



# Precision Gage Solutions

PRECISION THREAD GAGES  
PLAIN PLUG AND RING GAGES  
THREADTECH V2.24 SOFTWARE  
THREAD MEASURING SYSTEMS  
METROLOGY AND INDUSTRIAL SUPPLIES  
MEASURING INSTRUMENTS  
CUSTOM GAGES  
PRECISION MACHINING AND GRINDING  
ISO 17025 REGISTERED CALIBRATION



Toll-Free: Phone 1-800-767-7633 • Fax 1-800-767-2034

Phone 631-231-1515 • Fax 631-231-1625 • [www.threadcheck.com](http://www.threadcheck.com) • [info@threadcheck.com](mailto:info@threadcheck.com)



Dear Valued Customer,

The new Thread Check, Inc. "Precision Gage Solutions" catalog features an extensive product line of precision gages, measuring instruments, cutting tools, software, engineering services, and support.

Thread Check Inc.'s customer service team is led by expertly trained sales engineers and supported by some of the industry's most talented manufacturing engineers and gauging experts.

In addition to the thousands of high quality precision products referenced in this catalog, Thread Check, Inc. has the capability and resources to procure and distribute quality products from thousands of leading companies.

We are pleased to assist you with all your standard and special requirements.

Your comments and suggestions are always welcomed as they help us to become a better company. Please contact us anytime.



### EXPEDITE SERVICE

Thread Check, Inc. offers express manufacturing and delivery on many items at a premium charge. Call for price and delivery via Expedite Service.

### SPECIALS:

Thread Check, Inc. does specials! If you do not see an item in our catalog, call our sales engineering staff for price and availability. Thread Check's engineering staff will assist in designing and manufacturing of special gaging products from concept to completion.

### SERVICES:

Thread Check, Inc. offers calibration services through an ISO 9001 and ISO 17025 Accredited Metrology Facility. Standard turnaround time is 2-3 days on many items. Call for pricing.

All items unless noted are manufactured in the U.S.A.



Thread Check, Inc. ships world wide.

All Thread Check, Inc. gages and precision measuring instruments are traceable to N.I.S.T.

Thread Check, Inc. gages are inspected at 68° F and 50% humidity.

Items stocked are indicated by the "IN STOCK" symbol.



### CONTACT INFORMATION

Thread Check, Inc.  
390 Oser Ave.  
Hauppauge, NY 11788  
USA

Toll Free 800-767-7633  
in the U.S. and Canada  
Toll-Free Fax: 800-767-2034  
World Wide: 631-231-1515  
24 Hour Fax: 631-231-1625

sales@threadcheck.com  
techsupport@threadcheck.com  
info@threadcheck.com  
Web: www.threadcheck.com

Office Hours:  
Mon.-Fri.  
8:30 AM - 5:30 PM  
(08:30-17:30hrs.)  
Eastern Time



## HOW TO ORDER:

Call, fax, or email us for the fastest service. All purchase orders faxed or emailed must have the following information:

- Ship to: / Bill to information
- Telephone/Fax numbers
- Contact information

## TERMS:

Thread Check's accepted methods of payment:



CREDIT ACCOUNT - TERMS NET 30 DAYS

To set up a Thread Check, Inc. credit account, please fax a standard credit application sheet consisting of Ship to:/Bill to: information, 3 trade references, and bank information including a D&B number if available.

Please allow up to 5 days to establish an account.

Terms: Net 30 days from date of invoice  
(credit must be approved first)

Shipping Terms: FOB shipping point Hauppauge, New York. Orders are shipped UPS ground unless requested otherwise. (Exceptions: Packages over 80 lbs may be shipped by common carrier.)

RETURNS: Non Defective Items

Standard items may be returned within 15 days from date of invoice. A return authorization number must be issued from Thread Check prior to return and items must be returned within 6 days from RA number issue. A 15% restocking charge is assessed on returns of standard product. Upon inspection, credit will be given on standard items returned in resalable (like new) condition and charges for freight out. Special items may not be returned.

### Thread Check, Inc. Gage Warranty

Thread Check, Inc. warrants all gages for 30 days from date of shipment if found not to be in tolerance except in cases of customer mishandling. Special gages including special marking are not returnable. Thread Check, Inc. offers no further warranties, expressed or implied and its responsibilities, due to any defects or inaccuracies of the gage or certificate, shall in no event nor for any cause whatsoever exceed the purchase price of the gage.

Prices in catalog are subject to change without notice.





## THREADCHECK, INC. MISSION STATEMENT

Thread Check, Inc. Designers and manufacturers of high quality gaging and inspection equipment.

As a dynamic full service gage company we provide a complete line of precision thread gages, plain cylindrical gages, patented 3-wire thread measuring systems, powerful thread engineering software, measuring instruments, cutting tools, and ISO 17025 registered calibration services. We are also delighted to provide specialized technical support to our customers free of charge.

### Our Mission:

Thread Check, Inc. is committed to delivering total customer satisfaction by providing high quality products and superior service levels. Through a highly skilled and dedicated workforce we have generated an outstanding service record, which means you can be assured all our high quality products will accurately meet agreed specifications. Additionally, our Customer Service Team is always on hand with expert support and innovative solutions that we guarantee will surpass your expectations.

Thread Check, Inc. is proud to be considered a valuable vendor to a diverse group of customers in industries such as aerospace, automotive, pharmaceutical, petroleum, medical and mechanical contracting. We also provide quality support to educational and scientific institutions, the military and other government bodies.

We invite you to uniquely experience our total customer satisfaction guarantee.

## TABLE OF CONTENTS

ITEM	PAGE
3-Wire Thread Measuring System .....	17 - 18
API - (American Petroleum Institute) Thread Gages .....	15
British - BA Screw Thread Gages .....	11
British - BSF & BSW Screw Thread Plug & Ring Gages .....	11
British - BSP Screw Thread Gages - ISO 228. ....	11
British - BSPT Taper Screw Thread Plug & Ring Gages .....	11
Brown and Sharpe Taper Plug and Ring Gages.....	43
Calibration Prices - New Gages .....	49
Fixed Limit Gage Fact Sheet .....	28
Flexbar Triga Bore TM / True Bore Gaging Systems .....	45 - 46
Flexible Hole Location Gages & Sets .....	10
Gear Measuring Wires and Master Sets.....	20
ISO Registered Calibration Services.....	4
ITC - Internal Thread Comparators.....	23
Jarno Taper Plug and Ring Gages .....	43
Master Setting Discs .....	41
Morse Taper Plug and Ring Gages .....	43
National Machine Taper Plug and Ring Gages .....	43
Pin Gage Assemblies and Replacement Members .....	30
Pin Gage Sets and Libraries - Class ZZ .....	29
Pipe Thread Gages - Gages to Check Other Pipe Threads .....	14
Pipe Thread Gages - Straight - NPSM - NPSF .....	14
Pipe Thread Gages - Taper - NPT - NPTF - ANPT .....	13-Dec
Plug Gages - Class X Economy Members and Assemblies.....	31
Plug Gages - Class XXX Tolerance.....	33
Plug Gages - Custom Hex .....	37
Plug Gages - Custom Micro Sizes .....	33
Plug Gages - Custom Reversible Style.....	32
Plug Gages - Progressive Style .....	36
Plug Gages - Taperlock Style .....	34
Plug Gages - Trilock Style.....	35
Power Driven Thread Gaging .....	25 - 27
Products and Services .....	5
Profile Thread Gages - TP Series .....	16
Reference Books .....	47
Ring Gages - Carbide .....	40
Ring Gages - Steel and Chrome .....	38 - 39
Snap Gages - AGD Limit Style .....	42
STI - Helical Coil Class X Thread Plug Gages .....	10
Surveillance Masters.....	44
Taper Gages - Cylindrical Style Plug and Ring .....	43
TECHNICAL: ANSI & International Thread Series Designations.....	53
TECHNICAL: Basic Screw Thread Designations .....	48
TECHNICAL: Calibration Procedures For Thread Ring Gages .....	50
TECHNICAL: Gage Tolerances .....	52
TECHNICAL: NPTF Class 2 Specifications.....	51
TECHNICAL: Standard Inch Pitch Diameter Chart .....	54
TECHNICAL: Standard Metric Pitch Diameter Chart.....	55
Thread Measuring Wires and Library Sets.....	19
Thread Plug Gages - Metric .....	8
Thread Plug Gages - Unified Inch.....	6
Thread Ring Gages - Metric .....	9
Thread Ring Gages - Unified Inch.....	7
Thread Set plug Gages - Metric .....	9
Thread Set plug Gages - Unified Inch .....	7
ThreadTech V2.24 Thread Software for Windows .....	Back Cover
Tri-Roll & ITC Master Setting Plugs and Rings .....	24
Tri-Roll Thread Comparators .....	21 - 22



## ISO REGISTERED CALIBRATION SERVICES

All calibrations are performed by an ISO 9001 and ISO 17025 Accredited Metrology Facility.

Standard turnaround for calibration of in service (used) items approximately **2-3 days**.

Turnaround on repair items approximately 10 working days.

Prices include level 4 certification traceable to NIST.

Calibration includes disassembly, cleaning, and minor adjustments.

Inquire about gages not listed.

TCI offers online calibration management services.

On – Site Calibration Services Available.

Call **800-767-7633** for pricing and lead time.

### HARD GAGE CALIBRATION

Angle Gages	Gear Wires	Pin Gages	Taper Gages
Calibration Balls	Kalmasters	Protractors	Tapered Thread Plugs & Rings
Cylindrical Plugs	Length Standards	Radius Gages	Thread Plugs and Set Plugs
Cylindrical Rings	Levels	Screw Pitch Gages	Thread Rings
Cylindrical Squares	Masterdiscs	Spline Gages	Thread Wires
Deltronic Plugs	Mike Masters	Squares	Dimensional Inspection
Feeler Gages	Optical Flats	Steel Rules	
Gage Blocks	Parallels	Tape Measures	

### ELECTRONIC CALIBRATION AND FIELD SERVICE

Air Gages	Decade Resistors	Glass Thermometers	Pressure Gages	Surface Plates
Analog Meters	Deadweight Testers	Hardness Testers	Profilometers	Tachometers
Ammeters	Digital Multimeters	Hygrometers	Resistors	Thermal Couples
Barometers	Digital Readouts	Hypot Testers	Scales/Balances	RTD Thermometers
Bridges	Durometers	LCR Meters	Scopometers	Temp Controllers
Cable Tensiometers	Durometer Specimen	Load Cells	Shunts	Torque Testers
Capacitance Meters	Dynamometers	Optical Comparator	Signal Generators	Torque Analyzers
Conductance Meters	Film Thickness	Oscilloscopes	Solder Guns	Torque Wrenches
Contracers	Force Gages	Ovens	Stop Watches	Vacuum Gages
Clamp-on Meters	Frequency Counters	Panel Meters	Strip/Chart/XY Rec	Watt Meters
CMM's	Function Generators	PH Meters	Stroboscopes	Z Meters
Data Loggers	Gauge Amps	Power Supplies	Supermicrometers	

### REPAIR & HAND TOOL CALIBRATION

Bench Centers	Chamfer Check Gages	Groove Gages	Indicators
Bore Gages	Plug & Ring Repair	Height Gages	Inside Micrometers
Calipers	Depth Micrometers	Height Set Masters	Outside Micrometers
Calipers (Depth)	Dial Depth Gages	Holtest Gages	Pitch Micrometers
Calipers (ID)	Dial Snap Gages	Indicator Calibration	Snap Gages



# THREAD CHECK'S PRODUCTS AND SERVICES

- Precision Thread Gages
- ThreadTech V2.24 Software
- Machine Tools
- Sales, Service and Calibration
- SPI-Swiss Precision Instruments
- Thread Measuring Systems
- Measuring Instruments
- Metrology & Industrial Supply
- Mitutoyo Measuring Instruments
- Starrett Measuring Instruments
- Plain Plugs & Rings
- Custom Gages
- Precision Machining & Grinding
- Calibration Services
- Mahr Federal Measuring Instruments

## THREAD GAGES

Thread Plug Gages  
Thread Ring Gages  
Thread Setting Plugs  
ACME Gages  
API Gages  
AMO Gages  
ANPT Gages  
Asymetric Gages  
Buttress Gages  
British Gages  
DIN Gages  
JIS Gages  
Metric Gages  
NPT / NPTF / NPTS / NPSM  
STI Helical Coil Gages  
Unified Gages  
Whitworth Gages  
Taperlock and Reversible  
Specials  
Pre-Plate / Multiple Start  
Left Hand  
Solid Thread Ring Gages  
Flexible Hole Location Gages



## 3-WIRE THREAD

## MEASURING SYSTEMS

Thread Measuring Wires  
Gear Measuring Wires  
Internal & External Variable Gaging Systems

## TRI-ROLL GAGING SYSTEMS

## THREAD ENGINEERING SOFTWARE

## MEASURING INSTRUMENTS

Mitutoyo Precision Measuring Instruments  
Brown & Sharpe Metrology Equipment  
Starrett Precision Measuring Instruments  
Flexbar Measuring Instruments  
Fowler Measuring Instruments  
Mahr/Federal Precision Measuring Instruments  
Phase II Precision Tools & Measuring Instruments

## REFERENCE PUBLICATIONS

## PRODUCTION TURNING AND MILLING

## PLAIN CYLINDRICAL GAGES

ZZ - XXXX Gagemaker Tolerances  
Gages in Steel, Chrome, and Carbide  
Plug and Ring Gages  
Taperlock / Trilock / Reversible Gages  
ZZ Pin Gage Sets  
Progressive Gages  
Tapered Ring and Plug Gages  
Square and Hex Plug Gages  
Flush Pin Gages  
Concentricity Gages  
Special Purpose Gages  
Ball Gages  
Master Rolls  
Ruby Ball Contacts  
AGD SNAP LIMIT GAGES



## HARDNESS TESTING EQUIPMENT AND SUPPLIES

## TORQUE GAGES AND SYSTEMS

## DRILLS AND REAMERS

Jobber Length Drills- General Purpose, Heavy Duty, Fast Spiral, Cobalt, Coated, Bright Finish, Parabolic Screw Machine  
Length Drills Extra Length Drills  
Aircraft Extension Drills  
Taper Length Drills  
Taper Shank Drills  
Silver and Deming Drills  
Core Drills  
Spotting Drills, Centering Drills, Combined Drills and Countersinks, Short Length  
Carbide Tipped Masonry Drills  
Screw Extractors  
Carbide Drills  
Jobber Length Drill Sets  
Chuckling Reamers  
Taper Reamers  
Taper Pipe Reamers  
Taper Pin Reamers  
Special Reamers



## ISO 17025 and ISO 9002

## Registered Calibration

## 1 - 3 Day turnaround

Thread Ring & Plug Gages  
Plain Ring & Plug Gages  
Precision Hand Tools  
Gage Blocks  
Thread Measuring Wires  
Mechanical Gages  
Dimensional Inspection  
Electronic Calibration and Field Service  
Repair Service



## TAPS

Taper Taps,  
Semi-Bottoming Taps  
CNC Forming Taps  
Metric Taps  
Nut Taps  
Short Projection Pipe Taps  
Coolant Fed (oil-hole) Taps  
Taps For Non-Metallics  
Combination Tap & Drill  
Combination Tap & Reamer  
Piloted Taps  
Shell Taps  
ACME Taps  
Pipe Taps  
Plug Taps  
Special Taps  
High Performance Taps  
Hand Taps  
Spiral Pointed Taps  
Spiral Fluted Taps  
Maintenance Taps  
British Taps  
DIN Standard Taps



## DIES

Hexagon Rethreading Dies- Carbon Steel  
Metric Rethreading Dies  
Round Adjustable Dies  
Solid Round Dies  
Collect Caps  
Die Stocks  
Tap Wrenches  
Tap and Die Sets  
Tap and Drill Sets





## THREAD PLUG GAGES—CHROME



**TAPERLOCK  
STYLE**

**CHROME  
PLATED**

Thread Check, Inc. provides Chrome Plating on standard stock thread working plug gages at no additional charge. Chrome Plating extends the wear life by more than 100%, which provides dramatic savings on replacement costs



**REVERSIBLE  
STYLE**

Carbide, TIN coat and Ceramic thread gages priced on request.

All Thread Check, Inc., gages are made to the high end of the tolerance to ensure longer gage life.



ThreadTech™V2.24 for Windows. The most complete and accurate screw thread program. See back cover.

THREADS PER INCH (TPI)					TAPERLOCK DESIGN			REVERSIBLE DESIGN		
SIZE DEC.	FRAC.	UNC	UNF	UNEF	GO OR NO GO 2B-3B MEMBER	COMPLETE GO/NOGO w/HANDLE ASSEMBLY	HANDLE ONLY	GO OR NO GO 2B-3B MEMBER	COMPLETE GO/NOGO w/HANDLE ASSEMBLY	HANDLE ONLY
.060	#0		80		\$39.00	\$87.00	\$9.00	\$52.00	\$115.00	\$11.00
.073	#1	64	72		39.00	87.00	9.00	52.00	115.00	11.00
.086	#2	56	64		39.00	87.00	9.00	52.00	115.00	11.00
.099	#3	48	56		37.00	82.00	9.00	48.00	107.00	11.00
.112	#4	40	48		32.00	73.00	9.00	47.00	105.00	11.00
.125	#5	40	44		29.00	67.00	9.00	42.00	95.00	11.00
.138	#6	32	40		29.00	67.00	9.00	42.00	95.00	11.00
.164	#8	32	36		29.00	67.00	9.00	42.00	95.00	11.00
.190	#10	24	32		29.00	67.00	9.00	42.00	95.00	11.00
.216	#12	24	28		29.00	67.00	9.00	42.00	95.00	11.00
.216	#12			32	42.00	93.00	9.00	59.00	129.00	11.00
.250	1/4	20	28		26.00	61.00	9.00	38.00	87.00	11.00
.250	1/4			32	44.00	92.00	9.00	57.00	125.00	11.00
.3125	5/16	18	24		27.00	63.00	9.00	38.00	87.00	11.00
.3125	5/16			32	45.00	99.00	9.00	57.00	125.00	11.00
.375	3/8	16	24		27.00	63.00	9.00	41.00	93.00	11.00
.375	3/8			32	51.00	111.00	9.00	60.00	131.00	11.00
.4375	7/16	14	20		28.00	65.00	9.00	40.00	91.00	11.00
.4375	7/16			28	51.00	111.00	9.00	61.00	133.00	11.00
.500	1/2	13	20		28.00	65.00	9.00	41.00	91.00	11.00
.500	1/2			28	53.00	115.00	9.00	66.00	143.00	11.00
.5625	9/16	12	18		36.00	81.00	9.00	47.00	107.00	13.00
.5625	9/16			24	58.00	125.00	9.00	81.00	175.00	13.00
.625	5/8	11	18		37.00	83.00	9.00	44.00	101.00	13.00
.625	5/8			24	58.00	125.00	9.00	82.00	177.00	13.00
.6875	11/16			24	58.00	125.00	9.00	87.00	187.00	13.00
.750	3/4	10	16		39.00	87.00	9.00	53.00	123.00	17.00
.750	3/4			20	59.00	127.00	9.00	84.00	185.00	17.00
.8125	13/16			20	64.00	137.00	9.00	—	—	—
.875	7/8	9	14		44.00	97.00	9.00	—	—	—
.875	7/8			20	66.00	141.00	9.00	—	—	—
.9375	15/16			20	67.00	143.00	9.00	—	—	—
1.000	1	8	12,14		50.00	111.00	11.00	—	—	—
1.000	1			20	74.00	159.00	11.00	—	—	—
1.0625	1-1/16		12	18	77.00	165.00	11.00	—	—	—
1.125	1-1/8	7	12		61.00	133.00	11.00	—	—	—
1.125	1-1/8			18	78.00	167.00	11.00	—	—	—
1.1875	1-3/16		12	18	85.00	181.00	11.00	—	—	—
1.250	1-1/4	7	12		72.00	155.00	11.00	—	—	—
1.250	1-1/4			18	81.00	173.00	11.00	—	—	—
1.3125	1-5/16		12	18	91.00	193.00	11.00	—	—	—
1.375	1-3/8	6	12		75.00	161.00	11.00	—	—	—
1.375	1-3/8			18	97.00	205.00	11.00	—	—	—
1.4375	1-7/16		12	18	98.00	207.00	11.00	—	—	—
1.500	1-1/2	6	12		85.00	181.00	11.00	—	—	—
1.500	1-1/2			18	103.00	207.00	11.00	—	—	—

**Long Form Calibration - add \$13.00 per gage member.**

AGD Taperlock and Reversible Styles

Unified Thread Series (UNC-UNF-UNEF)

Standard (ANSI/ASME B1.2) 'X' Tolerance Class 2B or 3B

Special gages including preplates, multiple lead, ACME, Buttress, extra length, etc. are priced promptly on request.

