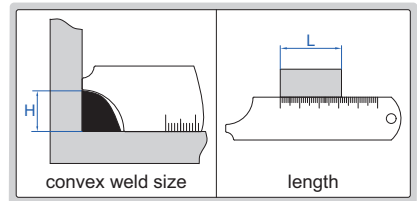
Code	Measurement	Range	Graduation	Accuracy
4847-1	convex weld size	4, 6, 8, 10, 12, 14mm	—	±0.5mm
	length	0-50mm	1mm	±0.5mm

WELDING UNDERCUT GAUGE

Unit: mm

0.5
0.25
45°
Ø6.5
100
20

0.25 ±0.01mm
100
6.5
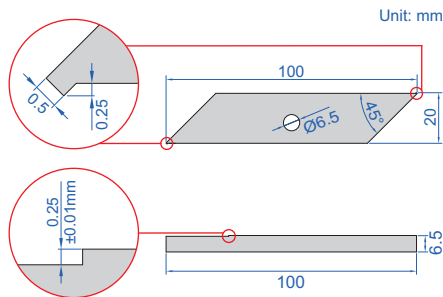
4849-1

calibration block (included)

application
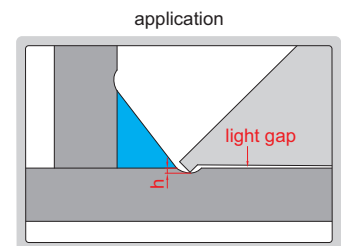
light gap
h

when there is a light gap, h<0.25mm;
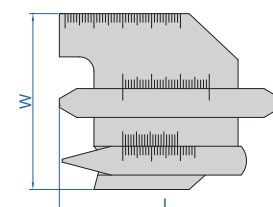when there is no light gap, h≥0.25mm

Code
4849-1

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

WELDING GAUGES

crown height | leg height | weld length | angle
undercut depth | throat size | gap | length

front **4838-1** back

front **4838-2** back

W
L
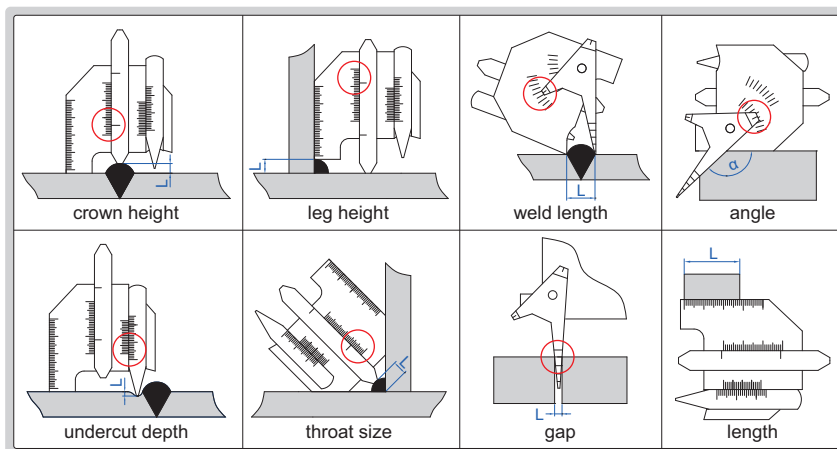
- Made of stainless steel

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		

15

462

WELDING GAUGE

crown height	fillet weld leg height
misalignment (high-low)	undercut depth
fillet weld throat size	angle of preparation
length	45° angle

