



PROTRACTOR
COMBINATION SQUARE
SQUARE
FEELER GAGE
PITCH GAGE
ANGLE GAGE
RADIUS GAGE
WIRE GAGE
SHEET METAL GAGE
TAPER GAGE
WELDING GAGE
KEYWAY GAGE
TELESCOPING GAGE
RULE
STRAIGHTEDGE

PROTRACTOR



Code	Diameter of protractor	Length of blade
4780-85	85mm/3.3"	150mm/6"

- Range 0-180°, two directions, graduation 1°
- Satin chrome plated scale
- With locking screw
- Made of stainless steel
- Packed in leathery pouch

PROTRACTOR



Code	Diameter of protractor	Length of blade
4799-180	80mm/3.1"	120mm/4.7"
4799-1120	120mm/4.7"	150mm/6"
4799-1150	150mm/6"	200mm/8"
4799-1200	200mm/8"	300mm/12"
4799-1300	300mm/12"	500mm/20"

- Range 0-180°, graduation 1°
- Satin chrome plated scale
- With locking screw
- Made of stainless steel
- Packed in leathery pouch

PROTRACTOR



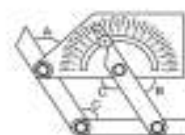
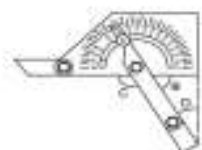
Code	Diameter of protractor	Length of blade
4797-100	100mm/4"	150mm/6"
4797-150	150mm/6"	300mm/12"
4797-200	200mm/8"	400mm/16"
4797-250	250mm/10"	500mm/20"
4797-300	300mm/12"	600mm/24"

- Blade is adjustable
- Range 10-170°, graduation 1°
- Satin chrome plated scale
- With locking screw
- Made of stainless steel
- Packed in leathery pouch

PROTRACTOR

- Graduation 1°, two directions
- Satin chrome plated scale
- With locking screw
- Made of stainless steel
- Packed in leathery pouch

Code	Range
4796	0-180°



PROTRACTOR

- Graduation 2°
- Satin chrome plated scale, with fine adjustment
- Packed in plastic box

Code	Range
2374-320	0-320°



PROTRACTOR



Code	Range
2372-360	0-360°

- Graduation 5°
- Parallax-free reading
- Satin chrome plated scale
- With fine adjustment and locking screw
- Two blades: 150mm/6" and 300mm/12"
- With magnifier and small angle attachment
- Clamp for height gages is optional
- Made of stainless steel
- Packed in plastic box

DIAL PROTRACTOR



Code	Range
2373-360	0-360°

- Graduation 5'
- With locking screw
- Two blades: 150mm/6" and 300mm/12"
- With small angle attachment
- Clamp for height gages is optional
- Made of stainless steel
- Packed in plastic box

ELECTRONIC DIGITAL PROTRACTOR



Code	Range	Resolution
2172-360	0-360°	30"/0.005°

- Display in degree and degree/minute/second
- PRESET button: preset any angle
- MODE button: choose 0-90°, 0-180° or 0-360°
- ZERO/ON button: zero and power on
- +/- button: reversal of measuring direction
- Two blades 150mm/6" and 300mm/12"
- With fine adjustment and small angle attachment
- Supplied with standard square for 90° set
- Made of stainless steel
- Packed in wooden box

COMBINATION SQUARE SET



Code
2278-180
2278-180E

- Used as square, level, marking gage, scribe, center gage, protractor and steel rule
- Square: 90° and 45°, with level and scribe
- Protractor graduated 180° in both directions, with level
- Blade graduation:
 - 2278-180: 1/2mm and 1/32" on one side, 1mm and 1/64" on reverse side
 - 2278-180E: 1/8" and 1/16" on one side, 1/32" and 1/64" on reverse side
- Packed in plastic box

COMBINATION SQUARE SET



Code	Blade length	Graduation
2279-1	6"	1/8", 1/16", 1/32", 1/64"
2279-2	150mm/6"	1/2mm, 1mm, 1/32", 1/64"

- Used as square, level, marking gage, scribe, center gage and steel rule
- Square: 90° and 45°
- With level and scribe
- Packed in plastic box

DOUBLE SQUARE



Code	Blade length	Graduation
2277-1	4"	1/8", 1/16", 1/32", 1/64"
2277-2	6"	1/8", 1/16", 1/32", 1/64"
2277-3	100mm/4"	1/2mm, 1mm, 1/32", 1/64"
2277-4	150mm/6"	1/2mm, 1mm, 1/32", 1/64"