UNJ THREADS: NO EXTRA CHARGE



# THREAD RING GAGES & THREAD SET PLUGS

THREADS PER INCH (TPI)					AGD THREAD RING GAGES			TRUNCATED SETTING PLUGS		
SIZE Dec.	Frac.	UNC	UNF	UNEF	GO MEMBER		HOLDER ONLY	GO or NO GO MEMBERS Class 2A,3A NO GO Class 2A,3A	COMPLETE GO/NOGO W/HANDLE ASSEMBLY	HANDLE ONLY
					Class 2A,3A	Class 2A,3A				
.060	#0		80		\$133.00	\$133.00	\$15.00	\$78.00	\$165.00	\$9.00
.073	#1	64	72		126.00	126.00	15.00	78.00	165.00	9.00
.086	#2	56	64		105.00	105.00	15.00	78.00	165.00	9.00
.099	#3	48	56		105.00	105.00	15.00	78.00	165.00	9.00
.112	#4	40	48		95.00	95.00	15.00	72.00	153.00	9.00
.125	#5	40	44		83.00	83.00	15.00	67.00	143.00	9.00
.138	#6	32	40		83.00	83.00	15.00	67.00	143.00	9.00
.164	#8	32	36		80.00	80.00	15.00	67.00	143.00	9.00
.190	#10	24	32		80.00	80.00	15.00	67.00	143.00	9.00
.216	#12	24	28		80.00	80.00	15.00	70.00	149.00	9.00
.216	#12			32	103.00	103.00	15.00	85.00	179.00	9.00
.250	1/4	20	28		80.00	80.00	15.00	61.00	131.00	9.00
.250	1/4			32	103.00	103.00	15.00	85.00	179.00	9.00
.3125	5/16	18	24		80.00	80.00	15.00	59.00	127.00	9.00
.3125	5/16			32	103.00	103.00	15.00	85.00	179.00	9.00
.375	3/8	16	24		80.00	80.00	19.00	61.00	131.00	9.00
.375	3/8			32	105.00	105.00	19.00	98.00	205.00	9.00
.4375	7/16	14	20		83.00	83.00	19.00	65.00	139.00	9.00
.4375	7/16			28	105.00	105.00	19.00	98.00	205.00	9.00
.500	1/2	13	20		87.00	87.00	19.00	67.00	143.00	9.00
.500	1/2			28	105.00	105.00	19.00	108.00	225.00	9.00
.5625	9/16	12	18		100.00	100.00	22.00	75.00	159.00	9.00
.5625	9/16			24	113.00	113.00	22.00	115.00	239.00	9.00
.625	5/8	11	18		100.00	100.00	22.00	80.00	169.00	9.00
.625	5/8			24	120.00	120.00	22.00	117.00	243.00	9.00
.6875	11/16			24	115.00	115.00	22.00	125.00	259.00	9.00
.750	3/4	10	16		126.00	126.00	22.00	92.00	193.00	9.00
.750	3/4			20	150.00	150.00	22.00	117.00	243.00	9.00
.8125	13/16			20	153.00	153.00	22.00	130.00	269.00	9.00
.875	7/8	9	14		137.00	137.00	28.00	107.00	223.00	9.00
.875	7/8			20	155.00	155.00	28.00	134.00	277.00	9.00
.9375	15/16			20	155.00	155.00	28.00	136.00	281.00	9.00
1.000	1	8	12,14		163.00	163.00	28.00	124.00	257.00	9.00
1.000	1			20	180.00	180.00	28.00	143.00	295.00	9.00
1.0625	1-1/16		12	18	185.00	185.00	28.00	143.00	295.00	9.00
1.125	1-1/8	7	12		200.00	200.00	28.00	143.00	295.00	9.00
1.125	1-1/8			18	200.00	200.00	28.00	151.00	311.00	9.00
1.1875	1-3/16		12	18	210.00	210.00	28.00	153.00	316.00	10.00
1.250	1-1/4	7	12		210.00	210.00	36.00	153.00	316.00	10.00
1.250	1- 1/4			18	210.00	210.00	36.00	176.00	362.00	10.00
1.3125	1-5/16		12	18	220.00	220.00	36.00	183.00	376.00	10.00
1.375	1-3/8	6	12		215.00	215.00	36.00	183.00	376.00	10.00
1.375	1-3/8			18	230.00	230.00	36.00	188.00	386.00	10.00
1.4375	1-7/16		12	18	235.00	235.00	36.00	192.00	394.00	10.00
1.500	1-1/2	6	12		240.00	240.00	36.00	183.00	376.00	10.00
1.500	1-1/2			18	250.00	250.00	36.00	192.00	394.00	10.00

**Long Form Calibration - add \$13.00 per gage member.**

AGD Adjustable Thread Ring Gages and Set Plugs

Unified Thread Series (UNC-UNF-UNEF)

Standard (ANSI/ASME B1.2) 'X' Tolerance Class 2A or 3A

Thread Check, Inc., Thread Set Plugs are class "X" tolerance on pitch diameter and class "W" tolerance on lead and flank angle. For class "W" tolerance - add 25%.

Special gages including preplates, multiple lead, ACME, Buttress, extra length, etc. are priced on request.

UNJ THREADS: ADD \$35. TO GO MEMBER

Phone 631-231-1515 | Fax 631-231-1625 | www.threadcheck.com | info@threadcheck.com | Thread Check Product Catalog 7



**THREAD SET PLUG**



**THREAD RING GAGES**

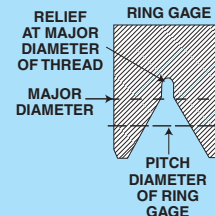


Chrome thread gages priced on request.  
All Thread Check, Inc., gages are made to the high end of the tolerance to ensure longer gage life.

## SETTING THREAD RING GAGES

Use thread setting plugs to calibrate and properly set adjustable thread ring gages. Adjustable Thread rings can only be calibrated by this method.

Truncated thread setplugs have a thread with both a truncated and a full form thread for both the go and the no go member. The full form section inspects and sets the correct clearance and forms at the major diameter of the ring gage. The truncated section controls pitch diameter. A thread ring gage should be set on the full form portion of the setplug - the back portion. The ring is then turned onto the truncated portion and should have the same drag and fit as when turned through the full form. A ring gage which spins quickly through the truncated section or "shakes" usually indicates wear. The ring gage should be repaired by relapping if possible or replaced. See technical page 44 on the Evaluations of and procedure for calibrating thread ring gages with thread set plugs.



**Root Relieved Thread Ring Gages**

All Thread Check thread ring gages are root relieved for longer life and more accurate gaging. The gages are manufactured with a root clearance in the major diameter which eliminates the possibility of interference from the full form section of the thread setting plug and major diameter of the part being gaged. This feature assures that the thread flanks are making proper contact.



# METRIC THREAD PLUG GAGES—CHROME



## TAPERLOCK STYLE 6H Tolerance

**CHROME  
PLATED**

Thread Check, Inc. provides Chrome Plating on standard stock thread working plug gages at no additional charge. Chrome Plating extends the wear life by more than 100%, which provides dramatic savings on replacement costs



## REVERSIBLE STYLE 6H Tolerance

Carbide, TIN coat and Ceramic thread gages priced on request.

All Thread Check, Inc., gages are made to the high end of the tolerance to ensure longer gage life.



ThreadTech™V2.24 for Windows. The most complete and accurate screw thread program. See back cover.

NOMINAL SIZE & PITCH			TAPERLOCK DESIGN			REVERSIBLE DESIGN		
SIZE MM	COARSE	FINE	GO or NO GO 6H MEMBER	COMPLETE D.E.GAGE	HANDLE ONLY	GO or NO GO 6H MEMBER	COMPLETE D.E.GAGE	HANDLE ONLY
M1.6	.35	—	\$43.00	\$95.00	\$9.00	\$59.00	\$127.00	\$9.00
M1.8	.35	—	43.00	95.00	9.00	59.00	127.00	9.00
M2	.40	—	43.00	95.00	9.00	57.00	123.00	9.00
M2.2	.45	—	43.00	95.00	9.00	57.00	123.00	9.00
M2.5	.45	—	40.00	89.00	9.00	57.00	123.00	9.00
M3	.50	—	40.00	89.00	9.00	57.00	123.00	9.00
M3.5	.60	—	40.00	89.00	9.00	51.00	111.00	9.00
M4	.70	—	38.00	85.00	9.00	45.00	99.00	9.00
M4.5	.75	—	38.00	85.00	9.00	45.00	99.00	9.00
M5	.80	—	38.00	85.00	9.00	48.00	105.00	9.00
M6	1.0	—	31.00	71.00	9.00	36.00	81.00	9.00
M7	1.0	—	31.00	71.00	9.00	38.00	85.00	9.00
M8	1.25	1.0	31.00	71.00	9.00	39.00	88.00	10.00
M10	1.5	1.25	31.00	71.00	9.00	40.00	90.00	10.00
M12	—	1.0	75.00	159.00	9.00	95.00	202.00	12.00
M12	1.5	—	33.00	75.00	9.00	42.00	94.00	10.00
M12	1.75	1.25	33.00	79.00	9.00	42.00	94.00	10.00
M14	2.0	1.5	36.00	81.00	9.00	43.00	99.00	13.00
M16	2.0	1.5	38.00	85.00	9.00	46.00	107.00	15.00
M18	2.5	1.5	43.00	95.00	9.00	54.00	123.00	15.00
M20	2.5	1.5	45.00	99.00	9.00	NA	NA	NA
M22	2.5	1.5	45.00	98.00	8.00	NA	NA	NA
M24	3.0	2.0	51.00	111.00	9.00	NA	NA	NA
M27	3.0	2.0	68.00	145.00	9.00	NA	NA	NA
M30	3.5	2.0	84.00	178.00	10.00	NA	NA	NA
M33	3.5	2.0	84.00	178.00	10.00	NA	NA	NA
M36	4.0	3.0	102.00	214.00	10.00	NA	NA	NA
M39	4.0	3.0	108.00	230.00	14.00	NA	NA	NA

**Long Form Calibration - add \$13.00 per gage member.**

Thread Check, Inc. metric thread gages conform to ANSI/ASME B1.16M gage standard and/or H28 handbook. Special gages including preplates, multiple lead, extra length, etc. are priced on request.



# METRIC THREAD RING & SET PLUG GAGES

NOMINAL SIZE & PITCH			METRIC RING GAGES			METRIC SET PLUGS		
SIZE MM	COARSE	FINE	GO MEMBER Class 6g	NO GO MEMBER 6g	HOLDER ONLY	GO or NO GO MEMBER 6g	COMPLETE GO/NO GO W/HANDLE ASSEMBLY	HANDLE ONLY
M1.6	.35	—	\$145.00	\$145.00	\$13.00	\$93.00	\$195.00	\$9.00
M1.8	.35	—	145.00	145.00	13.00	93.00	195.00	9.00
M2	.40	—	120.00	120.00	13.00	88.00	185.00	9.00
M2.2	.45	—	120.00	120.00	13.00	88.00	185.00	9.00
M2.5	.45	—	120.00	120.00	13.00	88.00	185.00	9.00
M3	.5	—	105.00	105.00	13.00	85.00	179.00	9.00
M3.5	.6	—	105.00	105.00	13.00	85.00	179.00	9.00
M4	.7	—	95.00	95.00	13.00	80.00	169.00	9.00
M4.5	.75	—	100.00	100.00	13.00	80.00	169.00	9.00
M5	.8	—	100.00	100.00	13.00	80.00	169.00	9.00
M6	1.0	—	90.00	90.00	13.00	72.00	153.00	9.00
M7	1.0	—	90.00	90.00	13.00	72.00	153.00	9.00
M8	1.25	1	90.00	90.00	13.00	72.00	153.00	9.00
M10	1.5	1.25	95.00	95.00	17.00	77.00	163.00	9.00
M12	—	1.0	200.00	200.00	17.00	95.00	199.00	9.00
M12	1.5	—	98.00	98.00	17.00	77.00	163.00	9.00
M12	1.75	1.25	110.00	110.00	17.00	81.00	171.00	9.00
M14	2.0	1.5	115.00	115.00	21.00	89.00	187.00	9.00
M16	2.0	1.5	115.00	115.00	21.00	89.00	187.00	9.00
M18	2.5	1.5	155.00	155.00	21.00	97.00	203.00	9.00
M20	2.5	1.5	185.00	185.00	21.00	103.00	215.00	9.00
M22	2.5	1.5	185.00	185.00	26.00	140.00	289.00	9.00
M24	3.0	2	215.00	215.00	26.00	140.00	289.00	9.00
M27	3.0	2	230.00	230.00	26.00	148.00	305.00	9.00
M30	3.5	2	235.00	235.00	31.00	156.00	321.00	10.00
M33	3.5	2	255.00	255.00	31.00	163.00	336.00	10.00
M36	4.0	3	285.00	285.00	31.00	178.00	366.00	10.00

## Long Form Calibration - add \$13.00 per gage member.

Thread Check metric thread gages conform to ANSI/ASME B1.16M gage standard and/or H28 handbook.

Special gages including preplates, multiple lead, extra length, etc. are priced on request.

Thread Check, Inc., Thread Set Plugs are class "X" tolerance on pitch diameter and class "W" tolerance on lead and flank angle. For class "W" tolerance - add 25%.

MJ THREADS: ADD \$35 TO GO MEMBER



**METRIC THREAD  
RING GAGES  
6g Tolerance**

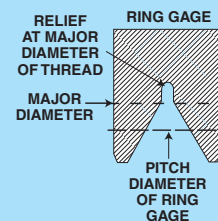
**METRIC THREAD  
PLUG GAGES  
6g Tolerance**

All Thread Check, Inc., gages are made to the high end of the tolerance to ensure longer gage life.

## SETTING THREAD RING GAGES

Use thread setting plugs to calibrate and properly set adjustable thread ring gages. Adjustable Thread rings can only be calibrated by this method.

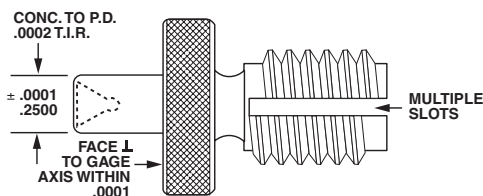
Truncated thread setplugs have a thread with both a truncated and a full form thread for both the go and the no go member. The full form section inspects and sets the correct clearance and forms at the major diameter of the ring gage. The truncated section controls pitch diameter. A thread ring gage should be set on the full form portion of the setplug – the back portion. The ring is then turned onto the truncated portion and should have the same drag and fit as when turned through the full form. A ring gage which spins quickly through the truncated section or "shakes" usually indicates wear. The ring gage should be repaired by relapping if possible or replaced. See technical page 44 on the Evaluations of and procedure for calibrating thread ring gages with thread set plugs.



## Root Relieved Thread Ring Gages

All Thread Check thread ring gages are root relieved for longer life and more accurate gaging. The gages are manufactured with a root clearance in the major diameter which eliminates the possibility of interference from the full form section of the thread setting plug and major diameter of the part being gaged. This feature assures that the thread flanks are making proper contact.

## FLEXIBLE HOLE LOCATION GAGES



Flexible Hole Location Gauge plugs also referred to as Centerline Hole Location Plugs are used to determine the true centerline to centerline distances of threaded holes. The Flexible Hole Location Gauge is slotted at 90° increments to insure positive location on the thread flanks regardless of hole size. This feature provides a firm locating grip without pulling the shoulder of the plug up against the hole face thus avoiding any squareness error being transferred to the centerline measurement.

- Positive grip on flanks regardless of hole size
- Center is concentric with threaded section within .0002" T.I.R. for probe location of coordinate measuring machines
- The .2500 +/- .0001 (6.35mm +/- .0025mm) shank is concentric to the threaded section within .0002 T.I.R. prior to slotting and may be used with micrometers or plate inspection setups as "overpin" measurement.
- Used with vee-block, concentricity checks can be made with other diameters.