front   back
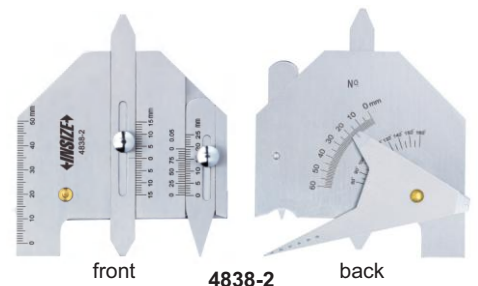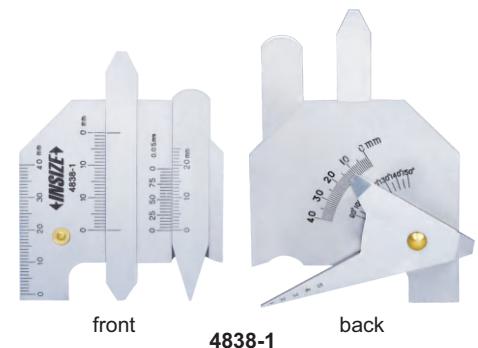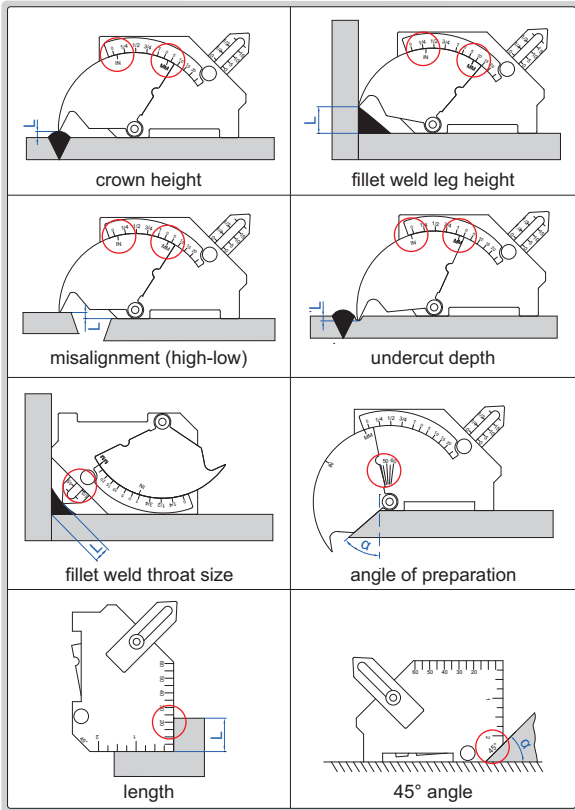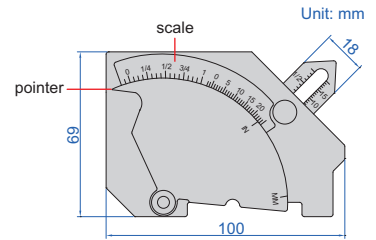
4835-1

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

Unit: mm

scale
pointer

69
100
18

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

WELDING GAUGE

front   back

6832-1

Unit: mm

56
47
10
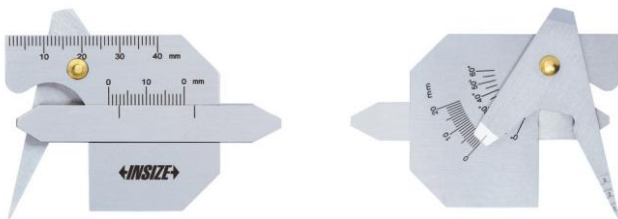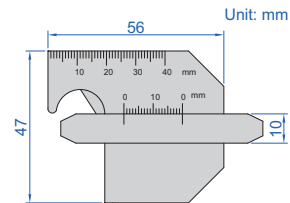
- Made of stainless steel
- Satin chrome plated surface