- Hardened and chrome plated blade
- Packed in plastic box

ELECTRONIC COMBINATION SQUARE



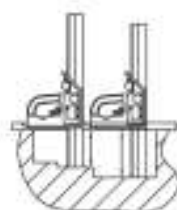
Level



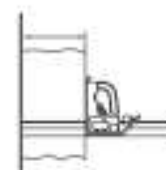
Check 90° angle



Check 135° angle



Depth measurement



Length measurement



Depth measurement



Marking



Marking



Marking

- Patented
- Supplied with level vial and scriber
- Blade is graduated in 1/32" and 1mm
- Packed in plastic box

Code

2174

90° TOOL MAKER SQUARE

- DIN875 grade 00
- Made of hardened stainless steel
- One beveled edge
- Packed in plastic box



Code	Size
4790-025	25x20mm
4790-040	40x28mm

90° BEVELED EDGE SQUARE

- Satin chrome plating
- Two beveled edges
- Made of hardened stainless steel
- Packed in plastic box or wooden box



Metric

- DIN875 grade 00 (option: grade 0 and 1)

Code	Size
4790-050	50x40mm
4790-075	75x50mm
4790-0100	100x70mm
4790-0150	150x100mm
4790-0200	200x130mm
4790-0250	250x165mm
4790-0300	300x200mm

Inch

Code	Size	Squareness
4790-0E2	2x1.6"	0.00012"
4790-0E3	3x2"	0.00012"
4790-0E4	4x2.75"	0.00012"
4790-0E6	6x4"	0.00016"
4790-0E8	8x5"	0.00016"
4790-0E10	10x6.5"	0.00020"
4790-0E12	12x10"	0.00020"

90° FLAT EDGE SQUARE

- DIN875 grade 0
- Flat edge
- Made of hardened stainless steel
- Packed in plastic box or wooden box

Code	Size
4791-50	50x40mm
4791-75	75x50mm
4791-100	100x70mm
4791-150	150x100mm
4791-200	200x130mm
4791-250	250x165mm
4791-300	300x200mm



90° FLAT EDGE SQUARE WITH WIDE BASE

- DIN875 grade 0
- Flat edge
- Made of hardened stainless steel
- Packed in plastic box or wooden box

Code	Size
4793-50	50x40mm
4793-75	75x50mm
4793-100	100x70mm
4793-150	150x100mm
4793-200	200x130mm
4793-250	250x165mm
4793-300	300x200mm



90° FLAT EDGE SQUARE WITH WIDE BASE

- Flat edge
- Made of hardened stainless steel
- Packed in plastic box or wooden box

Metric

- DIN875 grade 0

Code	Size
4792-50	50x40mm
4792-75	75x50mm
4792-100	100x70mm
4792-150	150x100mm
4792-200	200x130mm

Inch

Code	Size	Squareness
4792-E2	2x1.6"	0.00024"
4792-E3	3x1.9"	0.00026"
4792-E4	4x2.7"	0.00028"
4792-E6	6x3.9"	0.00031"
4792-E8	8x5.1"	0.00035"



90° BEVELED EDGE SQUARE WITH WIDE BASE

- DIN875 grade 0
- Beveled edge
- Made of hardened stainless steel
- Packed in plastic box or wooden box

Code	Size
4795-50	50x40mm
4795-75	75x50mm
4795-100	100x70mm
4795-150	150x100mm
4795-200	200x130mm



ADJUSTABLE SQUARE



- DIN875 grade 00
- The straight edge can be moved and locked by the clamping screw
- Made of hardened stainless steel
- Packed in plastic box

Code	Size of block	Size of straight edge
4701-1	40x22x10mm	6x4x4mm

45° SQUARE



- Flat edge
- Made of hardened stainless steel
- Packed in plastic box or carton

Metric

- DIN875 grade 2

Code	Size
4745-1100	100x70mm
4745-1120	120x80mm
4745-1150	150x100mm
4745-1200	200x130mm
4745-1250	250x160mm
4745-1300	300x200mm

Inch

Code	Size	Accuracy
4745-1E4	4x2.7"	0.0012"
4745-1E47	4.7x3.15"	0.0013"
4745-1E6	6x4"	0.0014"
4745-1E8	8x5.1"	0.0016"
4745-1E10	10x6"	0.0018"
4745-1E12	12x8"	0.0020"

45° SQUARE WITH WIDE BASE

- Flat edge
- Made of hardened stainless steel
- Packed in plastic box or carton

Metric

- DIN875 grade 2

Code	Size
4747-100	100x70mm
4747-120	120x80mm
4747-150	150x100mm
4747-200	200x130mm
4747-250	250x160mm
4747-300	300x200mm