## FLEXIBLE HOLE LOCATION GAGE SETS

2 each of #1-64 thru 5-40 Unified (Coarse Pitches) . . . . . with case . . . . . **\$1,140**

2 each of #6-32 thru 3/8-16 Unified (Coarse Pitches) with case . . . . . **\$1,301**

2 each of #6-32 thru 1/2-13 Unified (Coarse Pitches) with case . . . . . **\$1,659**

Complete set of 2 each from 9/16-12 thru 1-12 Unified (Coarse Pitches) and Unified Fine with case . . . . . **\$2,268**

2 each of #0-80 thru #5-44 Unified (Fine Pitches) with case . . . . . **\$1,312**

2 each of #6-40 thru 3/8-24 Unified (Fine Pitches) with case . . . . . **\$1,386**

2 each of #6-40 thru 1/2-20 Unified (Fine Pitches) with case . . . . . **\$1,375**

Complete set of 2 each from #0-80 thru 1/2-20 Unified . . . . . (Coarse Pitches) and Unified (Fine Pitches) with case . . . . . **\$5,229**

**Long Form Calibration - add \$13.00 per gage member.**

Inch Flexible Hole Location Gages			
SIZE	UNC	UNF	PRICE
0	-	80	\$100.00
1	64	72	98.00
2	56	64	98.00
3	48	56	93.00
4	40	48	85.00
5	40	44	85.00
6	32	40	85.00
8	32	36	85.00
10	24	32	85.00
12	24	28	85.00
1/4	20	28	85.00
5/16	18	24	73.00
3/8	16	24	78.00
7/16	14	20	78.00
1/2	13	20	85.00
9/16	12	18	80.00
5/8	11	18	85.00
3/4	10	16	85.00
1	8	12	145.00

Metric Flexible Hole Location Gages	
SIZE	PRICE
M1.6 x .35	\$110.00
M2 x 0.4	110.00
M2.5 x 0.45	110.00
M3 x 0.5	100.00
M3.5 x 0.6	100.00
M4 x 0.7	97.00
M5 x 0.8	92.00
M6 x 1.0	85.00
M8 x 1.25	85.00
M8 x 1.0	85.00
M10 x 1.5	85.00
M10 x 1.25	91.00
M10 x .75	91.00
M12 x 1.75	98.00
M12 x 1.5	98.00
M12 x 1.25	98.00
M12 x 1.0	98.00
M14 x 2.0	105.00
M14 x 1.5	105.00
M15 x 1.0	105.00
M16 x 2.0	105.00
M16 x 1.5	105.00
M17 x 1.0	112.00
M18 x 1.5	112.00
M20 x 2.5	114.00
M20 x 1.5	114.00
M20 x 1.0	114.00
M22 x 2.5	123.00
M22 x 1.5	123.00
M24 x 3.0	135.00
M24 x 2.0	135.00

Sizes #10 (M5 Metric) and smaller are solid tapered thread form from low limit to high limit of class 2B pitch diameters.

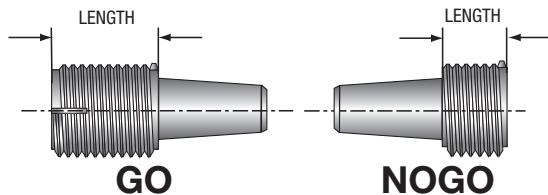
## S.T.I. THREAD PLUG GAGES



**CHROME PLATED**

### S.T.I. THREAD PLUG GAGES ("HELICAL COIL" CLASS X TAPERLOCK)

SIZE	PITCH UNC	PITCH UNF	GO or NOGO MEMBER		
			GO	D/E w/ HANDLE	HANDLE
#2	56	NA	\$46.00	\$101.00	\$9.00
#3	48	56	46.00	101.00	9.00
#4	40	48	40.00	89.00	9.00
#5	40	NA	40.00	89.00	9.00
#6	32	40	40.00	89.00	9.00
#8	32	36	39.00	87.00	9.00
#10	24	32	39.00	87.00	9.00
#12	24	NA	39.00	87.00	9.00
1/4	20	28	37.00	83.00	9.00
5/16	18	24	37.00	83.00	9.00
3/8	16	24	37.00	83.00	9.00
7/16	14	20	39.00	87.00	9.00
1/2	13	20	41.00	91.00	9.00
9/16	12	18	49.00	107.00	9.00
5/8	11	18	49.00	107.00	9.00
3/4	10	16	52.00	113.00	9.00



### GAGE BLANK LENGTH DIMENSIONS

#### S.T.I. THREAD PLUG GAGES ("HELICAL COIL" CLASS X TAPERLOCK)

SIZE	PITCH UNC	PITCH UNF	LENGTH	
			GO	NO GO
#2	56	NA	5/16	7/32
#3	48	56	5/16	7/32
#4	40	48	5/16	7/32
#5	40	NA	5/16	7/32
#6	32	40	13/32	9/32
#8	32	36	13/32	9/32
#10	24	32	1/2	5/16
#12	24	NA	1/2	5/16
1/4	20	28	1/2	5/16
5/16	18	24	3/4	3/8
3/8	16	24	3/4	3/8
7/16	14	20	7/8	1/2
1/2	13	20	7/8	1/2
9/16	12	18	7/8	1/2
5/8	11	18	7/8	1/2
3/4	10	16	1	5/8



# BRITISH GAGES

## BSPT TAPER SCREW THREAD PLUG AND RING GAGES

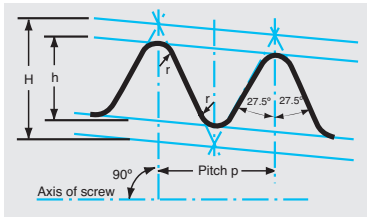
Gages for testing pipe threads where pressure tight joints are made on the threads to BS 21: 1985, and ISO 7/2 1982.

BS 21 specifies requirements of pipe threads for joints made pressure tight by the mating of threads, and are taper external, taper internal, parallel external and parallel internal threads.

The thread form is based on the Whitworth profile. The taper is 1:16 on diameter, normal to the axis.

Please note that ISO-7-2:2000(E) specifies that the external taper product thread is gauged by using a parallel full form threaded ring gage and a tapered plain ring gage respectively.

ISO 7/2 are different in design and have different gage manufacture limits than BS21.



TO BS21 & ISO 7/2 1982  
ALSO AVAILABLE  
FOR ISO 7/2 2000

AVAILABLE AS:

- Taper Screw "Rc" Plug
- Taper Screw "R" Ring
- Taper Plain Plug

CALL FOR PRICES

### SIZES

1/16 X 28
1/8 X 28
1/4 X 19
3/8 X 19
1/2 X 14
5/8 X 14
3/4 X 14
1 X 11
1 1/8 X 11
1 1/4 X 11
1 1/2 X 11
2 X 11
2 1/2 X 11
3 X 11
3 1/2 X 11
4 X 11
5 X 11
6 X 11

## BA SCREW THREAD GAGES

TO BS93 & BS 919  
PLUGS & RINGS TO NORMAL CLASS

AVAILABLE AS:

- End only Go or NoGo Screw Plug
- Double End Go or NoGo Screw Plug w/handle
- Screw Ring Gage Go or NoGo

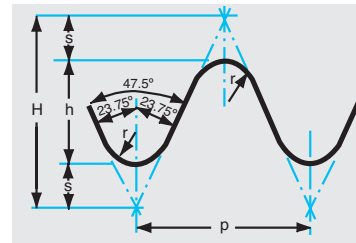
CALL FOR PRICES

### SIZES

BA
0
1
2
3
4
5
6
7
8
9
10

Gages for testing threads having a full form BA profile are manufactured to BS 93: 1951, and BS 919: Part 2: 1971.

BS 93 specifies basic information for the British Association thread form, and tabulates diameters for threads from 0BA to 25BA.



$$H = 1.1363365 \times p$$

$$r = .1808346 \times p$$

$$h = 0.6 \times p$$

$$s = 2681683 \times p$$

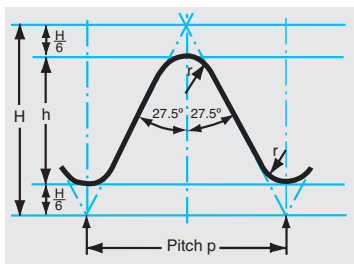
## BSF & BSW SCREW THREAD GAGES

Gages for testing parallel threads having a full form Whitworth profile are manufactured to BS 84: 1956, and BS 919: Part 2: 1971.

BS 84 specifies basic information for the Whitworth form, and tabulates diameters for threads designated BSW and BSF.

BSW is a coarse thread series from 1/8" to 6" diameter.

BSF is a fine thread series from 3/16" to 3" diameter.



$$H = 0.960491p$$

$$h = \frac{2}{3}H = 0.640327p$$

$$\frac{H}{6} = 0.160082p$$

$$r = 0.137329p$$

TO BS84 & BS 919  
PLUGS & RINGS TO MEDIUM CLASS

AVAILABLE AS:

- End only Go or NoGo Screw Plug
- Double End Go or NoGo Screw Plug
- Double End Style A Setting Plug
- Screw Ring Gauge Go or NoGo

CALL FOR PRICES

### SIZES

BSF	BSW
	1/8 X 40
3/16 X 32	3/16 X 24
1/4 X 26	1/4 X 20
5/16 X 22	5/16 X 18
3/8 X 20	3/8 X 16
7/16 X 18	7/16 X 14
1/2 X 16	1/2 X 12
9/16 X 16	9/16 X 16
5/8 X 14	5/8 X 11
3/4 X 12	3/4 X 10
7/8 X 11	7/8 X 9
1 X 10	1 X 8
1 1/8 X 9	1 1/8 X 7
1 1/4 X 9	1 1/4 X 7
1 3/8 X 8	1 3/8 X 6
1 1/2 X 8	1 1/2 X 6

## BSP SCREW THREAD GAGES

TO BS2779\* ALSO TO DIN 228  
RING GAUGES SUPPLIED IN CLASS A OR B

CALL FOR PRICES

### SIZES

G1/8 X 28
G1/4 X 19
G3/8 X 19
G1/2 X 14
G5/8 X 14
G3/4 X 14
G7/8 X 14
G1 X 11
G1 1/8 X 11
G1 1/4 X 11
G1 1/2 X 11
G2 X 11
G2 1/2 X 11
G3 X 11
G3 1/2 X 11
G4 X 11
G5 X 11
G6 X 11

BSP - Parallel Thread - ISO 228, BS 21, DIN 259, DIN 5157. Class A is standard tolerance. Class B is loose or rough tolerance. 55° thread.

\* In March 2003 the British Standards Institute withdrew BS-2779 and replaced it with ISO-228 (technically BS-EN-ISO-228). This statement is that all requirements for BS-2779 will now be filled with ISO-228

# TAPER PIPE THREAD GAGES

## METHOD OF GAGING PRODUCT – NPT

**Internal Taper Pipe Threads:** The plug gage is screwed up tight by hand into the internal thread of the product. The thread is within the permissible tolerance when the gaging notch of the working plug is not more than plus or minus one turn from being flush with the end of the thread. Fig. 1.

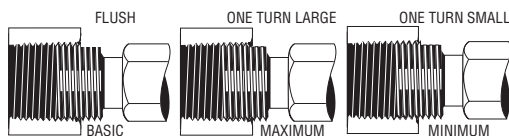


Fig. 1 Gaging internal American National Taper pipe threads with working gage. When the internal thread is chamfered, the gaging point shall be the intersection of the chamfer and the pitch cone of the thread.

**External Taper Pipe Threads:** In gaging external taper threads, the ring gage is screwed up tight by hand on the external thread of the product. The thread is within the permissible tolerance when the the gaging face of the working ring is plus or minus one turn from being flush with the end of the thread. Figure 2.

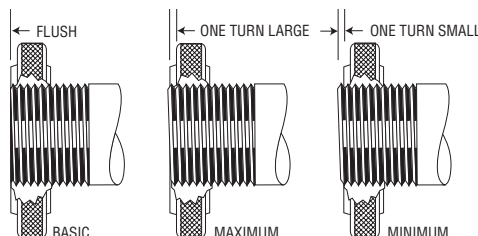


Fig. 2 Gaging external NPT threads.

## Limit Type Plug and Ring Gages

The limit type gage is used to eliminate counting turns by which the gage over or under travels to the basic surface.

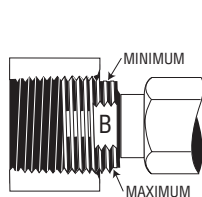


Fig. 3  
L<sup>1</sup> limit type Plug Gage

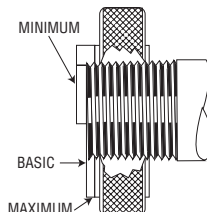


Fig. 4  
L<sup>2</sup> limit type Ring Gage

The gages include the basic notch on the plug and the basic surface on the ring and in addition include two notches, or steps, on both plug and ring. One notch is considered the maximum and the other the minimum. The retention of the basic step, or notch, facilitates checking against master and reference gages and provides a means of checking the maximum and minimum steps.

## METHOD OF GAGING PRODUCT ANPT AND NPTF

**Internal Threads.** The internal thread is first gaged with a limit-type L1 taper thread plug gage, and the gaging notch which most nearly represents the size of the thread is noted.

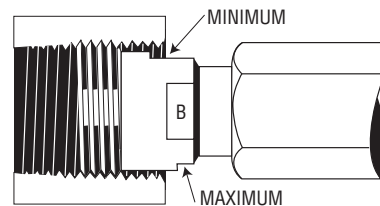


Fig. 5 Checking fitting with L<sup>3</sup> thread Plug Gages.

The three product threads beyond the L1 are called the L3 length and are the additional threads which will be engaged when the pipe is tightened with a wrench, or “wrench tight”. These threads are next gaged with an L3 taper thread plug gage. This is also a limit type gage with the length equal to L<sup>1</sup> plus L3, but which has four threads at the small end only. For a thread to be acceptable on an L3 gage, the position of the gaging notch must coincide within 1/2 turn of the position previously noted on the L1 gage. The L1 and the L3 together check the lead, taper, pitch diameter, and the major diameter.

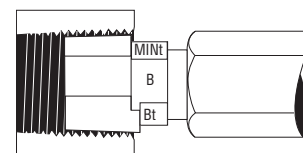


Fig. 6 Checking minor diameter truncation with 6 step plain Plug Gages.

The minor diameter of internal threads is determined by the amount of truncation of the thread crests. As the truncation and pitch diameter varies within limits, so will the minor diameter vary and for this reason it is customary to refer to minor diameter as at “maximum truncation” or “minimum truncation”. There are also 3 pitch diameter gaging positions: basic, minimum, and maximum which necessitates 3 pairs of maximum and minimum truncation steps, or a total of 6 positions.

To gage the minor diameter, a 6 step plain plug gage is always used in connection with the L1 gage. The L1 gage is used as a guide to determine the gaging position. If the basic gage notch is flush with end of the product, the threads are considered to be basic. The plain plug gage used on the same fitting should show the end of the product at or between the basic maximum and minimum notches.

**External Threads:** ANPT and NPTF external threads are first gaged with a thin L1 taper thread ring gage. Observe the small end of the gaging face of the ring to the small end of the pipe.

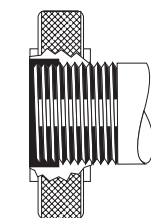


Fig. 7 L2 Thick Ring Gage



# TAPER PIPE THREAD GAGES

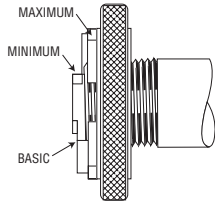


Fig. 8 Checking major diameter truncation with 6 step plain ring gage.

The L2 ring is used to gage the effective external threads beyond the L1 location length. It is relieved by counterboring at the small end to a depth equal to L1 minus 1P. The L2 is used like the thin L1 gage is used with a count of the number of turns by which the product over travels or fails to reach basic. The two gages together inspect the lead, pitch diameter, taper, and minor diameter. When both the L1 and L2 rings are used, the relative position of the small end of the pipe and the basic gaging face of the rings may not vary more than 1/2 turn.

The 6 step plain taper ring gage checks the truncation of the crest at the major diameter. Three of the steps represent the minimum truncation for the basic, maximum and minimum thread sizes – B, MN, MX. The other three represent the corresponding maximum truncation.

The 6 step plain ring is used similar to the 6 step plain plug. The ring is always used with a limit type thin L1 ring gage.



## TAPER PIPE THREAD GAGES - NPT AND NPTF

NPT(ANSI/ASME B1.20.1)

NPTF(ANSI/ASME B1.20.5)



SIZE	NPT PLUG	NPT RING	NPTF PLUGS L1 or L3	NPTF PLUGS 6 STEP PLAIN	NPTF RINGS L1	NPTF RINGS L2	NPTF RINGS 6 STEP PLAIN	HANDLES
1/16-27	\$68.00	\$129.00	\$86.00	\$139.00	\$139.00	\$191.00	\$219.00	\$10.00
1/8-27	50.00	91.00	63.00	139.00	97.00	185.00	219.00	10.00
1/4-18	56.00	99.00	73.00	139.00	115.00	191.00	219.00	10.00
3/8-18	62.00	109.00	86.00	139.00	120.00	185.00	219.00	11.00
1/2-14	69.00	121.00	100.00	139.00	127.00	193.00	219.00	11.00
3/4-14	80.00	139.00	109.00	146.00	141.00	218.00	244.00	11.00
1-11 1/2	89.00	160.00	120.00	158.00	164.00	238.00	244.00	11.00
1 1/4-11 1/2	99.00	175.00	132.00	168.00	176.00	258.00	262.00	11.00
1 1/2-11 1/2	112.00	206.00	154.00	184.00	210.00	283.00	299.00	11.00
2-11 1/2	136.00	252.00	181.00	255.00	283.00	328.00	341.00	11.00
2 1/2-8	165.00	293.00	265.00	393.00	316.00	393.00	405.00	14.00
3-8	191.00	372.00	297.00	425.00	365.00	464.00	495.00	14.00
3 1/2-8	295.00	473.00	Priced on Request					16.00
4-8	320.00	540.00	Priced on Request					16.00
5-8	430.00	645.00	Priced on Request					16.00
6-8	535.00	761.00	Priced on Request					16.00

Master gages priced on request.

Long form calibration - add \$30. per gage.

## TAPER PIPE THREADS - ANPT - WORKING & INSPECTION

SAE AS71051 and MIL-G-10944



SIZE	L-1 RING GAGE BASIC STEP	L-2 RING GAGE BASIC STEP	PLAIN TAPER RING 6 STEP	L-1 PLUG GAGE BASIC STEP	L-3 PLUG GAGE BASIC STEP	PLAIN TAPER PLUG 6 STEP	HANDLE
1/16-27	\$210.00	\$245.00	\$260.00	\$145.00	\$175.00	\$165.00	\$10.00
1/8-27	185.00	225.00	260.00	145.00	175.00	165.00	10.00
1/4-18	180.00	230.00	255.00	145.00	140.00	165.00	10.00
3/8-18	180.00	225.00	255.00	135.00	135.00	165.00	10.00
1/2-14	165.00	235.00	255.00	130.00	145.00	165.00	10.00
3/4-14	175.00	255.00	285.00	140.00	145.00	175.00	10.00
1-11 1/2	225.00	280.00	285.00	155.00	175.00	185.00	12.00
1 1/4-11 1/2	225.00	295.00	315.00	170.00	175.00	195.00	12.00
1 1/2-11 1/2	245.00	330.00	355.00	175.00	185.00	215.00	12.00
2-11 1/2	345.00	380.00	398.00	215.00	215.00	298.00	12.00
2 1/2-8	375.00	455.00	470.00	325.00	325.00	455.00	15.00
3-8	430.00	539.00	575.00	365.00	365.00	490.00	15.00

Long form calibration - add \$30. per gage.

