Planer & Shaper Gage

Maximum range 6-1/4" with extension rod.

- Now set shaper and planer tools fast and easy
- No need for trial cuts
- Set the gage with caliper, micrometer, or surface gage and simply bring the cutting tool in contact with the gage for a reliable starting point
- Use with a dial indicator and level large plates for planing

Model No.:PG

T Acme Screw Thread Gage

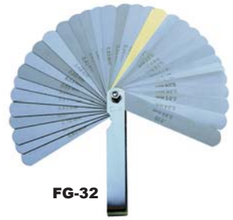
Used in grinding and setting tools when cutting acme threads.

Model No.	Range	Angle
STG-29	1-10TPI	29°
STG-30	2-12mm	30°

STG-29

Thickness Gages

Feeler gage sets are available with straight or tapered blade thickness and in a variety of lengths to meet all requirements



FG-32

Model No.	Length	Piece	Range(in/mm)
FG-9	3"/75mm	9	0.002/.05 - .020/.50
FG-9/2	3"/75mm	9	0.002/.05 - .025/.63
FG-12	4"/100mm	12	0.008/.20- .026/.63
FG-15	3-1/2"/90mm	15	0.002/.05 - .025/.63
FG-7	3-1/2"/90mm	7	0.25/.04 - .025/1.02
FG-26	3-1/2"/90mm	26	0.0015/.04 - .025/.63
FG-32	3-1/2"/90mm	32	0.0015/.04 - .035/.88
FG-16	3-1/2"/90mm	16	0.010/.25 - .035/.88

Radius Gage

Checking and layout of radius for tools, dies, patterns, etc

Inch

Model No.	Range	No. of Leaves
RIG-1/4	1/32-1/4" × 64ths	30
RIG-1/2	17/64-1/2" × 64ths	32
RIG-1	17/32-1" × 64ths	32

Metric

Model No.	Range mm	No. of Leaves
RG-065	1-3mm × 0.25mm step 3.5-6.5mm × 0.5mm step	32
RG-145	7-14.5mm × 0.5mm step	32
RG-250	15-20mm × 0.5mm step 21-25mm × 1.0mm step	32

Screw Pitch Gage

Thread Angle:
Inch 55°
Metric 60°

SPG60-20

*Can be used to check pitches

Model No.	Leaves pcs	Range	Pitches
SPG60-20 (60°)	20	0.4-6mm	0.4, 0.45, 0.50, 0.60, 0.70, 0.75, 0.80, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00, 3.50, 4.00, 4.50, 5.00, 5.50, 6.00
SPG55-22 (55°)	22	4-48TPI	4, 4.5, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 19, 20, 22, 24, 26, 28, 32, 40, 48
SPG55-30	30	4-42TPI, Inch 55°	
SPG60-30	30	4-42TPI, Metric 60°	
SPG55-51	51	4-84TPI, Inch 60°	
SPG60-28	28	0.25-2.5mm, 60°	

18 Pc. Angle Gage

Features:

- Stainless steel, satin finished
- 18 individual gages for easy use
- Eight gaging surfaces per gage
- Precision finished edges for accurate checking
- Each gage checks primary. 1/2 primary and complimentary angles
- Quick and accurate inspection of angles and I.D. or O.D. chamfers in or out of the machine
- Fast set-ups and fixturing of workpieces
- Eliminates time consuming measuring set-ups

Model No.:AGS-18

P* Angle	1/2* Angle	Comp Angle	P* Angle	1/2* Angle	Comp Angle
5°	20° ,30'	175°	50°	25°	130°
10°	5°	170°	55°	27° ,30'	125°
15°	70° ,30'	165°	60°	30°	120°
20°	10°	160°	65°	32° ,30'	115°
25°	12° ,30'	155°	70°	35°	110°
30°	15°	150°	75°	37° ,30'	105°
35°	17° ,30'	145°	80°	40°	100°
40°	20°	140°	85°	42° ,30'	95°
45°	22° ,30'	135°	90°	45°	90°

Radius Gauge Sets

Features:

- Each gauge marked deeply with proper size
- Each gauge has both internal & external radius
- Must for machinists, tool & die makers, inspectors,etc
- Complete with fitted case

RG 303-4201

Model No.	Each Set Includes Range/Radii
RG 303-4201	25 pc. 1/64 to 17/64 by 64ths & 9/32 to 1/2 by 32nds w/holder
RG 303-4203	8pc. 9/16-1 by 16ths w/holder
RG 303-4202	26 pc set w/holder. .010-.030" by .005", .040-.100" by .010", .120-.220" by .020", .240-.300" by .020", .350-.500" by .050"
RG 303-4204	10 pc.set w/holder. consisting of .550,.600,.700,.750,.800,.850, .900,.950.and 1" vinyl case
RG 303-4205	26 pc.set/w/holer.5-13.0mm.5mm increments
RG 303-4206	8 pc.set w/o holder 1-1/16 to-1-1/12 × 16ths

Rockwell Hardness Tester

Determining the Rockwell hardness of hard alloys, quenched and unquenched steels.