Inch

Code	Size	Accuracy
4747-E4	4x2.7"	0.0012"
4747-E47	4.7x3.15"	0.0013"
4747-E6	6x4"	0.0014"
4747-E8	8x5.1"	0.0016"
4747-E10	10x6"	0.0018"
4747-E12	12x8"	0.0020"



60° SQUARE

- Flat edge
- Made of hardened stainless steel
- Packed in plastic box or carton

Metric

- DIN875 grade 2

Code	Size
4760-1100	100x70mm
4760-1120	120x80mm
4760-1150	150x100mm
4760-1200	200x130mm
4760-1250	250x160mm
4760-1300	300x200mm

Inch

Code	Size	Accuracy
4760-1E4	4x2.7"	0.0012"
4760-1E47	4.7x3.15"	0.0013"
4760-1E16	6x4"	0.0014"
4760-1E8	8x5.1"	0.0016"
4760-1E10	10x6"	0.0018"
4760-1E12	12x8"	0.0020"



60° SQUARE WITH WIDE BASE

- Flat edge
- Made of hardened stainless steel
- Packed in plastic box or carton

Metric

- DIN875 grade 2

Code	Size
4762-100	100x70mm
4762-120	120x80mm
4762-150	150x100mm
4762-200	200x130mm
4762-250	250x160mm
4762-300	300x200mm



Inch

Code	Size	Accuracy
4762-E4	4x2.7"	0.0012"
4762-E47	4.7x3.15"	0.0013"
4762-E6	6x4"	0.0014"
4762-E8	8x5.1"	0.0016"
4762-E10	10x6"	0.0018"
4762-E12	12x8"	0.0020"

120° SQUARE

- Flat edge
- Made of hardened stainless steel
- Packed in plastic box or carton

Metric

- DIN875 grade 2

Code	Size
4706-150	50x50mm
4706-175	75x75mm
4706-1100	100x100mm
4706-1150	150x150mm
4706-1200	200x200mm



Inch

Code	Size	Accuracy
4706-1E2	2x2"	0.0010"
4706-1E3	3x3"	0.0011"
4706-1E4	4x4"	0.0012"
4706-1E6	6x6"	0.0014"
4706-1E8	8x8"	0.0016"

135° SQUARE WITH WIDE BASE



- Flat edge
- Made of hardened stainless steel
- Packed in plastic box or carton

Metric

- DIN875 grade 2

Code	Size
4754-3100	100x70mm
4754-3120	120x80mm
4754-3150	150x100mm
4754-3200	200x130mm
4754-3250	250x165mm
4754-3300	300x175mm

Inch

Code	Size	Accuracy
4754-3E4	4x2.7"	0.0012"
4754-3E47	4.7x3.15"	0.0013"
4754-3E6	6x4"	0.0014"
4754-3E8	8x5.1"	0.0016"
4754-3E10	10x6.5"	0.0018"
4754-3E12	12x7"	0.0020"

STRAIGHT EDGE



- Satin chrome plating
- Beveled edge
- Made of hardened stainless steel
- Packed in leathery pouch

Metric

- DIN874

Code	Size
4700-50	50mm
4700-75	75mm
4700-100	100mm
4700-125	125mm
4700-150	150mm
4700-200	200mm
4700-250	250mm
4700-300	300mm
4700-400	400mm
4700-500	500mm

Inch

Code	Size	Straightness
4700-E2	2"	0.00008"
4700-E3	3"	0.00008"
4700-E4	4"	0.00008"
4700-E5	5"	0.00012"
4700-E6	6"	0.00012"
4700-E8	8"	0.00012"
4700-E10	10"	0.00012"
4700-E12	12"	0.00012"
4700-E16	16"	0.00012"
4700-E20	20"	0.00016"

SQUARE SET

- Includes:
 - straight edge 100mm DIN874
 - 90° beveled edge square 75x50mm DIN875 grade 00
 - 90° tool maker square 25x20mm DIN875 grade 00
 - 90° tool maker square 40x28mm DIN875 grade 00
 - scriber 60x8x8mm
- Made of stainless steel
- Packed in plastic box



Code

4702-1

MACHINIST SQUARE

- Galvanized
- Ground surfaces
- Packed in carton



Code	Size
4703-100	100x70mm
4703-150	150x100mm
4703-200	200x130mm
4703-250	250x160mm
4703-300	300x180mm
4703-400	400x230mm
4703-500	500x280mm

MACHINIST SQUARE WITH WIDE BASE

- Galvanized
- Ground surfaces
- Packed in carton



Code	Size
4704-100	100x70mm
4704-150	150x100mm
4704-200	200x130mm
4704-250	250x160mm
4704-300	300x180mm
4704-400	400x230mm
4704-500	500x280mm