# STRAIGHT PIPE THREAD GAGES



**NPSM STRAIGHT PIPE RINGS AND SET PLUGS**  
(ANSI/ASME B1.20.1)

SIZE	P.D. GO 2A	P.D. NOGO 2A	GO or NOGO RING GAGE PER MEMBER	GO&NOGO SET PLUG ASSEMBLY
1/8-27	.3725	.3689	\$222.00	\$229.00
1/4-18	.4903	.4859	208.00	210.00
3/8-18	.6256	.6211	208.00	220.00
1/2-14	.7769	.7718	217.00	231.00
3/4-14	.9873	.9820	218.00	262.00
1-11 1/2	1.2369	1.2311	238.00	268.00
1 1/4-11 1/2	1.5816	1.5756	279.00	342.00
1 1/2-11 1/2	1.8205	1.8144	294.00	364.00
2-11 1/2	2.2944	2.2882	373.00	436.00
2 1/2-8	2.7600	2.7526	415.00	546.00
3-8	3.3862	3.3786	494.00	598.00

**NPSM STRAIGHT PIPE PLUGS**  
(ANSI/ASME B1.20.1)

SIZE	PITCH DIA. GO MEMBER 2B	PITCH DIA. NOGO MEMBER 2B	GO or NOGO PER MEMBER	HANDLE	GO&NOGO w/HANDLE
1/8-27	.3736	.3783	\$83.00	\$10.00	\$176.00
1/4-18	.4916	.4974	83.00	10.00	176.00
3/8-18	.6270	.6329	83.00	10.00	176.00
1/2-14	.7784	.7851	93.00	10.00	196.00
3/4-14	.9889	.9958	93.00	10.00	196.00
1-11 1/2	1.2386	1.2462	108.00	10.00	226.00
1 1/4-11 1/2	1.5834	1.5912	120.00	10.00	250.00
1 1/2-11 1/2	1.8223	1.8302	130.00	10.00	270.00
2-11 1/2	2.2963	2.3044	145.00	10.00	300.00
2 1/2-8	2.7622	2.7720	162.00	10.00	334.00
3-8	3.3885	3.3984	200.00	10.00	410.00

**NPSF TAPERLOCK THREAD PLUG GAGES**  
(ANSI/ASME B1.20.5)

SIZE	P.D. MIN.	P.D. MAX.	GO or NOGO PER MEMBER	HANDLE	GO&NOGO w/HANDLE
1/16-27	.2768	.2803	\$90.00	\$10.00	\$190.00
1/8-27	.3692	.3727	90.00	10.00	190.00
1/4-18	.4852	.4904	90.00	10.00	190.00
3/8-18	.6205	.6257	90.00	10.00	190.00
1/2-14	.7700	.7767	100.00	10.00	210.00
3/4-14	.9805	.9872	105.00	10.00	220.00
1-11 1/2	1.2284	1.2365	117.00	10.00	244.00



**GAGES REQUIRED TO CHECK OTHER PIPE THREADS**

THREAD TYPE	GAGING EXTERNAL PRODUCT THREAD	GAGING INTERNAL PRODUCT THREAD
ANPT	ANPT L1, L2, and Plain 6 Step Ring	ANPT L1, L3, and Plain 6 Step Plug
NPSF	Mates with NPTF External Threads	NPTF L1 Plug Gage
PTF SAE Short	PTF SAE Short L1, and L2 Ring gages	PTF SAE Short L1 and L3 Plug Gages
NPSC	Mates with NPT External Threads	NPT L1 Plug Gage
NPSM	GO / NOGO Thread Ring Gages	GO / NOGO Thread Plug Gages
NPSL	GO / NOGO Thread Ring Gages	GO / NOGO Thread Plug Gages
NPSH	GO / NOGO Thread Ring Gages	GO / NOGO Thread Plug Gages
NH	GO / NOGO Thread Ring Gages	GO / NOGO Thread Plug Gages
BSPT System A	BSPT Thread Ring	BSPT Thread Plug
BSPT System B	BSPT Thread Ring and Plain Ring	BSPT Thread Plug and Ring
BSPP	GO / NOGO Thread Ring	GO / NOGO Thread Plug
NGT	NGT L1, L8 and Plain 6 Step ring	NGT L1, L9 and Plain 6 Step

Gages priced on request.

API - See page 15.

# API (American Petroleum Institute) GAGES



Thread Check, Inc. offers API Thread Gages to Spec Q1, Spec 5B, Spec 7, Spec 11B as well as many other special API gages. Our engineering staff have served on various API gaging subcommittees and would be pleased to assist you with all your custom requirements. Contact **800 767 7633** for assistance.

API Gages are available in Chrome for increased wear life and resistance to corrosion from high humidity and salt spray.

Thread Check is a proud member of the American Petroleum Institute.



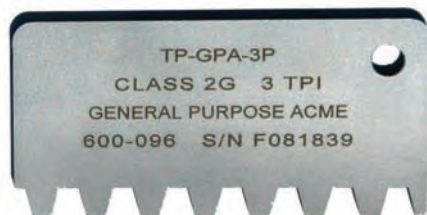
		Nominal Size				
		From	To	TPI	TPF	
SPECIFICATION APPLICATION	SPEC 5B (PLUG RING)	Casing - Round	4-1/2	20	8	3/4
		Line Pipe	1/8	20	8 - 27	3/4
		Tubing-Non Upset	1.050	3-1/2	10	3/4
			4	4-1/2	8	3/4
		Tubing-External Upset	1.050	1.900	10	3/4
			2-3/8	4-1/2	8	3/4
		Tubing-Integral Joint	2-3/8	4-1/2	8	3/4
	Extreme Line Casing	5	7-5/8	6	1-1/2	
	SPEC 7 (PLUG RING)		8-5/8	10-3/4	5	1-1/4
		NC Connections	NC 10	NC 16	6	1-1/2
			NC 23	NC 50	4	2
			NC 56	NC 77	4	3
		Regular	1	8-5/8	4 - 6	1-1/2,2,3
		Full Hole	3-1/2	6-5/8	4 - 5	2,3
		Internal Flush	2-3/8	5-1/2	4	2
	OTHER OIL FIELD RELATED CONNECTIONS(PLUG/RING)	H-90	2-3/8	8-5/8	3-1/2	1-1/4,2,3
		Slim Hole	2-3/8	—	4	2
		Extra Hole	2-7/8	5	4	2
		Wide Open	2-3/8	—	4	2
		AOH	2-3/8	4-1/2	4	1-1/2
		PAC	2-3/8	3-1/2	4	1-1/2
XHole		2-7/8	5	4	2	
SPEC 11B	Sucker Rods B1 to B8	1/2	1-1/8	10		
	Sucker Rods P1 to P8	1/2	1-1/8	10		
SPECIALS	Mining: BECO, D1-22, D1-42					
	American National Special Threads					
	Tapered Thread Gages - AWWA					





## PROFILE GAGES, THREAD PROFILE, TP SERIES

The TP Series of Thread Profile Gages are manufactured to tolerances of  $\pm 0.0002$ " using EDM technology. These precision gages are ideal for quickly identifying each of the different thread forms named in the API Std. 5B and Specification 7. Profile gages can also be used to perform a visual inspection of a thread form for detecting chipped inserts, stretched threads, wide first threads, or rolled over threads. Special profiles are available and quoted upon request.



TPF/TPI Thread Form	Connector Type
1.5" TPF, 4 TPI V-0.076	2 3/8" – 3 1/2" P.A.C. Connections
3/4" TPF, 8 TPI 8 Round	API 8 Round Casing, Tube & Drill Type
3/4" TPF, 10 TPI 10 Round	API 10 – Round Tubing
3/4" TPF, 8 TPI 8 V Thread	8V API Line Pipe American Std. NPR
3/4" TPF, 11 1/2 TPI 11 1/2 V Thread	11 1/2 V API Line Pipe, American Std. NPT
3/4" TPF, 5 TPI	API Buttress Casing, Internal, 4 1/2" – 13 3/8"
3/4" TPF, 5 TPI	API Buttress Casing, External, 4 1/2" – 13 3/8"
1" TPF, 5 TPI	API Buttress Casing, Internal, 16" – 20"
1" TPF, 5 TPI	API Buttress Casing, External, 16" – 20"
3" TPF, 5 TPI V – 0.040	2 3/8" – 4 1/2" API REG 3 1/2", 4 1/2", API Full Hole
2" TPF, 4 TPI V – 0.050	6 5/8" API REG 5 1/2" & 6 5/8" API Full Hole
3" TPF, 4 TPI V – 0.050	5 1/2", 7 5/8", & 8 5/8" API REG
2" TPF, 4 TPI V – 0.038R	4" API Full Hole, 2 7/8" – 5" Hughes Xtra Hole 2 3/8" – 4 1/2" Hughes Slim Hole
2" TPF, 4 TPI V – 0.038R	2 3/8" 5 1/2" API INT Flush API Numbered Connectors #23 - #50
3" TPF, 4 TPI V – 0.038R	API Numbered Connectors #56 - #77
1.5" TPF, 6 TPI V – 0.055	API Numbered Connectors #10, #12, #13, #16 M.T. (Macaroni Tubing)
1.5" TPF, 4 TPI V – 0.076	2 3/8" – 4 1/2" American Open Hole
2" TPF, 3.5 TPI H – 90	3 1/2" – 6 5/8" Hughes H – 90
3" TPF, 3.5 TPI H – 90	7" – 8 5/8" Hughes H – 90
1.25" TPF, 3 TPI H – 90	2 3/8" – 3 1/2" Hughes Slim Line
Tool Grinding & Setting Gage	90° & 60° Threads, Tool Grinding & Setting Gage
3/4" TPF, 14 TPI	NPT Threads

# 3-Wire Thread Measuring Systems

Thread measuring holders and wires available for a wide selection of measuring instruments.

Wire holders and 3 thread measuring wires for each thread pitch

Vertically Adjustable Platform for positioning and supporting threaded parts and plug gages between anvils of micrometer

Exclusive "U" Track for maintaining wire holders in the ideal position for engaging the lead angle of a thread

SPC compatible

## Thread Check 0-1" 3-Wire Thread Measuring System

Micrometer with a graduation of .00005



Locking clamp holds micrometer accurately in place

**1001B-Base assembly...\$210.00**  
**1001M-Micrometer**  
**.0 -1" Micrometer...Call for price**

PATENT NO. 5,317,809  
PATENT NO. 5,383,286  
FOREIGN PATENT  
NO. 94901380.0

**Thread Check, Inc. offers the 3-Wire Thread Measuring System for fast and accurate thread measurement on a variety of measuring instruments.**

The traditional three-wire method is the most accurate method of measuring the effective or pitch diameter of an external screw thread. Unfortunately in the past, holding and correctly positioning three wires against a thread while simultaneously taking an accurate measurement had been an extremely difficult task. Now, Thread Check's 3-Wire Thread Measuring System provides a simple and precise way for determining the pitch diameter for threaded parts and thread plug gages. The system enhances Repeatability and Reproducibility (R & R) and reduces measurement time to a fraction of the time normally taken using the traditional three-wire method.

Thread Check offers specially designed wire holders and wires, base assemblies, and vertically adjustable off-set platforms that make thread measurement fast and accurate. Thread Check's holders are fitted with certified full length thread measuring wires that meet or exceed the requirements of the ASME/ANSI B1.2, and B1.16M, thread standards as well as Federal Spec. GGG-W-366b and ISO standards. All wire holder sets include the actual wire size, NIST traceable number, and the constant required for determining the pitch diameter.

Thread measuring holders are precision made to predetermined thread pitches. Thread measuring wires are held in a predetermined position by light pressure clips. The holders rotate freely on the

spindle/anvil of the measuring instrument so as to engage the lead angle of a thread. Holders for finer pitches have wires positioned off center to allow for measurement at the back of a thread and closer to the shoulder of certain parts. Holders can be purchased without wires for companies that have existing wires. Wires can be easily installed. Thread measuring holders are available in a full range of Standard, Metric, and Acme sizes. Thread Check's engineering department can design wire holders for multiple start threads, helical gears, worms, and other special thread measurement applications.

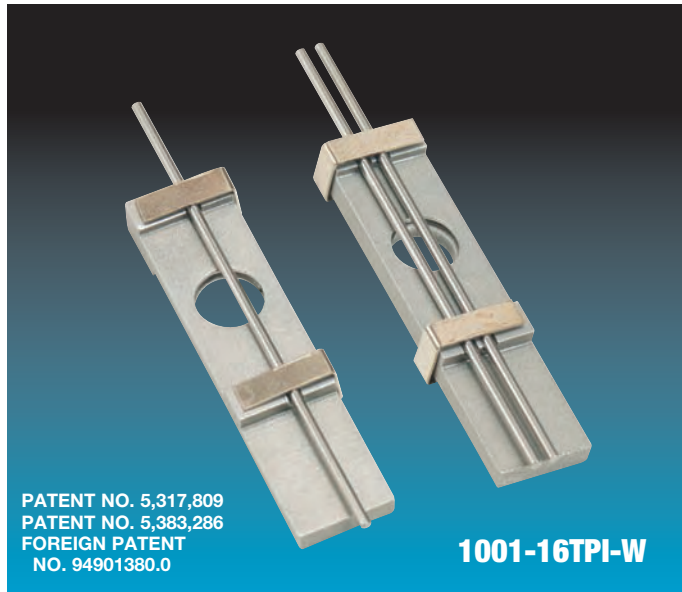
## Applications:

- Certify setplug gages & working thread plug gages
- Monitor the wear on working thread plug gages
- Monitor and control pitch diameter variation during thread fabrication
- Use in conjunction with "GO" and "NOGO" ring gages to control thread size to the most demanding specifications
- Determine out of roundness and taper that may exist in threaded parts
- Applications for preplating & postplating thread measurement
- Eliminate the cost and time involved in using outside calibration services
- Reduce measurement time to a fraction of the time normally taken using the traditional three-wire method.



**THREAD CHECK INC.**

# 3-Wire Thread Measuring Holders and Wires



PATENT NO. 5,317,809  
PATENT NO. 5,383,286  
FOREIGN PATENT  
NO. 94901380.0

**1001-16TPI-W**

MEASURING INSTRUMENTS	ANVIL DIA.		PART NO.
	INCH	MM	
Mitutoyo Micrometers 0 -1", 1"-2"	.250	6.35	1001-
Starrett Micrometers 0 -1", 1"-2"	.250	6.35	1001-
Mitutoyo Bench Comparator Series 162	.315	8.0	3004-
Starrett Bench Comparator 673Z	.300	7.62	5002-
Pratt & Whitney Supermicrometer	.375	9.525	3104-
Browne & Sharpe Ultra Mic.	.312	7.924	3204-
Fowler Trimos	.256	6.5	1201-
Zeis ULM	.315	8.0	1301-
American SIP	.315	8.0	1401-
Helios UMG 50	.256	6.5	1501
Flexbar	.256	6.5	1701-
Mahr 828 Universal	.295	7.5	1601-

Call for compatibility of other measuring instruments.  
All trademarks are the property of their respective companies.  
Specials priced on request.

## HOLDERS AND WIRES

When ordering deduct  
5 to 9 sets ..... \$5. per set  
10 or more sets ..... 10. per set

## HOLDERS LESS WIRES

When ordering any pitch/TPI.  
1 to 4 sets ..... \$115. per set  
5 to 9 sets ..... 110. per set  
10 or more sets ..... 105. per set

Special holders and wires include: Whitworth, Buttress and Worm threads. Priced on request

Gear and spline 2 and 3 wire applications priced on request.

## HOW TO ORDER

**1001 - 16TPI - W**

Part No    TPI    W=wires  
                 or  
                 LW=less wires  
                 Pitch

**1001 - 1.0M - W**



## Tolerance and specifications:

Thread measuring wire sets are...

- within .000020" of best wire diameter for specified tpi.
- within .000005" of the calibrated size provided on label.
- have the same diameter within .000005".
- roundness within .000010".
- taper does not exceed .000010".
- standard 2" lengths.
- minimum hardness of RC 62.5.
- surface finish lapped, 1 MU AA.
- traceable to NIST.
- wires meet or exceed Federal specifications ASME/ANSI B1.2 and B1.6M for Grade A Master Thread Wires



METRIC HOLDERS & WIRES			
Pitch	MM diameter	Inch diameter	Price
.2mm	.1155	.00455	\$205
.225mm	.1299	.00511	205
.25mm	.1443	.00568	205
.30mm	.1732	.00682	205
.35mm	.2021	.00796	205
.40mm	.2309	.00909	205
.45mm	.2598	.01023	195
.50mm	.2887	.01137	195
.55mm	.3175	.01250	195
.60mm	.3464	.01364	195
.70mm	.4041	.01591	165
.75mm	.4330	.01705	165
.80mm	.4619	.01818	165
.85mm	.4907	.01932	165
.90mm	.5196	.02046	165
1.00mm	.5774	.02273	165
1.25mm	.7217	.02841	165
1.50mm	.8660	.03410	165
1.75mm	1.0104	.03978	165
2.00mm	1.1547	.04546	165
2.50mm	1.4434	.05683	165
3.00mm	1.7321	.06819	165
3.50mm	2.0207	.07956	165
4.00mm	2.3094	.09092	165
4.50mm	2.5981	.10229	205
5.00mm	2.8868	.11365	205
5.50mm	3.1754	.12502	205
6.00mm	3.4641	.13638	205

## LIBRARIES IN WOODEN CASES

Partial Library:	.3-.3.5 mm	\$3340
Full Library:	.2-4.0 mm	\$3935

## STANDARD HOLDERS & WIRES

Threads per inch	Wire diameter	Price
120	.00481	\$200
100	.00577	200
96	.00601	200
90	.00642	200
80	.00722	200
72	.00802	200
64	.00902	190
56	.01031	190
50	.01155	190
48	.01203	155
44	.01312	155
40	.01443	155
36	.01604	155
32	.01804	155
30	.01925	155
28	.02062	155
27	.02138	155
26	.02221	155
24	.02406	155
22	.02624	155
20	.02887	155
18	.03208	155
16	.03608	155
14	.04124	155
13	.04441	155
12	.04811	155
11.5	.05020	155
11	.05249	155
10	.05774	155
9	.06415	155
8	.07217	155
7.5	.07698	155
7	.08248	155
6	.09623	155
5.5	.10497	190
5	.11547	190

## LIBRARIES IN WOODEN CASE

Partial Library* 6-36	\$2900
Full Library* 5-80	4545

\* 7.5 and 22 TPI not included.