Specifications

- Measuring range: 20-88HRA, 20-100HRB, 20-70HRC
- Test force:588.4, 980.7, 1471N (60, 100, 150kgf)
- Max.height of test piece: 170mm
- Depth of throat: 135mm
- Dimensions (L × W × H): 466 × 238 × 630mm
- Weight:approx. 65kg

Main accessories

Large flat anvil: 1pc
Small flat anvil: 1pc
V-notch anvil: 1pc
Diamond cone penetrator: 1pc
1/16 in. steel ball penetrator: 1pc
Rockwell standardized block: 5 pcs

Model No.:HR-150A

Low Load Vickers Hardness Tester

This tester can be used to complete Vickers hardness test in the enterprises of machinery, metallurgy, national defence, scientific research and instruments, and it can also be used as a standard Vickers hardness tester in the metering department. The tester is equipped with a programmable calculator so as to speed up the calculation of hardness values.

Specifications

Measuring range: 5-3000HV
Test force: 1.961, 2.942, 4.903, 9.807, 19.61, 24.52, 29.42, 49.03N (0.2, 0.3, 0.5, 1, 2, 2.5, 3, 5kgf)
Max.height of test piece:130mm Depth of throat: 100mm
Magnifications of the optical micrometer: 500 × ,125 ×
Min.scale value of the optical micrometer: 0.25 μ m,1 μ m
Power supply: 220V AC/110V AC,50/60Hz
Dimensions (L × W × H):455 × 295 × 675mm
Weight: approx. 50kg

Main accessories

Coordinate test stand: 1pc
Flat nose pliers: 1pc
Small V-anvil: 1pc
Diamond pyramid penetrator: 1pc
Vickers standardized block: 1pc
Micro-Vickers standardized block: 1pc
Electronic calculator: 1pc
Thin shaft anvil : 1pc
Large V-anvil: 1pc
Attachment for thin plate: 1pc

Model No.:HV-5

Integrated Portable Hardness Tester TH132

- Integrated Impact Device C for thin components: no cables!
- Wide measuring range in HLC and direct display of con verted hardness values in HB, HRB, HRC, HV, HS
- For materials steel & cast steel and cold work tool steels
- Simple handling and low test expenditure
- Optional printer TA220S available

Measuring range

Material	HLC	HB	HRC	HV	HS
Steel & cast steel	350-960	80-683	20.0-69.5	80-996	31.9-102
CWT. Steel	350-900		20.7-68.2	100-941	

Technical specification

Standard Impact device	C integrated
Hardness scales	HLD,HB,HRC,HRB,HV,HS
Measuring range/materials	See table above
Accuracy	±12HLC
Memory	99 average readings
Output	RS 232 to printer
Min. Surface Roughness of Workpiece	0.4 μm(Ra)
Max. Workpiece Hardness	960HLC
Min. radius of Workpiece (convex/concave)	Rmin=11mm(with support rings)
Min. Workpiece weight	0.5-1.5kg on stable support 0.02-0.5kg with compact coupling
Min. Workpiece thickness coupled	1mm
Min. thickness of hardened layers	0.2mm
Indentation depth	Impact Device data
Continuous Working time	8 h
Power	Rechargeable NiMH battery
Operating temperature	0-40°C
Overall dimensions	155 x 24 x 55mm
Weight	175 g

Standard delivery

- Main Unit integrated with Impact Device C 1
- Test block with HLD value 1
- Charger 1
- Cleaning brush 1
- TIME certificate 1
- Instruction manual 1
- Warranty card 1
- Carrying case 1

Optional accessories

- Support rings
- Printer TA220S with cable

Digital Ultrasonic Thickness Gauge TT100

- Easy to operate ultrasonic thickness gauge
- Sound velocity range up to 9999m/s
- Memory for 10 readings
- Suitable for all metallic and non-matallic materials
- Clear 4-Digital LCD display with backlight
- 5 pre-set sound velocities for repeating applications
- Two Standard 5 MHz transducers included
- Display resolution 0.1mm
- mm/inch selectable

Technical specification

Measuring range(steel)	1.2mm-225.0mm with 5MHz transducer
Measuring range for steel pipes	Min. 3.0mm thickness xΦ 20 diameter
Transducer frequency	Standard 5 MHz, Φ10 mm
Display resolution	0.1mm
Calibration	4.0mm steel base plate integrated
Measurement accuracy	±(1%H+0.1)mm
Measuring Units	mm/inch
Sound velocity range	1000-9999m/s
Display	4-Digital LCD with backlight
Memory	Storage of 10 thickness readings
Surface temparature	-10°C to +60°C
Battery indicator	Low battery voltage indicator
Power supply	2 Pcs. AA batteries 1.5V
Operation time	250 hours
Dimensions	126mm x 68mm x 23mm
Weight	Approx. 250g including batteries

Standard delivery

- Main Unit 1
- Standard 5 MHz transducers 2
- Integrated steel calibration plate 4.0mm 1
- Batteries AA 1.5V 2
- Couplant 1
- Certificate 1
- Instruction manual 1
- Warranty card 1
- Carrying case 1

Optional accessories

- Probe 5PΦ10
- Probe 5PΦ10/90
- Probe SZ2.5P
- Probe 7PΦ6

Optional Transducers

Probe	Frequency	Range (steel)	Diameter Φ	For steel pipe size	Characteristic
5PΦ10	5MHz	1.2-225mm	10mm	Φ20x3mm	Standard
5PΦ10/90°	5MHz	1.2-225mm	10mm	Φ30x3mm	Standard
SZ2.5P	2.5MHz	3-300mm	14mm		Thick material/Rough surface
7PΦ6	7MHz	0.75-60mm	6mm	Φ15x2mm	Thin material

Table of sound velocity of various materials

Material	Aluminum	Iron	Copper	Brass	Zinc	Silver	Gold	Tin
Sound velocity (m/s)	6320	5900	4700	4430	4170	3600	3240	3320