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

leg length	leg height	crown height	throat size
angle	gap		length

15

463
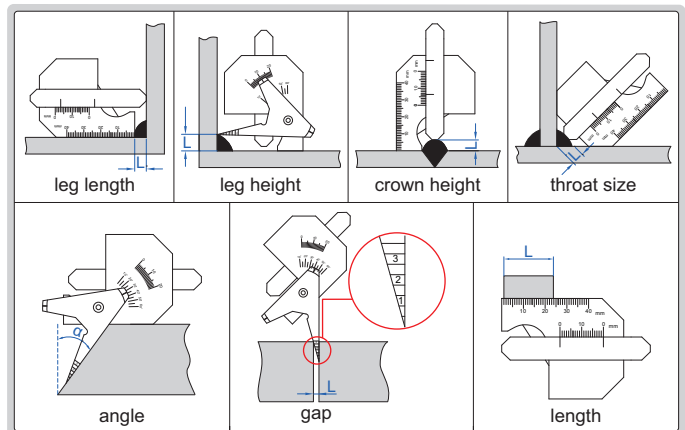
PIPE WELDING GAUGE

- Made of stainless steel
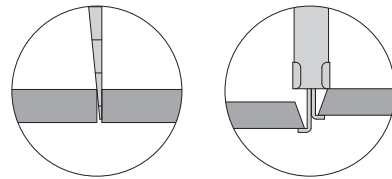
fit-up gap

internal misalignment

Unit: mm

14

150

7.7
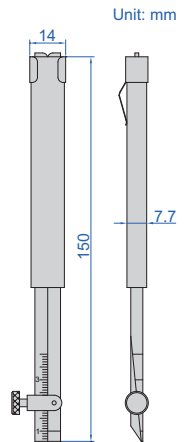
4841-1

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 GAUGE

37.5° 37.5°

bevel on end preparation

pipe wall thickness

internal misalignment

1.6mm

2.4mm

fit-up gap

crown height

L

distance between two marking lines of socket weld

H

H

L

fillet weld length and height

Unit: mm

158

64

front   back

4839-1

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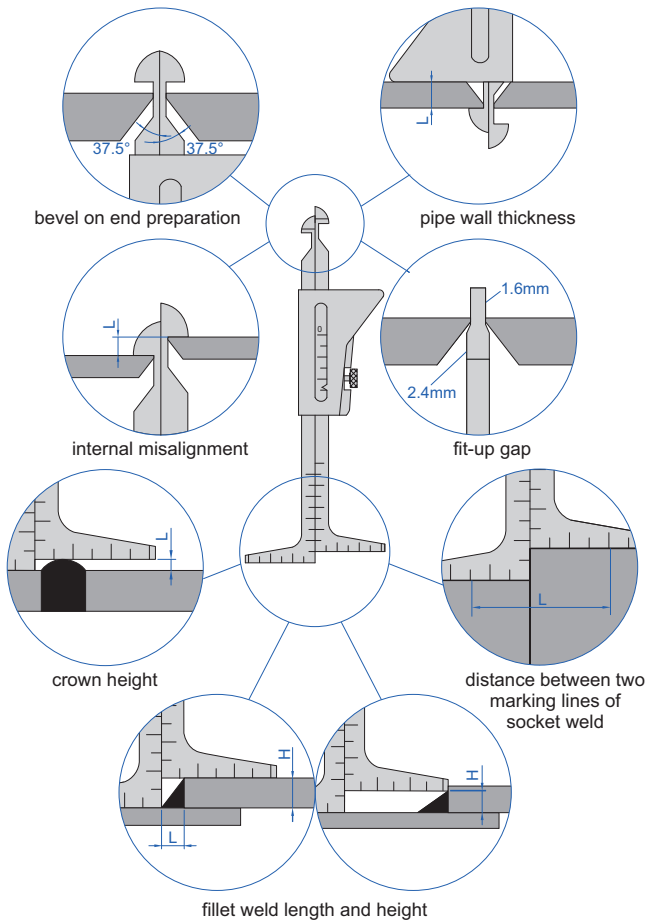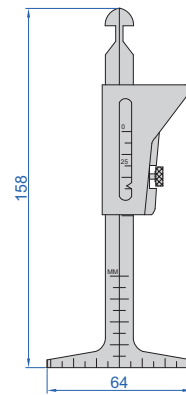
Code	Measurement	Range	Graduation	Accuracy
4839-1	bevel on end preparation	37.5°	—	±1°
	pipe wall thickness	0-45mm (0~1-3/4")	1mm (1/16")	±0.5mm
	internal misalignment	0-35mm (0~1-3/8")	1mm (1/32")	±0.5mm
	fit-up gap	1.6mm, 2.4mm	—	±0.1mm
	crown height	0-35mm (0~1-3/8")	1mm (1/32")	±0.5mm
	distance between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

15

464

6-PIECE WELDING GAUGE SET

- Includes:
  1) Welding gauge (code **4834-1**)
  2) Fillet welding gauge, size 3~25mm, 7 blades (code **4836-1**)
  3) Pipe welding gauge (code **4841-1**)
  4) Telescoping inspection mirror, size of mirror Ø32mm,
     length 178~505mm (code **7160-1**)
  5) Pocket ruler 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 GAUGE SET

- Includes:
  1) Welding gauge (code **4834-1**)
  2) Welding gauge (code **4851-1**)
  3) Pipe welding gauge (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 ruler, range 150mm/6", graduation 0.5mm, 1mm,
     1/64", 1/32", 1/16" (code **7110-150**)

5071

Code
5071

7-PIECE WELDING GAUGE SET

15

- Includes:
  1) Welding gauge (code **4834-1**)
  2) Welding gauge (code **4851-1**)
  3) Fillet welding gauge, 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 ruler 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

465