## ACME HOLDERS & WIRES

Threads per inch	Wire diameter	Price
5	.10329	\$200
5.5	.09390	180
6	.08608	180
7	.07378	180
8	.06456	180
9	.05738	180
10	.05164	180
11	.04695	180
12	.04304	180
14	.03689	180
16	.03228	180
18	.02869	180
20	.02582	180

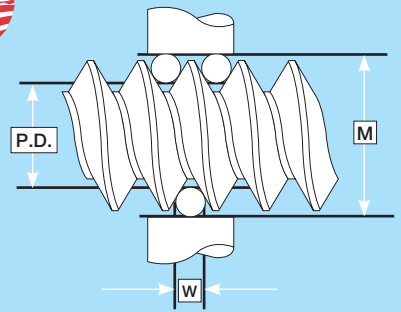
## LIBRARIES IN WOODEN CASE

Full Library 5A-20A	\$2170
---------------------	--------

For assistance call your dealer or 1-800-767-7633



# CERTIFIED THREAD MEASURING WIRES



P.D. = Pitch Diameter  
M = Measurement over wires  
W = Wire diameter  
C = Constant

C = .86603 x Pitch (inches) - 3W  
P.D. = M - C  
W = .57735 x P

## Thread Measuring Wires

### Tolerance and specifications:

- within .000020" of best wire diameter for specified tpi.
- within .000005" of the calibrated size provided on label.
- have the same diameter within .000005".
- roundness within .000010".
- taper does not exceed .000010".
- standard 2" lengths.
- minimum hardness of RC 62.5.
- surface finish lapped, 1 MU AA.
- traceable to NIST.
- wires meet or exceed Federal specifications ASME/ANSI B1.2 and B1.6M for Grade A Master Thread Wires

## Use of best size wires

In measuring screw threads it is desirable to use wires which touch the thread at or near the pitch diameter for the reason that with such "Best Size" wires the measurement of pitch diameter is least effected by an error in the included angle of thread.

	Max.	Best	Min.
60°	1.010362p	.57735p	.505182p
55°	.82573p	.563692p	.50568p
53°-8°	.97828p	.55902p	.54076p
47 1/2°	.72889p	.54625p	.49852p
29° Acme	.650013p	.51645p	.487263p

p=Pitch n=TPI P= 1/n

**Notes:** Maximum and minimum wires should be used which are safely within the limiting dimensions given by the above formulas.

Call for information and pricing of special wire diameters including Whitworth, British Association, Buttress and worm threads.

### Root Diameter Wires:

60° and 55° threads from 4 1/2-64 TPI.

Price per set of 3 wires.

Call for prices.

60° METRIC		
Pitch mm	Nominal Best Wire Diameter mm	Price Set of 3
.2	.1155	\$76.00
.225	.1299	76.00
.25	.1443	76.00
.3	.1732	76.00
.35	.2021	76.00
.4	.2309	76.00
.45	.2598	76.00
.5	.2887	76.00
.6	.3464	76.00
.7	.4041	76.00
.75	.4330	48.00
.8	.4619	48.00
.9	.5196	48.00
1.0	.5774	48.00
1.25	.7217	48.00
1.5	.8660	48.00
1.75	1.0104	48.00
2.0	1.1547	48.00
2.5	1.4434	48.00
3.0	1.7321	48.00
3.5	2.0207	48.00
4.0	2.3094	48.00
4.5	2.5981	48.00
5.0	2.8868	76.00
5.5	3.1754	76.00
6.0	3.4641	76.00
7.0	4.0415	76.00
8.0	4.6188	76.00
9.0	5.1962	76.00
10.0	5.7735	76.00

## LIBRARY SETS

Set No. 23M, 23 sizes  
(.3m pitch to 6m pitch)  
with case \$1351.00

60° Metric  
Set No. 30M, 30 sizes  
(.2m pitch to 10m pitch)  
with case \$1871.00

### Grand Master Calibration Sets

Supplied in durable corrosion resistant containers in fitted cases, identified by serial numbers with certification of calibration.

#20 HSC, 20 sizes (6-36 TPI)	\$805.00
#30 HSC, 30 sizes (5-80 TPI)	\$1380.00
#34 HSC, 34 sizes (4-80 TPI)	\$1553.00
#30 HSC, 30 sizes (2-10mm)	\$1610.00
#23 HSC, 22 sizes (.3-6mm)	\$1150.00
#22 HSC, 22 sizes (1-20 TPI)	\$1380.00

One master for each pitch.  
Grand Master Calibration Sets are not returnable for credit or cancellation. Certificate of Calibration traceable to NIST included with all sets.

60° INCH		
Threads per Inch (n)	Nominal Best Wire Diameter G	Price Set of 3
120	.00481	\$76.00
100	.00577	76.00
96	.00601	76.00
90	.00642	76.00
80	.00722	76.00
72	.00802	76.00
64	.00902	76.00
56	.01031	76.00
50	.01155	76.00
48	.01203	48.00
44	.01312	48.00
40	.01443	48.00
36	.01604	48.00
32	.01804	48.00
30	.01925	48.00
28	.02062	48.00
27	.02138	48.00
26	.02221	48.00
24	.02406	48.00
22	.02624	48.00
20	.02887	48.00
18	.03208	48.00
16	.03608	48.00
14	.04124	48.00
13	.04441	48.00
12	.04811	48.00
11 1/2	.05020	48.00
11	.05249	48.00
10	.05774	48.00
9	.06415	48.00
8	.07217	48.00
7 1/2	.07698	48.00
7	.08248	48.00
6	.09623	48.00
5 1/2	.10497	76.00
5	.11547	76.00
4 1/2	.12830	76.00
4	.14434	76.00
3 1/2	.16496	76.00
3 1/4	.17765	76.00
3	.19245	76.00
2 3/4	.20995	76.00
2 1/2	.23094	76.00
2	.28868	76.00

## LIBRARY SETS

60°Inch Set No. 30HS\*  
30 sizes (5-80 TPI)  
with case \$1578.00

Set No. 34 HS 34 sizes  
(4-80 TPI) with case 1803.00

Set No.20 HS\*20 sizes  
(6-36 TPI) with case 937.00

Set No. 20 TC 20 sizes  
(6-36 TPI) with case  
(tungsten carbide shop set) Priced on Request

\* 7 1/2 & 22 TPI not included in these sets.

29° ACME		
Threads per Inch (n)	Nominal Best Wire Diameter G	Price Set of 3
1	.51645	\$87.00
1 1/3	.38734	87.00
1 1/2	.34430	87.00
1 3/4	.29511	87.00
2	.25823	87.00
2 1/2	.20658	87.00
3	.17215	87.00
3 1/2	.14756	70.00
4	.12911	70.00
4 1/2	.11477	70.00
5	.10329	70.00
5 1/2	.09390	70.00
6	.08608	70.00
7	.07378	70.00
8	.06456	70.00
9	.05738	70.00
10	.05164	70.00
12	.04304	70.00
14	.03689	70.00
16	.03228	70.00
18	.02869	70.00
20	.02582	70.00

## LIBRARY SETS

29° Acme  
Set No. 22AB, 22 sizes  
(1 to 20 TPI),with case \$1671.00

## SPECIAL THREAD MEASURING WIRES +/- .000020"

Above - including	Set of 3
.004 - .005"	\$145.00
.1016mm-.1270mm	145.00
.005-.007"	145.00
.1270mm-.1778mm	110.00
.007-.010"	110.00
.1778mm-.2540mm	110.00
.010"-.135"	110.00
.2540mm-3.429mm	110.00
.135-.260"	110.00
3.429mm-6.604mm	120.00
.260-.385"	120.00
6.604mm-9.779mm	120.00
.385-.510"	120.00
9.779mm-12.954mm	120.00
.510-.635"	120.00
12.954mm-16.129mm	145.00
.635-.760"	145.00
16.129mm-19.304mm	145.00
.760-1.010"	145.00
19.304mm-25.654mm	

P	WIRE DIAMETER FOR ENLARGED PINIONS 1.92" P	WIRE DIAMETER FOR EXTERNAL GEARS 1.728" P	ALTERNATE SERIES 1.68" P	WIRE DIAMETER FOR INTERNAL GEARS 1.44" P	PRICE SET OF TWO
2	.960	.864	.840	.720	\$84.00
2-1/2	.768	.6912	.672	.576	84.00
3	.640	.576	.560	.480	84.00
4	.480	.432	.420	.360	84.00
5	.384	.3456	.336	.288	58.00
6	.320	.288	.280	.240	58.00
7	.27428	.24686	.240	.20571	58.00
8	.240	.216	.210	.180	48.00
9	.21333	.192	.18666	.160	48.00
10	.192	.1728	.168	.144	48.00
11	.17454	.15709	.15273	.13091	48.00
12	.160	.144	.140	.120	48.00
14	.13714	.12343	.120	.10286	48.00
16	.120	.108	.105	.090	48.00
18	.10667	.096	.09333	.080	48.00
20	.096	.0864	.084	.072	48.00
22	.08727	.07855	.07636	.06545	48.00
24	.080	.072	.070	.060	48.00
28	.06857	.06171	.060	.05143	48.00
32	.060	.054	.0525	.045	48.00
36	.05333	.048	.04667	.040	48.00
40	.048	.0432	.042	.036	48.00
48	.040	.036	.035	.030	48.00
64	.030	.027	.02625	.0225	48.00
72	.02667	.024	.02333	.020	48.00
80	.024	.0216	.021	.018	48.00
96	.020	.018	.0175	.015	48.00
100	.0192	.01728	.0168	.0144	48.00
120	.0160	.0144	.014	.012	74.00
128	.0150	.0135	.01312	.01125	74.00
200	.0096	.00864	.0084	.0072	74.00

Add 50% for 3-Wire Sets

Gear Measuring Holders available for both 2 and 3 wire gear applications.

Please provide measuring instrument and spindle diameter when ordering

PRICES ON REQUEST FOR • Metric module sets • Carbide gear wires • Modified gear wires • Flatted gear wires • Gear measuring master wire library sets available

All Gear Measuring Wires meet or exceed Former Federal Specification GGG-W-366b for Grade AM.G.W. Wires are lapped to 2 RMS micro inchfinish or less.

SPECIAL GEAR MESURING WIRES +/- .000010"		
INCH ABOVE - TO	METRIC ABOVE - TO	PRICE PER 2 WIRE SET
.004 - .005"	.1016mm - .1270mm	\$120.00
.005 - .007"	.1270mm - .1778mm	120.00
.007 - .010"	.1778mm - .2540mm	97.00
.010 - .135"	.2540mm - 3.429mm	97.00
.135 - .260"	3.429mm - 6.604mm	97.00
.260 - .385"	6.604mm - 9.779mm	97.00
.385 - .510"	9.779mm - 12.954mm	97.00
.510 - .635"	12.954mm - 16.129mm	97.00
.635 - .760"	16.129mm - 19.304mm	120.00
.760 - 1.010"	19.304mm - 25.654mm	120.00

Gear wires are measured at 1 pound pressure between flat and parallel measuring surfaces.



## GEAR MEASURING WIRES MASTER SETS

Prices do not include long form certification.

Long Form Certifications are available for \$18.00 per Pitch

### Set No. 84 **\$4315.00**

Includes 2 wires each of 84 sizes from 1.92", 1.728", 1.44", and 1.68" series for measuring tooth thickness and checking involute profiles of external and internal gears from 2 to 80 P. Complete in mahogany cases.

### Set No. 71EX **\$3570.00**

Includes 2 wires each of 71 sizes from 1.92", 1.728", 1.44", and 1.68" series for measuring tooth thickness and checking involute profiles of external and internal gears from 2 to 80 P. Complete in mahogany cases.

### Set No. 48G **\$2415.00**

Includes 2 wires each of 48 sizes (excluding duplicates) from 1.728" and 1.44" series for measuring external and internal gears from 2 to 80 P. Complete in mahogany cases.

### Set No. 26EX **\$1244.00**

Includes 2 wires each of 26 sizes from 1.728" series for external gears from 2 to 80 P. Complete in mahogany case.

### Set No. 26IN **\$1315.00**

Includes 2 wires each of 26 sizes from 1.44" series for internal gears from 2 to 80 P. Complete in mahogany case

### Set No. 26 **\$1350.00**

Includes 2 wires each of 26 sizes from 1.68" alternate series for measurement of external or internal gears from 2 to 80 P. Complete in mahogany case.

### Set No. 15 **\$840.00**

Includes 2 wires each of 15 sizes from 1.92" series for 2 1/2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24, 32, 40, 48, and 64 P, external 30 degree splines, in mahogany case

### Set No. 15IN **\$1380.00**

Includes 2 wires each of 15 sizes from 1.92" series for 2 1/2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24, 32, 40, 48, and 64 P with flats for 30 degree internal splines, in mahogany case

### Set No. 9 **\$450.00**

Includes 2 wires each of 9 sizes from 1.92" series for 10, 16, 24, 32 40, 48, 64, 80, and 128 P, external and internal 45 degree serrated shafts, in mahogany case.

*Note: To avoid unnecessary duplication and expense, wires of like diameter are interchangeable within the series sets, and not duplicated in sets of No. 84, 71EX, and 48G*

*Metric Module Sets are priced on request*

# TRI-ROLL COMPARATOR

## THREAD CHECK COMPARATORS:

- System offers actual measurements of dimensional characteristics for quicker machine adjustments during thread production.
- Reduces gaging time over thread plug and ring gages.
- One single gage can be used for pre-plate, after-plate class 1, 1A, 2, 2A, 3, 3A eliminating the need for multiple fixed limit thread plug and ring gages.
- Ideal for use with Statistical Process Control – SPC.
- Rigid construction and constant measuring pressure provides consistent and accurate readings.
- Quick setting with the use of a set master.
- Easy to setup.

No.2: Various frames cover sizes from .060 to 3-3/8"

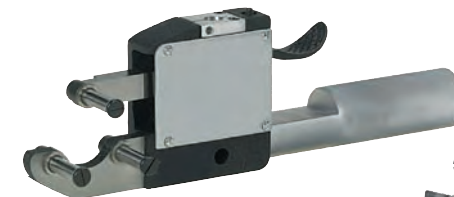
No.1: Base

No.3: Dial or digital indicator.

No.4: Stop adjusting tool. Adjusts the lever stop screw for protection of the indicator.

No.5: Gaging rolls. Various interchangeable rolls are available for threaded or cylindrical gaging applications.

Note: Setting Master also required.



Portable Hand held model.

Tri Roll Comparator.



Dual Frame Base Assembly



Multiple Mounting Bar with Spacers and Screws

BASIC SPECIFICATIONS						
Frame No.	Range Normal Size		Metric (MM)		For Threads	Roll Length
	Above	Inch to & Incl.	Above	to & Incl.		
0	.059	.073	1.5	1.8	80 to 64	.223
1	.073	.099	1.8	2.5	64 to 48	.223
2	.099	.164	2.5	4.2	48 to 32	.223
3	.164	.313	4.2	7.9	32 to 18	.424
4	.313	.500	7.9	12.7	32 to 12	.424
5	.500	.750	12.7	19.0	28 to 10	.626
6	.750	1.125	19.0	28.5	28 to 6	.931
7	1.125	1.500	28.5	38.1	28 to 6	.931
8	1.500	1.875	38.1	47.6	28 to 4	.931
9	1.875	2.250	47.6	57.1	28 to 4	.931
10	2.250	2.625	57.1	66.7	28 to 4	.931
11	2.625	3.000	66.7	76.2	28 to 4	.931
12	3.000	3.375	76.2	85.7	28 to 4	.931

There are 5 components that comprise a complete Tri-Roll Comparator Assembly. To assist you in ordering, we have separated each of the five components into pricing tables with the size, range and price.

1. BASE & ACCESSORIES			Price
Base			\$40.00
Multiple Mounting Bar			45.00
Dual Frame Assembly			80.00
Aluminum Handle for Hand Held Unit			50.00
2. FRAMES			
Frame No.	Range-Nominal Size		
	Above	To & Including	
	Inch (Metric)	Inch (Metric)	
0	.059 (1.5mm)	.073 (1.8mm)	352.00
1	.073 (1.8mm)	.099 (2.5mm)	352.00
2	.099 (2.5mm)	.164 (4.2mm)	362.00
3	.164 (4.2mm)	.313 (7.9mm)	362.00
4	.313 (7.9mm)	.500 (12.7mm)	366.00
5	.500 (12.7mm)	.750 (19.0mm)	366.00
6	.750 (19.0mm)	1.125 (28.5mm)	384.00
7	1.125 (28.5mm)	1.500 (38.1mm)	384.00
8	1.500 (38.1mm)	1.875 (47.6mm)	575.00
9	1.875 (47.6mm)	2.250 (57.1mm)	610.00
10	2.250 (57.1mm)	2.625 (66.7mm)	641.00
11	2.625 (66.7mm)	3.000 (76.2mm)	759.00
12	3.000 (76.2mm)	3.375 (85.7mm)	812.00

3. DIAL INDICATOR or DIGITAL INDICATOR		
Call for options and prices		
4. STOP ADJUSTING TOOL		\$25.00



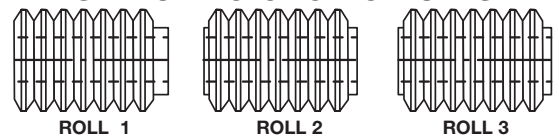
## 5. GAGING ROLLS - INCH

Type 3 Full Profile - Functional Size Diameter			Type 4 Cone and Vee - Single Element Pitch Diameter			Type 5 "Best Wire" Size Radius Single Element Pitch Diameter		
Size	Frame	Price	Size	Frame	Price	Size	Frame	Price
0-80	0	\$296.00	Call for price			0-80	0	171.00
1-64	0	296.00				1-64	0	171.00
1-72	0	296.00				1-72	0	171.00
2-56	1	296.00				2-56	1	171.00
2-64	1	296.00				2-64	1	171.00
3-48	1	296.00				3-48	1	171.00
3-56	1	296.00				3-56	1	171.00
4-40	2	296.00				4-40	2	171.00
5-40	2	296.00				5-40	2	171.00
5-44	2	296.00				5-44	2	171.00
6-32	2	296.00	4-40	2	257.00	6-32	2	171.00
6-40	2	296.00	5-40	2	257.00	6-40	2	171.00
8-32	2	296.00	5-44	2	257.00	8-32	2	171.00
8-36	2	296.00	6-32	2	257.00	8-36	2	171.00
10-24	3	296.00	6-40	2	257.00	10-24	3	171.00
10-32	3	296.00	8-32	2	257.00	10-32	3	171.00
12-24	3	296.00	8-36	2	257.00	12-24	3	171.00
12-28	3	296.00	10-24	3	257.00	12-28	3	171.00
1/4-20	3	296.00	10-32	3	257.00	1/4-20	3	171.00
1/4-28	3	296.00	12-24	3	257.00	1/4-28	3	171.00
5/16-18	3	296.00	12-28	3	257.00	5/16-18	3	171.00
5/16-24	3	296.00	1/4-20	3	257.00	5/16-24	3	171.00
3/8-16	4	296.00	1/4-28	3	257.00	3/8-16	4	171.00
3/8-24	4	296.00	5/16-18	3	257.00	3/8-24	4	171.00
7/16-14	4	296.00	5/16-24	3	257.00	7/16-14	4	171.00
7/16-20	4	296.00	3/8-16	4	257.00	7/16-20	4	171.00
1/2-13	4	296.00	3/8-24	4	257.00	1/2-13	4	171.00
1/2-20	4	296.00	7/16-14	4	257.00	1/2-20	4	171.00
9/16-12	5	296.00	7/16-20	4	257.00	9/16-12	5	171.00
9/16-18	5	296.00	1/2-13	4	257.00	9/16-18	5	171.00
5/8-11	5	296.00	1/2-20	4	257.00	5/8-11	5	171.00
5/8-18	5	296.00	9/16-12	5	257.00	5/8-18	5	171.00
3/4-10	5	296.00	9/16-18	5	257.00	3/4-10	5	171.00
3/4-16	5	296.00	5/8-11	5	257.00	3/4-16	5	171.00
7/8-9	6	304.00	5/8-18	5	257.00	7/8-9	6	200.00
7/8-14	6	304.00	3/4-10	5	257.00	7/8-14	6	200.00
1"-8	6	304.00	3/4-16	5	257.00	1"-8	6	200.00
1"-12	6	304.00	7/8-9	6	290.00	1"-12	6	200.00
1"-14	6	304.00	7/8-14	6	290.00	1"-14	6	200.00
1 1/8-7	6	304.00	1"-8	6	290.00	1 1/8-7	6	200.00
1 1/8-12	6	304.00	1"-12	6	290.00	1 1/8-12	6	200.00
1 1/4-7	7	304.00	1"-14	6	290.00	1 1/4-7	7	200.00
1 1/4-12	7	304.00	1 1/8-7	6	290.00	1 1/4-12	7	200.00
1 3/8-6	7	304.00	1 1/8-12	6	290.00	1 3/8-6	7	200.00
1 3/8-12	7	304.00	1 1/4-7	7	290.00	1 3/8-12	7	200.00
1 1/2-6	7	304.00	1 1/4-12	7	290.00	1 1/2-6	7	200.00
1 1/2-12	7	304.00	1 3/8-6	7	290.00	1 1/2-12	7	200.00
			1 3/8-12	7	290.00			
			1 1/2-6	7	290.00			
			1 1/2-12	7	290.00			