MACHINIST SQUARE WITH WIDE BASE

Individual Square

Code	Size	Code	Size
4707-50	50x40mm	4707-2	2x1-1/2"
4707-75	75x50mm	4707-3	3x2-1/2"
4707-100	100x70mm	4707-4	4x3"
4707-150	150x100mm	4707-6	6x4"
4707-200	200x130mm	4707-8	9x6"
4707-250	250x165mm	4707-12	12x8"
4707-300	300x200mm	4707-18	18x10"
4707-400	400x250mm	4707-24	24x12"
4707-500	500x300mm		

Square Set

Code	Size	Quantity
4707-S1	50x40, 100x70, 150x100mm	3pcs
4707-S2	50x40, 75x50, 100x70, 150x100mm	4pcs
4707-S3	100x70, 150x100, 200x130, 300x200mm	4pcs
4707-SE1	2x1-1/2", 4x3", 6x4"	3pcs
4707-SE2	2x1-1/2", 3x2-1/2", 4x3", 6x4"	4pcs
4707-SE3	4x3", 6x4", 9x6", 12x8"	4pcs



- Beam and blade are ground
- Blade is hardened
- Individual square is packed in carton
- Square set is packed in plastic box

SPECIAL SQUARE

- Check angles: 30°, 35°, 90°, 135°, 160°
- Packed in carton

Code	Size
4709-92	92x47mm (3.6x1.8")
4709-110	110x59mm (4.3x2.3")
4709-130	130x70mm (5.1x2.7")
4709-175	175x94mm (7x3.7")
4709-225	225x118mm (9x4.6")
4709-256	256x143mm (10x5.6")



METRIC FEELER GAGE

- Straight blades, length 75mm
- Each blade is marked with metric/inch size
- Made of hardened spring steel
- Packed in carton



Code	Range	Size of blade	Quantity of blade
4601-9	0.04-0.30mm	0.04, 0.05, 0.06, 0.07, 0.08, 0.10, 0.15, 0.20, 0.30mm	9pcs
4601-91	0.06-0.60mm	0.06, 0.10, 0.15, 0.20, 0.30, 0.35, 0.40, 0.50, 0.60mm	9pcs
4601-10	0.10-1.00mm	0.10, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80, 0.90, 1.00mm	10pcs
4601-15	0.06-0.70mm	0.06, 0.07, 0.08, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.70mm	15pcs
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, 1.00mm	25pcs

METRIC FEELER GAGE

- Taper blades, length 100mm
- Each blade is marked with metric/inch size
- Made of hardened spring steel
- Packed in carton



Code	Range	Size of blade	Quantity of blade
4602-8	0.05-0.50mm	0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50mm	8pcs
4602-10	0.05-0.80mm	0.05, 0.10, 0.15, 0.20, 0.30, 0.40, 0.50, 0.60, 0.70, 0.80mm	10pcs
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, 1.00mm	13pcs
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, 1.00mm	17pcs
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, 1.00mm	20pcs
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, 1.00mm	32pcs

METRIC LONG FEELER GAGE



- Straight blades
- Each blade is marked with metric/inch size
- Made of hardened spring steel
- Connected with ring
- Packed in plastic pouch

Code	Range	Size of blade	Quantity of blade	Length of blade
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, 1.00mm	13pcs	150mm
4605-131	0.05-1.00mm		13pcs	200mm
4605-132	0.05-1.00mm		13pcs	300mm
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, 1.00mm	20pcs	150mm
4605-201	0.05-1.00mm		20pcs	200mm
4605-202	0.05-1.00mm		20pcs	300mm

INCH FEELER GAGE



- Straight blades, length 1-3/4"
- Each blade is marked with inch/metric size
- Made of hardened spring steel
- Packed in carton

Code	Range	Size of blade	Quantity of blade
4611-17	0.010-0.035"	0.010, 0.012, 0.013, 0.015, 0.016, 0.017, 0.018, 0.019, 0.020, 0.022, 0.024, 0.025, 0.026, 0.028, 0.030, 0.032, 0.035inch	17pcs

INCH FEELER GAGE



- Taper blades, length 3"
- Each blade is marked with inch/metric size
- Made of hardened spring steel
- Packed in carton

Code	Range	Size of blade	Quantity of blade
4612-26	0.0015-0.025"	0.0015, 0.002, 0.0025, 0.003, 0.004, 0.005, 0.006, 0.007, 0.008, 0.009, 0.010, 0.011, 0.012, 0.013, 0.014, 0.015, 0.016, 0.017, 0.018, 0.019, 0.020, 0.021, 0.022, 0.023, 0.024, 0.025inch	26pcs