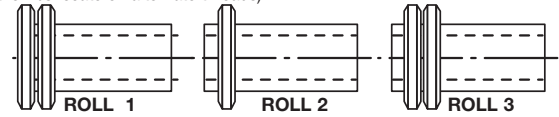
## 5. GAGING ROLLS - METRIC

Type 3 Full Profile - Functional Size Dia.			Type 4 Cone and Vee - Single Element Pitch Dia.			Type 5 "Best Wire" Size Radius - Single Element Pitch Dia.		
Size	Frame	Price	Size	Frame	Price	Size	Frame	Price
Call for price			Call for price			M1.6 x .35	0	171.00
M2 x .4	1	\$269.00				M2 x .4	1	171.00
M2.5 x .45	1	296.00				M2.5 x .5	1	171.00
M3 x .5	2	296.00				M3 x .45	1	171.00
M3.5 x .6	2	296.00				M3.5 x .6	2	171.00
M4 x .7	2	296.00				M4 x .7	2	171.00
M5 x .8	3	296.00				M5 x .8	3	171.00
M6 x 1	3	296.00				M6 x 1	3	171.00
M8 x 1.25	4	296.00				M8 x 1.25	4	171.00
M10 x 1.5	4	296.00				M10 x 1.5	4	171.00
M10 x 1.25	4	296.00	M3.5 x .6	2	257.00	M10 x 1.25	4	171.00
M12 x 1.75	4	296.00	M4 x .7	2	257.00	M12 x 1.75	4	171.00
M12 x 1.25	4	296.00	M5 x .8	3	257.00	M12 x 1.25	4	171.00
M14 x 2	5	296.00	M6 x 1	3	257.00	M14 x 2	5	171.00
M14 x 1.5	5	296.00	M8 x 1.25	4	257.00	M14 x 1.5	5	171.00
M16 x 2	5	296.00	M10 x 1.5	4	257.00	M16 x 2	5	171.00
M20 x 1.5	6	301.00	M10 x 1.25	4	257.00	M20 x 1.5	6	200.00
M22 x 1.5	6	301.00	M12 x 1.75	4	257.00	M22 x 1.5	6	200.00
M24 x 3	6	301.00	M12 x 1.25	4	257.00	M24 x 3	6	200.00
			M14 x 2	5	257.00			
			M14 x 1.5	5	257.00			
			M16 x 2	5	257.00			
			M20 x 1.5	6	290.00			
			M22 x 1.5	6	290.00			
			M24 x 3	6	290.00			

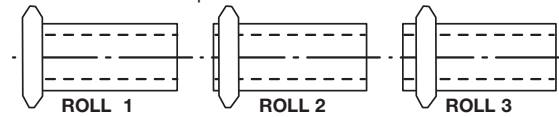
## SELECTING GAGING ROLLS



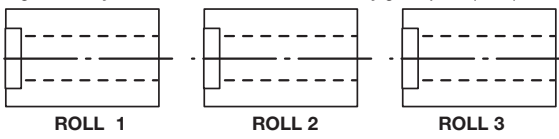
**TYPE 3:** Full Profile-Functional Diameter size. Full ribbed rolls for functional diameter size for pitches coarser than 48 T.P.I. (for 48 T.P.I. and finer the ribs locate on alternate threads)



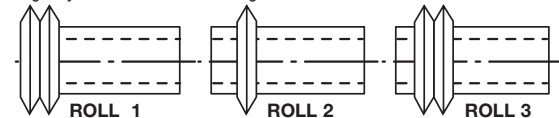
**TYPE 4:** Cone and Vee-Single Element Pitch Diameter. Two ribs ("vee"-type) on lower rolls (No.1 and 3). One rib ("cone" type) on upper roll (No.2). Flank contact limited to .1 pitch.



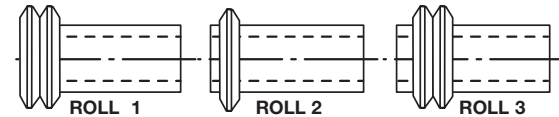
**TYPE 5:** "Best Wire" Size Radius-Single Element Pitch Diameter. Single ribs only with "best wire" size radius for any given pitch (T.P.I.).



**TYPE 6:** Plain Rolls-Thread Major Diameter and Plain Cylindrical Parts. Straight cylindrical rolls for checking diameter and out-of-roundness.



**TYPE 7:** Minor Diameter (55° Included Angle). Two full profile "vee" rolls (No. 1 and 3). One full profile "cone" roll (No. 2).



**TYPE 8:** Lead/Flank Angle. Two full profile "vee" rolls (No. 1 and 3) with outside flanks relieved. One full profile "cone" roll (No. 2).

Gaging rolls are also available for:  
Taper Pipe, ACME, Buttress, specials.

Call for prices **800-767-7633**



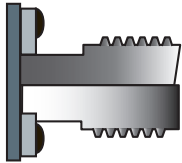
Measure I.D.  
Threads with  
Internal Thread  
Comparators.  
Call for prices.

**STC External Segment  
Thread Comparator.**  
Functional size. Use full form  
gaging sequential where 180°  
contact is specified.

# ITC COMPARATOR AND GAGING SEGMENTS

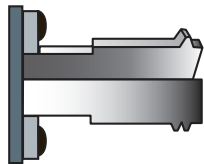
## THREAD CHECK COMPARATORS:

- System offers actual measurements of dimensional characteristics for quicker machine adjustments during thread production.
- Reduces gaging time over thread plug and ring gages.
- One single gage can be used for pre-plate, after-plate class 2, 2B, 3, 3B eliminating the need for multiple fixed limit thread plug and ring gages.
- Ideal for use with Statistical Process Control – SPC.
- Rigid construction and constant measuring pressure provides consistent and accurate readings.
- Quick setting with the use of a master setting ring.
- Easy to setup.



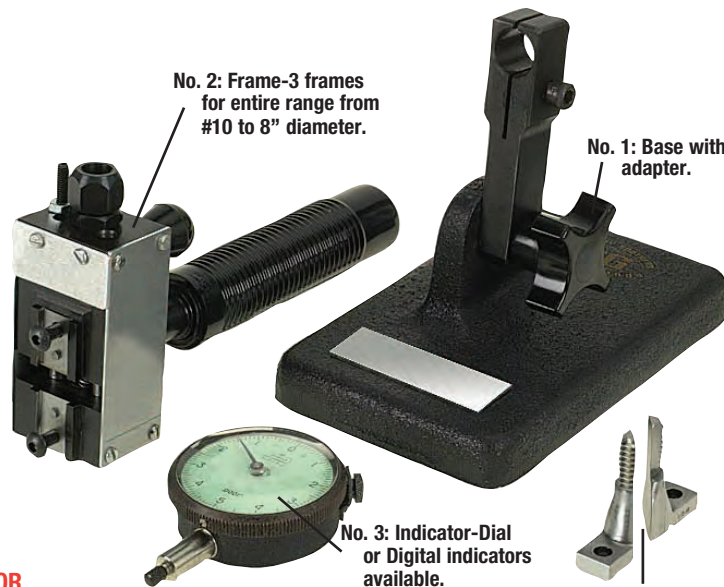
**Gaging Segments  
Functional Size**

(Maximum Material Condition)  
Use full profile functional  
gaging segments.



**Gaging Segments  
Pitch Diameter Size**

(Minimum Material Condition)  
Use full profile functional  
gaging segments.  
Cone and vee.



**No. 4: Segments-  
Full profile or  
Cone and Vee**

## ITC COMPARATOR

### 1. BASE AND ACCESSORIES

with Adapter	\$78.00
Multiple Mounting Bar	39.00
Dual Frame Base Assembly	72.00

### 2. FRAMES

Frame #		Above	To & Include
100	.189 (4.8mm)	2.500 (63.5mm)	\$669.00
200	2.500 (63.5mm)	5.000 (127mm)	817.00
300	5.000 (127mm)	8.000 (203.2mm)	917.00

### 3. DIAL INDICATOR

Dial or Digital Indicator-Call for pricing-**800-767-7633**

## 4. SEGMENTS

INCHES	Full Profile Functional Pitch Diameter	Cone & Vee Single Element Pitch Diameter
#10-24	\$344.00	\$397.00
#10-32	344.00	397.00
#12-24	344.00	397.00
#12-28	344.00	397.00
1/4-20	344.00	397.00
1/4-28	344.00	397.00
5/16-18	344.00	397.00
5/16-24	344.00	397.00
3/8-16	344.00	397.00
3/8-24	344.00	397.00
7/16-14	344.00	397.00
7/16-20	344.00	397.00
1/2-13	344.00	397.00
1/2-20	344.00	397.00
9/16-12	427.00	484.00
9/16-18	427.00	484.00
5/8-11	427.00	484.00
5/8-18	427.00	484.00
7/8-9	427.00	484.00
7/8-14	427.00	484.00
1"- 8	427.00	484.00
1"- 12	427.00	484.00
1"- 14	427.00	484.00
1 1/8"- 7	442.00	500.00
1 1/8"- 12	442.00	500.00
1 1/4"- 7	442.00	500.00
1 1/4"- 12	442.00	500.00
1 3/8"- 6	442.00	500.00
1 3/8"- 12	442.00	500.00
1 1/2"- 6	441.00	474.00
1 1/2"- 12	441.00	474.00

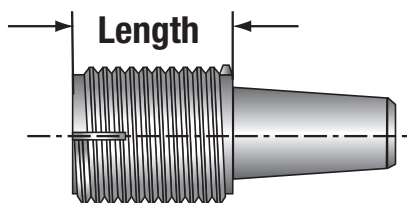
## METRIC

Size	Length	Price
M5 x 8	\$344.00	\$397.00
M6 x 1	344.00	397.00
M8 x 1.25	344.00	397.00
M10 x 1.5	344.00	397.00
M10 x 1.25	344.00	397.00
M12 x 1.75	344.00	397.00
M12 x 1.25	344.00	397.00
M14 x 2	427.00	484.00
M14 x 1.5	427.00	484.00
M16 x 2	427.00	484.00
M20 x 1.5	427.00	484.00
M22 x 1.5	427.00	460.00
M24 x 3	427.00	460.00

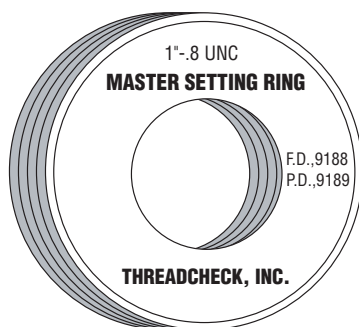


# MASTER SETTING PLUGS AND RINGS for Tri-Roll and ITC Comparators

## Class "W" Tolerance Full Form Master Set Plug



## Class "W" Master Setting Ring



### MASTER SETTING RINGS Class "W" Tolerance INCH Basic

Size	Length	Price
#10-24	3/8	\$384.00
#10-32	3/8	384.00
#12-24	3/8	384.00
#12-28	3/8	384.00
1/4-20	3/8	384.00
1/4-28	3/8	384.00
5/16-18	3/8	384.00
5/16-24	3/8	384.00
3/8-16	9/16	384.00
3/8-24	9/16	384.00
7/16-14	9/16	384.00
7/16-20	9/16	384.00
1/2-13	9/16	384.00
1/2-20	9/16	384.00
9/16-12	9/16	470.00
9/16-18	9/16	470.00
5/8-11	9/16	470.00
5/8-18	9/16	470.00
3/4-10	9/16	470.00
3/4-16	9/16	470.00
7/8-9	3/4	470.00
7/8-14	3/4	470.00
1"- 8	3/4	470.00
1"- 12	3/4	470.00
1"- 14	3/4	470.00
1 1/8"- 7	3/4	539.00
1 1/8"- 12	3/4	539.00
1 1/4"- 7	3/4	539.00
1 1/4"- 12	3/4	539.00
1 3/8"- 6	3/4	539.00
1 3/8"- 12	3/4	539.00
1 1/2"- 6	3/4	539.00
1 1/2"- 12	3/4	539.00

Size	Length	Price
M5 x 8	3/8	384.00
M6 x 1	3/8	384.00
M8 x 1.25	9/16	384.00
M10 x 1.5	9/16	384.00
M12 x 1.75	9/16	384.00
M12 x 1.25	9/16	384.00
M14 x 2	9/16	470.00
M14 x 1.5	9/16	470.00
M16 x 2	9/16	470.00
M20 x 1.5	3/4	470.00
M22 x 1.5	3/4	470.00
M24 x 3	3/4	470.00

### MASTER SETTING PLUGS Class "W" Tolerance Full Form INCH 3A (Go Basic)

Size	Length	Price	Handle
0-80	1/4	\$98.00	\$11.00
1-64	1/4	98.00	11.00
1-72	1/4	98.00	11.00
2-56	1/4	98.00	11.00
2-64	1/4	98.00	11.00
3-48	1/4	98.00	11.00
3-56	1/4	98.00	11.00
4-40	5/16	85.00	11.00
4-48	5/16	93.00	11.00
5-40	5/16	93.00	11.00
5-44	5/16	86.00	11.00
6-32	5/16	82.00	11.00
6-40	5/16	82.00	11.00
8-32	13/32	82.00	11.00
8-36	13/32	82.00	11.00
10-24	13/32	82.00	11.00
10-32	13/32	82.00	11.00
12-24	13/32	88.00	11.00
12-28	13/32	88.00	11.00
1/4-20	1/2	72.00	10.00
1/4-28	1/2	72.00	10.00
5/16-18	1/2	72.00	10.00
5/16-24	1/2	72.00	10.00
3/8-16	3/4	72.00	10.00
3/8-24	3/4	72.00	10.00
7/16-14	3/4	72.00	10.00
7/16-20	3/4	75.00	10.00
1/2-13	3/4	79.00	10.00
1/2-20	3/4	79.00	10.00
9/16-12	7/8	88.00	10.00
9/16-18	7/8	88.00	10.00
5/8-11	7/8	88.00	10.00
5/8-18	7/8	88.00	10.00
3/4-10	7/8	102.00	10.00
3/4-16	7/8	102.00	10.00
7/8-9	1	129.00	11.00
7/8-14	1	129.00	11.00
1"-8	1	142.00	11.00
1"-12	1	142.00	11.00
1"-14	1	142.00	11.00
1 1/8"-7	1	167.00	11.00
1 1/8"-12	1	167.00	11.00
1 1/4"-7	1 1/4	184.00	11.00
1 1/4"-12	1	184.00	11.00
1 3/8"-6	1 1/4	210.00	11.00
1 3/8"-12	1	210.00	11.00
1 1/2"-6	1 1/4	222.00	11.00
1 1/2"-12	1	222.00	11.00

### METRIC 6g (Go)

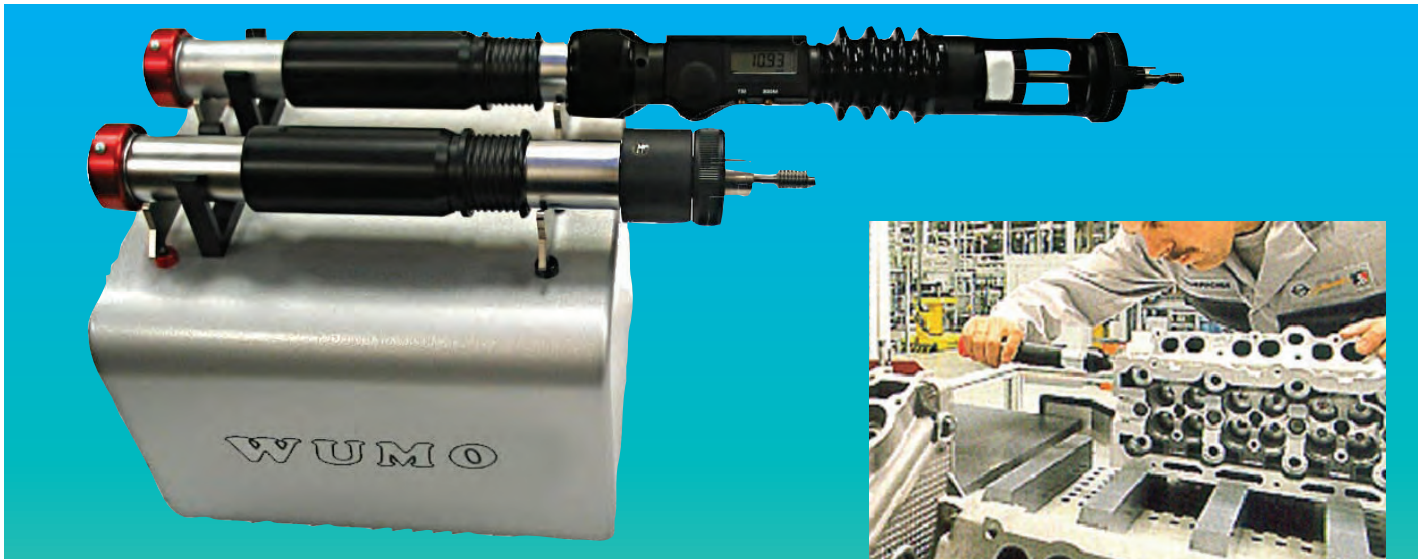
Size	Length	Price	Handle
M1 .6 x.35	1/4	\$112.00	\$11.00
M2 x .4	1/4	103.00	11.00
M2.5 x .45	1/4	103.00	11.00
M3 X .5	5/16	103.00	11.00
M4 x.7	13/32	101.00	11.00
M5 x.8	13/32	101.00	11.00
M6 x .1	1/2	86.00	10.00
M8 x 1.25	1/2	86.00	10.00
M10 x1.5	3/4	92.00	10.00
M10 x1.25	3/4	92.00	10.00
M12 x1.75	3/4	97.00	10.00
M12 x1.25	3/4	97.00	10.00
M14 x2	7/8	109.00	10.00
M14 x1.5	7/8	109.00	10.00
M16 x2	7/8	130.00	10.00
M20 x1.5	7/8	151.00	10.00
M22 x1.5	1	161.00	11.00
M24 x3	1	180.00	11.00



# Power Driven Thread Gaging

Thread Check offers a innovative  
Power Driven Thread Gaging System.

- Inspects threads for functional size and depth faster than conventional methods
- Power Driven Thread Gaging reduces operator fatigue and repetitive motion injuries
- Safely checks threads using unique slip clutches
- Portable for heavy industrial use
- High performance NiMH rechargeable quick change batteries with low voltage charging stations
- Custom threads and specially designed units are available



Power Driven Thread Plug Gage is now available with measuring thread depth control.

User friendly and ergonomically designed, the Power Driven Thread Gaging unit inspects threaded parts for size and depth faster than any other process. It is portable for heavy industrial use.

Available in two styles for checking Thread Ranges from (M1.6-M39.0) Metric (#0-1.500) inches.

Style 1. Lightweight Model uses M1.6-M8.0-#0-5/16"

Style 2. Universal Model M4.0-M39.0 #8-1.500"



Clutches engineered to fit ANSI/ISO tapers, heavy use Anodized Blue. Existing thread members can be used with these clutches. Specially designed Power Thread Gage Members are available.



Available in Single and twin Station Models.



Stacker Plate

# POWER DRIVEN THREAD GAGING



**Item No.0245**  
Power-Driven  
Thread Gauge  
Appliance  
& Charging  
Station.  
\$2530.00



**Item No.0246**  
Twin version-  
2 Power-Driven  
Thread Gauge  
Systems  
with 1 charging  
station and  
second charging  
holder. \$4482.50



**Item No.0247**  
Mixed Twin  
Version.  
Charging  
station for size  
1 and size 2  
Appliances.  
\$4345.00



**Item No.0245A**  
Universal Charging  
Station.  
\$495.00



**Item No.0246A**  
Charging  
Station with  
2 Charging  
holders.  
\$588.50



**Item No.0247A**  
Charging  
station with  
mixed twin  
Charging  
holders  
\$588.50



**Item No.0245B**  
UniversalAppliance  
(Driver only).  
\$2090.00



**Item No.BAT-GEN 3**  
Replacement battery  
for Size 2 Appliance.  
\$80.00



Friction Clutches		ANSI Standard	Taper Lock	Cone 1:48		
Weight: 140g/4.9oz						
Item Number	Nominal Size	Decimal Range	Metric Size	Handle Size	Torque	Price
0221	8-12	0.150-0.230	M4.0-5.5	0	15 Ncm	\$331.50
0222	1/4"-5/16"	0.230-0.365	M6.0-8.0	1	15 Ncm	330.00
0223	3/8"-1/2"	0.365-0.510	M9.0-12.0	2	17 Ncm	335.50
0224	9/16"-3/4"	0.510-0.825	M14.0-18.00	3	17 Ncm	341.00
0225	7/8"-1-1/8"	0.825-1.135	M20.0-28.0	4	17 Ncm	346.50

Clutches engineered to fit ANSI/ISO tapers. The clutches are anodize coated for heavy duty use. Standard plug thread members can be used with these clutches. Specially designed Power Thread Gauge members are available.



**Item No.0444**  
Stacker Plate  
Holds 4 or more units.  
Priced on request.



**Item No.0145**  
Power-Driven  
Thread Gauge  
Appliance  
& Charging  
Station.  
\$2194.50



**Item No.0146**  
Twin version-  
2 Power-Driven  
Thread Gauge  
Systems  
with 1 charging  
station and  
second charging  
holder.  
\$3960.00



**Item No.0145B**  
Lightweight Appliance  
(Driver only).  
\$1705.00



**Item No.0145A**  
Universal  
Charging  
Station.  
\$495.00



**Item No.0146A**  
Charging  
Station with  
2 Charging  
holders.  
\$588.50



**Item No.BAT-GEN 3**  
Replacement battery  
for Size 2 Appliance.  
\$80.00



Friction Clutches		ANSI Standard	Taper Lock	Cone 1:48		
Weight: 40g/1.4oz						
Item Number	Nominal Size	Decimal Range	Metric Size	Handle Size	Torque	Price
0121	0-3	0.059-0.105	M1.6-2.2	000	—	\$308.00
0122	4-6	0.105-0.150	M2.5-3.5	00	—	319.00
0123	8-12	0.150-0.230	M4.0-5.5	0	10 Ncm	330.00
0124	1/4"-5/16"	0.230-0.365	M6.0-8.0	1	10 Ncm	341.00

Clutches engineered to fit ANSI/ISO tapers. The clutches are anodize coated for heavy duty use. Standard thread plug members can be used with these clutches. Specially designed Power Thread Gauge members are available.



**Item No.0444**  
Stacker Plate  
Holds 4 or more units.  
Priced on request.

# SPECIFICATIONS

## POWER DRIVEN THREAD GAGING



### UNIVERSAL SIZE TWO

- Weight: 612g/21oz
- Dimensions:  
Dia.=38mm, Length =332mm
- Motor: Rating: 9volts/5Watts
- Max. Torque: 25 Ncm,
- Speed: 300 RPM
- Battery: recharge time: 2 to 4 hours  
life: 2 to 5 years  
8 Cells, Ni/MH, 350 mAh, 9.6V
- Battery exchangeable by Customer



### UNIVERSAL CHARGING STATIONS

- Weight: 2.6kg/5.7pounds
- Input: USA:120 VAC (USA), 60Hz, 15VA  
European: 230V AC, 50Hz, 15VA
- Output: Charging Voltage: 11.5V  
DC/70mA, 9 V DC/1000 mA  
Permanent Connection

UNIVERSAL SIZE TWO



### LIGHTWEIGHT SIZE ONE

- Weight: 230g/8oz
- Dimensions:  
Dia.=27mm, Length=180mm
- Motor: Rating: 2.4volts/2Watts  
Max. Torque: 12 Ncm, 240 RPM
- Battery: recharge time: 2 to 4 hours  
life: 2 to 5 years  
2 Cells, Ni/MH, 1000mAh, 2.4V
- Battery exchangeable by factory only.



### LIGHTWEIGHT CHARGING STATIONS

- Weight: 2.6kg/5.7pounds
- Input:USA:120 VAC (USA), 60Hz, 15VA  
European: 230V AC, 50Hz, 15VA
- Output: Charging Volt.:3.5, VDC/70mA

LIGHTWEIGHT SIZE ONE

# THREAD PLUG GAGES

## POWER DRIVE DESIGN

Size Dec.	THREADS PER INCH (TPI)				GO or NO GO 2B-3B Member
	Fraction.	UNC	UNF	UNEF	
.060	#0		80		\$88.00
.073	#1	64	72		88.00
.086	#2	56	64		88.00
.099	#3	48	56		88.00
.112	#4	40	48		88.00
.125	#5	40	44		80.00
.138	#6	32	40		68.00
.164	#8	32	36		68.00
.190	#10	24	32		68.00
.216	#12	24	28		68.00
.216	#12			32	120.00
.250	1/4	20	28		60.00
.250	1/4			32	110.00
.3125	5/16	18	24		60.00
.3125	5/16			32	115.00
.375	3/8	16	24		60.00
.375	3/8			32	133.00
.4375	7/16	14	20		63.00
.4375	7/16			28	133.00
.500	1/2	13	20		65.00
.500	1/2		28		140.00
.5625	9/16	12	18		88.00
.5625	9/16			24	145.00
.625	5/8	11	18		88.00
.625	5/8			24	145.00
.6875	11/16			24	145.00
.750	3/4	10	16		98.00
.750	3/4			20	155.00
.8125	13/16			20	170.00
.875	7/8	9	14		100.00
.875	7/8			20	170.00
.9375	15/16			20	170.00
1.000	1	8	12,14		120.00
1.000	1			20	198.00
1.0625	1-1/16		12	18	195.00
1.125	1-1/8	7	12		153.00
1.125	1-1/8			18	195.00
1.1875	1-3/16		12	18	
1.250	1-1/4	7	12		
1.250	1-1/4			18	
1.3125	1-5/16		12	18	
1.375	1-3/8	6	12		
1.375	1-3/8			18	
1.4375	1-7/16		12	18	
1.50	1-1/2	6	12		
1.50	1-1/2			18	

PRICED  
ON  
REQUEST

Long form calibration - add \$15.00 per gage member.

## SPECIALLY DESIGNED POWER DRIVEN THREAD PLUG GAGES

Unified Thread Series (UNC-UNF-UNEF)  
Standard (ANSI/ASME B1.2) 'X' Tolerance  
Class 2B or 3B

Special gages including preplates, multiple lead, ACME,  
Buttress, extra length, etc. are priced on request.

UNJ THREADS: NO EXTRA CHARGE

Chrome Gages add 30%

# Power Driven Thread Gaging

User friendly and ergonomically designed, the Power Driven Thread Gaging unit inspects threaded parts for size faster than any other process. It is portable for heavy industrial use.

Available in 2 sizes:

Universal Size 2 and Lightweight Size 1



Twin version-2 Power Driven Thread Gage Systems with 1 charging station and second charging holder.



Power Driven Thread Gaging is available with optional thread depth control.



Available with optional Power Cord for continuous use without charging.



Clutches are engineered to fit ANSI/ISO tapers. They are anodize coated for heavy duty use. Standard plug thread members can be used with these clutches.

For special requirements call:  
**1-800-767-2034**



# FIXED LIMIT GAGE FACT SHEET

GAGEMAKER'S TOLERANCE CHART							
RANGE	XXXX	XXX	XX	X	Y	Z	ZZ
.0009" to .8250"	.000005"	.00001"	.00002"	.00004"	.00007"	.0001"	.00020"
.8251" to 1.5100"	.000008"	.000015"	.00003"	.00006"	.00009"	.00012"	.00024"
1.5101" to 2.5101"	.00001"	.00002"	.00004"	.00008"	.00012"	.00016"	.00032"
2.5101" to 4.5100"	.000013"	.000025"	.00005"	.00010"	.00015"	.00020"	.00040"
4.5101" to 6.5100"	.000017"	.000033"	.000065"	.00013"	.00019"	.000250"	.00050"
6.5101" to 9.0100"	.00002"	.00004"	.00008"	.00016"	.00024"	.000320"	.00064"
9.0101" to 12.260"	.000025"	.00005"	.0001"	.0002"	.0003"	.000400"	.00080"

METRIC EQUIVALENTS						
RANGE	XX	X	Y	Z	ZZ	
.74mm to 20.96mm	.00051	.00102	.00178	.00254	.005	
20.96mm to 38.35mm	.00076	.00152	.00229	.00305	.006	
38.35mm to 63.75mm	.00102	.00203	.00305	.00406	.008	
63.75mm to 114.55mm	.00127	.00254	.00381	.00508	.010	
114.55mm to 163.35mm	.00165	.00330	.00483	.00635	.013	
163.35mm to 228.85mm	.00203	.00406	.00610	.00813	.016	
228.85mm to 311.40mm	.00254	.00508	.00762	.01016	.020	

Fixed limit gages are primarily used to check dimensions and geometries. Plug gages check internal dimensions and ring gages check external dimensions. Inspection is performed by use of GO/NOGO gages that represent the Minimum and Maximum limit of the product part characteristic to ensure assembleability and fit. This method is used for both thread gages and cylindrical plain gages.

GO gages passing through a part assure that the maximum material condition of a part has not been exceeded. NOGO gages not passing through the part assure the dimension has not dropped below the minimum material condition.

Fixed limit gages are highly accurate, easy to use, and economical.

## HOW TO DETERMINE AND SELECT THE PROPER TOLERANCE FOR YOUR GAGING APPLICATION

The normal rule of practice requires 10% of product tolerance to be divided between the "GO" and "NOGO" gages. For plug gages, a plus tolerance is applied to the GO member and a minus tolerance to the NOGO member. Ring gages receive reverse tolerance direction so that the "GO" member is minus and the "NOGO" is plus tolerance. Applying this practice results in gage tolerance always being included in the part tolerance by up to 10%. This results in the possibility that 10% of good product could fail inspection but that no bad product would ever pass.

TOLERANCE DIRECTION		
Type of Gage	GO Member	NOGO Member
Thread plug	Plus	Minus
Plain plug	Plus	Minus
Thread ring gage	Minus	Plus
Plain ring gage	Minus	Plus
Thread Setting Plug	Minus	Plus

When ordering gages, the two basic principles are:

1. Do not allow the tolerance of the GO and NOGO gages to consume more than 10% of your product tolerance. The 10% is usually divided equally between the GO and NOGO gages.
2. Higher precision gages will accept slightly more product but with less wear life and greater expense.

## PROPER CARE AND USAGE OF GAGES

- Part dimensions to be gaged should be cleaned and burr free to prevent gaging interference.
- Gages should be turned or pushed slowly and gently into or onto the dimension being checked. Forcing gages will result in faulty gaging and the possibility of damaging both the part and gage.
- The effects of thermal expansion should be taken into consideration on both the part and the gage. The temperature of the part and the gage should be the same. 68° F is the ideal temperature at which both part and gage should be at when inspected because gages are calibrated at 68° F. This effectively eliminates any error due to thermal expansion.
- Protecting gages from excessive heat, moisture and corrosive chemicals will extend the life of your gages. After use, gages should be cleaned and recoated with a thin-film rust preventative and stored properly.
- Gages should be periodically inspected and calibrated to assure accuracy. Go member gages tend to wear quicker with normal use. NOGO gages will wear on the ends that receive the greatest usage. Frequency of inspection and calibration should be dependent on such factors as the amount of usage, part and gage material, tolerance, and quality procedures.

# CLASS ZZ PLAIN PIN GAGE SETS AND LIBRARIES

## Economical and General Purpose Pin Gages

Thread Check offers an extensive inventory of Vermont Gage precision products certified to ISO 9002 and traceable to NIST



Pin gage set



Pin gage library



Pin gage set

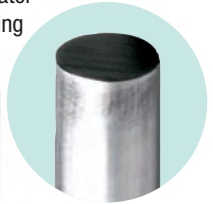
Make quick and accurate measurements with **Vermont Gage** pin gages. Measure hole sizes. Calculate distances between holes. Gage slot widths. Check locations. Use for Go/NoGo gaging. Size in micrometers and snap gages. These gages are essential for anyone making frequent and varied measurements.

- Class ZZ ( .0002" or .005mm tolerance )
- Go ( Plus ) or NoGo ( Minus ) tolerance
- NIST traceable
- .0005" or .02mm sizes
- .001" or .02mm set increments
- 52100 tool steel; 60/62 Rc
- 2" long
- 10 microinch finish or better
- within .0001" round
- marked with size & direction of tolerance on gages over .060"
- Certificate of Accuracy included



### Black Guard™

- Prevents rust & corrosion
- Visible wear indicator
- Bright clear marking
- Longer gage life



METRIC SETS (.02MM INCREMENTS)				
No of Range	Gages	Wt. Lbs.	Steel \$	Black Guard \$
0.20mm to 1.28mm	55	2	\$78.00	\$86.00
0.21mm to 1.29mm	55	2	78.00	86.00
1.30mm to 4.98mm	185	6	172.00	182.00
1.31mm to 4.99mm	185	6	172.00	182.00
5.00mm to 9.98mm	250	14	268.00	284.00
5.01mm to 9.99mm	250	14	268.00	284.00
10.00mm to 13.98mm	200	24	231.00	241.00
10.01mm to 13.99mm	200	24	231.00	241.00
14.00mm to 16.48mm	125	24	295.00	311.00
14.01mm to 16.49mm	125	24	295.00	311.00
16.50mm to 18.98mm	125	30	375.00	402.00
16.51mm to 18.99mm	125	30	375.00	402.00
19.00mm to 20.98mm	100	32	642.00	696.00
19.01mm to 20.99mm	100	32	642.00	696.00
21.00mm to 22.48mm	75	29	535.00	589.00
21.01mm to 22.49mm	75	29	535.00	589.00
22.50mm to 23.98mm	75	33	562.00	616.00
22.51mm to 23.99mm	75	33	562.00	616.00
24.00mm to 25.48mm	75	36	589.00	632.00
24.01mm to 25.49mm	75	36	589.00	632.00
METRIC LIBRARIES (.02MM INCREMENTS)				
.20mm to 13.98mm	690	46	\$953.00	\$990.00
.21mm to 13.99mm	690	46	953.00	990.00
.20mm to 18.98mm	940	100	1605.00	1712.00
.21mm to 18.99mm	940	100	1605.00	1712.00
.20mm to 22.48mm	1115	161	2996.00	3157.00
.21mm to 22.49mm	1115	161	2996.00	3157.00
.20mm to 25.48mm	1265	230	4387.00	4548.00
.21mm to 25.49mm	1265	230	4387.00	4548.00
1.30mm to 16.48mm	760	68	1284.00	1338.00
1.31mm to 16.49mm	760	68	1284.00	1338.00
1.30mm to 20.98mm	985	130	2140.00	2221.00
1.31mm to 20.99mm	985	130	2140.00	2221.00
1.30mm to 23.98mm	1135	192	3745.00	3852.00
1.31mm to 23.99mm	1135	192	3745.00	3852.00
1.30mm to 25.48mm	1210	228	4066.00	4280.00
1.31mm to 25.49mm	1210	228	4066.00	4280.00

INCH SETS ( .001" INCREMENTS )				
Range	No of Gages	Wt. Lbs.	Steel \$	Black Guard \$
.0060" to .0600"	55	2	\$86.00	\$91.00
.0065" to .0605"	55	2	86.00	91.00
.0110" to .0600"	50	2	65.00	70.00
.0115" to .0605"	50	2	65.00	70.00
.0110" to .2500"	240	6	204.00	214.00
.0115" to .2505"	240	6	204.00	214.00
.0610" to .2500"	190	6	145.00	156.00
.0615" to .2505"	190	6	145.00	156.00
.2510" to .5000"	250	20	214.00	231.00
.2515" to .5005"	250	20	214.00	231.00
.5010" to .6250"	125	21	252.00	268.00
.5015" to .6255"	125	21	252.00	268.00
.6260" to .7500"	125	31	279.00	295.00
.6265" to .7505"	125	31	279.00	295.00
.7510" to .8320"	82	27	482.00	509.00
.7515" to .8325"	82	27	482.00	509.00
.8330" to .9160"	84	33	562.00	589.00
.8335" to .9165"	84	33	562.00	589.00
.9170" to 1.0000"	84	38	589.00	616.00
.9175" to 1.0005"	84	38	589.00	616.00
INCH LIBRARIES ( .001 INCREMENTS )				
.0060" to .6250"	620	49	\$937.00	\$963.00
.0065" to .6255"	620	49	937.00	963.00
.0060" to .8320"	827	107	1739.00	1819.00
.0065" to .8325"	827	107	1739.00	1819.00
.0060" to 1.000"	995	176	2996.00	3050.00
.0065" to 1.000"	995	176	2996.00	3050.00
.0110" to .6255***	1230	148	1686.00	1766.00
.0110" to .6250"	615	80	883.00	937.00
.0115" to .6255	615	80	883.00	937.00
.0110" to .7500"	740	78	1177.00	1231.00
.0115" to .7505"	740	78	1177.00	1231.00
.0110" to .9160"	906	138	2274.00	2354.00
.0115" to .9165"	906	138	2274.00	2354.00
.0110" to 1.000"	990	176	2943.00	3023.00
.0115" to 1.0005"	990	176	2943.00	3023.00
.0610" to .5005***	880	80	937.00	963.00
.0610" to .7500"	690	78	1124.00	1151.00
.0615" to .7505"	690	78	1124.00	1151.00
.0610" to .9160"	856	138	2221.00	2301.00
.0615" to .9165"	856	138	2221.00	2301.00
.0610" to 1.000"	940	176	2863.00	2943.00
8 DRAWER WOODEN MOBILE LIBRARY				
.0060" to 1.0000"	995		3344.00	3505.00
.0065" to 1.0005"	995		3344.00	3505.00
.0110" to 1.0000"	990		3328.00	3478.00
.0115" to 1.0005"	990		3328.00	3478.00
.0610" to 1.0000"	940		3237.00	3424.00
.0615" to 1.0005"	940		3237.00	3424.00

\*\* Indicates .0005" increments.