INCH FEELER GAGE



- Straight blades
- Each blade is marked with inch/metric size
- Made of hardened spring steel
- Packed in carton

Code	Range	Size of blade	Quantity of blade	Length of blade
4613-261	0.0015-0.025"	0.0015, 0.002, 0.0025, 0.003, 0.004, 0.005, 0.006,	26pcs	3"
4613-262	0.0015-0.025"	0.007, 0.008, 0.009, 0.010, 0.011, 0.012, 0.013,	26pcs	3.5"
4613-263	0.0015-0.025"	0.014, 0.015, 0.016, 0.017, 0.018, 0.019, 0.020, 0.021, 0.022, 0.023, 0.024, 0.025inch	26pcs	4"

INCH FEELER GAGE



- With 2" rule
- Straight blades, length 3"
- Each blade is marked with inch/metric size
- Made of hardened spring steel
- Packed in carton

Code	Range	Size of blade	Quantity of blade
4614-9	0.002-0.025"	0.002, 0.003, 0.004, 0.006, 0.008, 0.012, 0.013, 0.020, 0.025inch	9pcs
4614-15	0.002-0.025"	0.002, 0.003, 0.004, 0.005, 0.006, 0.008, 0.011, 0.012, 0.013, 0.014, 0.016, 0.018, 0.020, 0.022, 0.025inch	15pcs

INCH FEELER GAGE



- With 0.010" brass blade
- Straight blades, length 3-5/16"
- Each blade is marked with inch/metric size
- Made of hardened spring steel
- Packed in carton

Code	Range	Size of blade	Quantity of blade
4608-31	0.0015-0.035"	0.0015, 0.002, 0.0025, 0.003, 0.004, 0.005, 0.006, 0.007, 0.008, 0.009, 0.010, 0.011, 0.012, 0.013, 0.014, 0.015, 0.016, 0.017, 0.018, 0.019, 0.020, 0.021, 0.022, 0.023, 0.024, 0.025, 0.026, 0.028, 0.030, 0.032, 0.035inch	31pcs

INCH GO AND NO-GO FEELER GAGE

- Each blade has two sizes
- Length of blade 4"
- Each blade is marked with inch/metric size
- Made of hardened spring steel
- Packed in carton



Code	Range	Size of blade	Quantity of blade
4615-22	0.004/0.006" 0.025/0.027"	0.004/0.006, 0.005/0.007, 0.006/0.008, 0.007/0.009, 0.008/0.010, 0.009/0.011, 0.010/0.012, 0.011/0.013, 0.012/0.014, 0.013/0.015, 0.014/0.016, 0.015/0.017, 0.016/0.018, 0.017/0.019, 0.018/0.020, 0.019/0.021, 0.020/0.022, 0.021/0.023, 0.022/0.024, 0.023/0.025, 0.024/0.026, 0.025/0.027inch	22pcs

INCH OFFSET FEELER GAGE

- Bend end
- Length of blade 4"
- Each blade is marked with inch/metric size
- Made of hardened spring steel
- Packed in carton



Code	Range	Size of blade	Quantity of blade
4609-16	0.005-0.020"	0.005, 0.006, 0.007, 0.008, 0.009, 0.010, 0.011, 0.012, 0.013, 0.014, 0.015, 0.016, 0.017, 0.018, 0.019, 0.020inch	16pcs
4609-12	0.008-0.026"	0.008, 0.010, 0.012, 0.013, 0.014, 0.015, 0.016, 0.018, 0.019, 0.020, 0.025, 0.026inch	12pcs

INCH OFFSET FEELER GAGE



- Bend end
- Length of blade 4"
- Each blade is marked with inch/metric size
- Made of hardened spring steel
- Packed in pouch

Code	Range	Size of blade	Quantity of blade
4616-26	0.005-0.030"	0.005, 0.006, 0.007, 0.008, 0.009, 0.010, 0.011, 0.012, 0.013, 0.014, 0.015, 0.016, 0.017, 0.018, 0.019, 0.020, 0.021, 0.022, 0.023, 0.024, 0.025, 0.026, 0.027, 0.028, 0.029, 0.030inch	26pcs

PITCH GAGE



- Blades marked with pitch
- Made of alloy steel
- Packed in carton

Code	Range	Thread type	Pitch of blade	Quantity of blade
4824-12	2-20mm	30°	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 16, 20mm	12pcs
Code	Range	Thread type	Pitch of blade	Quantity of blade
4824-16	1-12TPI	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	16pcs