Please specify plus or minus tolerance when ordering.

# CLASS ZZ REPLACEMENT PIN GAGES & ASSEMBLIES

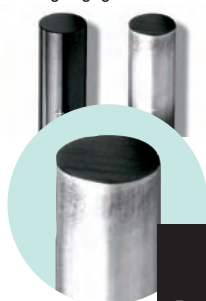
## CLASS ZZ REPLACEMENT PINS

### Keep old sets in compliance!

Replace missing, damaged, or worn-out Class ZZ gages from your existing sets & Libraries. These replacement pins are perfect in updating your old sets, and bringing them back into compliance. Each pin is individually marked with size and direction of tolerance. Packaged with a rust preventative, these pins maintain an indefinite shelf life; so keep several of your most used sizes on hand! Each pin is NIST traceable and includes a Certificate of Accuracy printed on back of package.

## Black Guard™

- Prevents rust and corrosion
- Visible wear indicator
- Bright clear marking
- Longer gage life



INCH	Member Only	Member Only
Range	Steel \$	Black Guard \$
.0040" to .0105"	\$6.00	\$7.00
.0110" to .0605"	3.00	3.50
.0610" to .5005"	3.00	3.50
.5010" to .6255"	4.00	4.50
.6260" to .7505"	5.00	6.00
.7510" to .8325"	7.00	8.00
.8330" to .9165"	8.00	9.00
.9170" to 1.0005"	9.00	10.00

METRIC	Steel \$	Black Guard \$
Range		
.20mm to 1.29mm	\$4.00	\$4.00
1.30mm to 4.99mm	3.00	4.00
5.00mm to 9.99mm	3.00	4.00
10.00mm to 13.99mm	4.00	5.00
14.00mm to 16.49mm	5.00	6.00
16.50mm to 18.99mm	6.00	6.50
19.00mm to 20.99mm	7.00	8.00
21.00mm to 22.49mm	9.00	9.50
22.50mm to 23.99mm	10.00	11.00
24.00mm to 25.49mm	10.00	11.00



Replacement Pins packaged in rust-preventative and individually labeled with size, tolerance direction, and NIST traceable numbers.

## CLASS ZZ ASSEMBLIES

A great Go/NoGo inspection Tool. Purchase your Class ZZ gages factory assembled in a handle for production gaging. Class ZZ assemblies are economical and very versatile for Go/ NoGo gaging. If the Go (Green End) fits and the NoGo (Red End) doesn't, your part passes inspection. It doesn't get any easier! Each assembly includes 1 line (up to 15 characters) of custom marking.

INCH	Steel Single End Ass'y	Double End Ass'y	Black Guard™ Single End Ass'y	Double End Ass'y
Range				
.0040" to .0105"	\$12.00	\$19.00	\$13.00	\$21.00
.0110" to .0755"	9.00	13.00	10.00	14.00
.0760" to .1805"	10.00	14.00	11.00	15.00
.1810" to .2815"	10.00	15.00	11.00	15.00
.2820" to .4065"	11.00	15.00	11.00	16.00
.4070" to .5005"	13.00	17.00	13.00	18.00
.5100" to .6255"	17.00	23.00	18.00	25.00
.6260" to .7505"	20.00	26.00	20.00	28.00
.7510" to .8325"	28.00	38.00	29.00	38.00
.8330" to .9165"	29.00	40.00	30.00	41.00
.9170" to 1.0005"	30.00	41.00	21.00	43.00

METRIC	Steel Single End Ass'y	Double End Ass'y	Black Guard™ Single End Ass'y	Double End Ass'y
Range				
.20mm to 1.29mm	\$10.00	\$15.00	\$10.00	\$16.00
1.30mm to 4.56mm	10.00	14.00	10.00	16.00
4.57mm to 7.14mm	10.00	16.00	11.00	17.00
7.15mm to 9.99mm	12.00	17.00	12.00	18.00
10.00mm to 12.94mm	14.00	20.00	14.00	23.00
12.95mm to 16.12mm	19.00	26.00	19.00	27.00
16.13mm to 18.99mm	20.00	28.00	21.00	29.00
19.00mm to 19.30mm	22.00	29.00	21.00	31.00
19.31mm to 22.49mm	29.00	40.00	30.00	42.00
22.50mm to 23.99mm	30.00	42.00	31.00	44.00
24.00mm to 25.49mm	32.00	44.00	33.00	47.00



Double End Assembly



Single End Assembly



Member-only Replacement Pins



# STANDARD CLASS X PLUG GAGES

## Value priced and stocked

### STANDARD CLASS X PLUG GAGES Sizes up to 1"

Use as masters to calibrate measuring equipment or to gage parts directly. Either way, these Class X (+.00004", -.0000") plug gages are accurate, cost effective measurement standards perfect for both the shop floor and metrology laboratory. Included with Certificate of Calibration traceable to NIST.

- Class X
- Single (GO) tolerance (+.00004, -.00000)  
(plus .00006, -.00000 .8251 - 1.000")
- NIST traceable
- Sizes available every .0001" up to 1.0000"
- Tool Steel; 60/62Rc (Cold Stabilized)
- 2" long
- 2 microinch finish or better
- Within .00002" round
- Certificate of Accuracy included
- Long Form Calibration available at an additional charge

Thread Check offers an extensive inventory of Vermont Gage precision products certified to ISO 9002 and traceable NIST



INCH	PRICE PER PIECE			
Range	1	2-4	5-9	10-49
.0040" to .0150"	\$18.00	\$17.00	\$16.00	\$15.00
.0151" to .0250"	17.00	16.00	15.00	14.00
.0251" to .1100"	10.00	9.00	8.00	7.00
.1101" to .3900"	12.00	11.00	9.00	8.00
.3901" to .6350"	14.00	13.00	12.00	11.00
.6351" to .8350"	18.00	17.00	16.00	15.00
.8351" to 1.000"	18.00	17.00	16.00	15.00



INCH	REVERSIBLE GAGE HANDLES			
Range	Single-End Handle	Double-End Handle		
	Handle No.	Price	Handle No.	Price
.0040" to .0750"	1WSE	\$4.50	1WDE	\$5.00
.0751" to .1800"	2WSE	5.00	2WDE	5.50
.1801" to .2810"	3WSE	5.75	3WDE	6.25
.2811" to .4060"	4WSE	6.00	4WDE	6.75
.4061" to .5100"	5WSE	8.25	5WDE	9.00
.5101" to .6350"	6WSE	10.75	6WDE	11.50
.6351" to .7600"	7WSE	11.75	7WDE	12.50
.7601" to 1.0100"	7WSE	19.00	7WDE	20.00
METRIC				
.10mm to 1.90mm	1WSE	\$5.50	1WDE	\$5.00
1.91mm to 4.56mm	2WSE	5.00	2WDE	5.50
4.57mm to 7.14mm	3WSE	5.75	3WDE	6.25
7.15mm to 10.30mm	4WSE	6.00	4WDE	6.75
10.31mm to 12.94mm	5WSE	8.25	5WDE	9.00
12.95mm to 16.12mm	6WSE	10.75	6WDE	11.50
16.13mm to 19.30mm	7WSE	11.75	7WDE	12.50
19.31mm to 25.64mm	8WSE	19.00	8WDE	20.00

#### BUSHING PRICES

Up to .5100"	\$2.00
.5101" and Up	3.00

CALL  
**800-767-7633**

# CUSTOM REVERSIBLE PLAIN PLUG GAGES

RANGE	TOLERANCE CLASS	STEEL			CHROME			CARBIDE		
		PRICE MEMBER ONLY	PRICE SINGLE-END ASSEMBLY	PRICE DOUBLE-END ASSEMBLY	PRICE MEMBER ONLY	PRICE SINGLE-END ASSEMBLY	PRICE DOUBLE-END ASSEMBLY	PRICE MEMBER ONLY	PRICE SINGLE-END ASSEMBLY	PRICE DOUBLE-END ASSEMBLY
.005" to .015" .11mm to .38mm	XX	\$65.00	\$75.00	\$140.00	<b>CALL FOR PRICES</b>					
	X	56.00	66.00	122.00						
	Y	45.00	55.00	100.00						
	Z,ZZ	40.00	50.00	90.00						
.0151" to .0300 .381mm to .76mm	XX	45.00	55.00	100.00						
	X	20.00	30.00	50.00						
	Y	17.00	27.00	44.00						
	Z,ZZ	13.00	23.00	36.00						
.0301" to .0750" .761mm to 1.91mm	XX	24.00	34.00	58.00	35.00	45.00	80.00	68.00	79.00	147.00
	X	13.00	23.00	36.00	28.00	38.00	66.00	62.00	73.00	135.00
	Y	10.00	20.00	30.00	25.00	35.00	60.00	58.00	69.00	127.00
	Z,ZZ	7.00	17.00	24.00	23.00	33.00	56.00	55.00	66.00	121.00
.0751" to .1800" 1.911mm to 4.57mm	XX	26.00	36.00	62.00	36.00	46.00	82.00	53.00	64.00	117.00
	X	14.00	24.00	38.00	31.00	41.00	72.00	50.00	61.00	111.00
	Y	10.00	20.00	30.00	27.00	37.00	64.00	45.00	66.00	111.00
	Z,ZZ	7.00	17.00	24.00	24.00	34.00	58.00	40.00	51.00	91.00
.1801" to .2810" 4.571mm to 7.14mm	XX	26.00	36.00	62.00	38.00	48.00	86.00	55.00	67.00	122.00
	X	17.00	27.00	44.00	33.00	43.00	76.00	52.00	64.00	116.00
	Y	11.00	21.00	32.00	31.00	41.00	72.00	49.00	61.00	110.00
	Z,ZZ	8.00	18.00	26.00	27.00	37.00	64.00	46.00	58.00	104.00
.2811" to .4060" 7.141mm to 10.31mm	XX	28.00	38.00	66.00	40.00	50.00	90.00	75.00	87.00	162.00
	X	17.00	27.00	44.00	35.00	45.00	80.00	70.00	82.00	152.00
	Y	12.00	22.00	34.00	33.00	43.00	76.00	69.00	81.00	150.00
	Z,ZZ	8.00	18.00	26.00	30.00	40.00	70.00	67.00	79.00	146.00
.4061" to .5100" 10.311mm to 12.95mm	XX	30.00	40.00	70.00	43.00	54.00	97.00	85.00	98.00	183.00
	X	18.00	28.00	46.00	38.00	49.00	87.00	83.00	96.00	179.00
	Y	13.00	23.00	36.00	33.00	44.00	77.00	74.00	87.00	161.00
	Z,ZZ	9.00	19.00	28.00	28.00	39.00	67.00	71.00	84.00	155.00
.5101" to .6350" 12.951mm to 16.13mm	XX	33.00	43.00	76.00	48.00	61.00	109.00	115.00	129.00	244.00
	X	19.00	29.00	48.00	40.00	53.00	93.00	107.00	121.00	228.00
	Y	15.00	25.00	40.00	36.00	49.00	85.00	105.00	119.00	224.00
	Z,ZZ	10.00	20.00	30.00	30.00	43.00	73.00	102.00	116.00	218.00
.6351" to .7600" 16.131mm to 19.30mm	XX	35.00	45.00	80.00	51.00	64.00	115.00	149.00	163.00	312.00
	X	22.00	32.00	54.00	42.00	55.00	97.00	141.00	155.00	296.00
	Y	17.00	27.00	44.00	38.00	51.00	89.00	139.00	153.00	292.00
	Z,ZZ	12.00	22.00	34.00	33.00	46.00	79.00	136.00	150.00	286.00
.7601" to 1.0100" 19.301mm to 25.65mm	XX	53.00	63.00	116.00	72.00	92.00	164.00	<b>CALL FOR PRICES</b>		
	X	28.00	38.00	66.00	66.00	86.00	152.00			
	Y	22.00	32.00	54.00	60.00	80.00	140.00			
	Z,ZZ	16.00	26.00	42.00	55.00	75.00	130.00			



- All gages are made of quality tool steel hardened between 60/62 Rockwell.
- All gages are two inches long except when noted
- All gages are ground, lapped to a 5 micro inch finish or better
- All gages are traceable to the National Institute of Standards and Technology.
- Long Form Calibration available at an additional charge



.0020" - .0049" sizes priced on request. Carbide prices start at .040". Carbide gages larger than .7600" are priced on request.  
Class XXX gages priced on request. Custom Long Length Reversible up to 6" Priced on Request

## Special Features Priced on Request

Depth notches or steps are available on plug gages for gaging depth and diameter  
Air flats or pressure relief flats are available which allow air or fluid to escape when gaging blind holes  
Pilots which allow easy entry into hole diameter  
Radius and Chamfers to customer specifications  
Diamond Shaped NOGO Members for checking out of roundness

## Special Gages Priced on Request

- Hex Plug Gages per ANSI B18.3 and ANSI/ASME 107.17M
- Square Gages
- Hole Location Gages
- Concentricity Gages
- Flush Pin Gages
- Alignment Gages
- Template Gages
- Tapered Gages including Brown & Sharpe, Jarno, Morse, National Machine Tapers
- Special Gages per Customer Drawing

## CUSTOM REVERSIBLE MICRO SIZE PLAIN PLUG GAGES

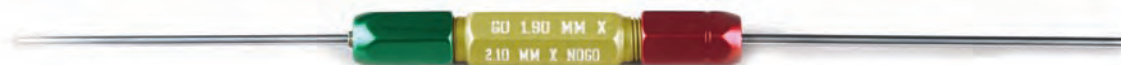
STEEL REVERSIBLE PINS - 2" LONG		
SIZE RANGE INCH/ METRIC SIZE	CLASS	PRICE
.0015" to .0019" .038mm to .050mm	XX	—
	X	\$355.00
	Y	320.00
	Z	295.00
	ZZ	275.00
.0020" to .0029" .051mm to .075mm	XX	265.00
	X	245.00
	Y	210.00
	Z	185.00
	ZZ	165.00
.0030" to .0039" .076mm to .101mm	XX	225.00
	X	195.00
	Y	165.00
	Z	135.00
	ZZ	115.00
.0040" to .0049" .102mm to .124mm	XX	185.00
	X	145.00
	Y	120.00
	Z	100.00
	ZZ	95.00

## CUSTOM REVERSIBLE CLASS XXX TOLERANCE PLAIN PLUG GAGES

STEEL REVERSIBLE PINS - 2" LONG CLASS XXX - MEMBER ONLY		
SIZE/RANGE		
INCH	METRIC	PRICE
.0050" to .0149"	.127mm to .380mm	\$195.00
.0150" to .0299"	.381mm to .761mm	90.00
.0300" to .0749"	.762mm to 1.904mm	48.00
.0750" to .2819"	1.905mm to 7.162mm	52.00
.2820" to .4069"	7.163mm to 10.337mm	56.00
.4070" to .5109"	10.338mm to 12.979mm	60.00
.5110" to .6359"	12.980mm to 16.513mm	66.00
.6360" to .7599"	16.514mm to 19.303mm	70.00
.7600" to 1.0000"	19.304mm to 25.40mm	106.00



- All gages are made of quality tool steel hardened between 60/62 Rockwell.
- All gages are two inches long except when noted
- All gages are ground, lapped to a 5 micro inch finish or better
- All gages are traceable to the National Institute of Standards and Technology.
- Long Form Calibration available at an additional charge



### Custom Long Length Reversible up to 6" Priced on Request

#### Special Features Priced on Request

Depth notches or steps are available on plug gages for gaging depth and diameter

Air flats or pressure relief flats are available which allow air or fluid to escape when gaging blind holes

Pilots which allow easy entry into hole diameter

Radius and Chamfers to customer specifications

Diamond Shaped NOGO Members for checking out of roundness

#### Special Gages Priced on Request

- Hex Plug Gages per ANSI B18.3 and ANSI/ASME 107.17M
- Square Gages • Hole Location Gages
- Concentricity Gages Flush Pin Gages
- Alignment Gages
- Template Gages
- Tapered Gages including Brown & Sharpe, Jarno, Morse, National Machine Tapers
- Special Gages per Customer Drawing





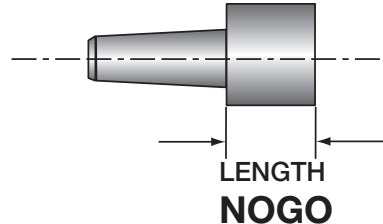
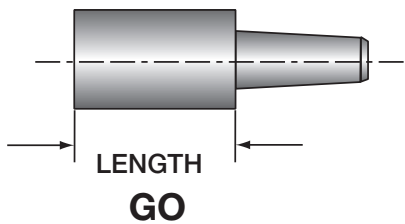
# TAPERLOCK PLUG GAGES

Taperlock plug gages are used to gage large diameters.

Taperlock style gages can be quickly changed by popping out the gage member and quickly press fitting a new member into the handle.



Single end assembly



All Cylindrical Taperlock plug gages are manufactured to ASME/ANSI B47.1 AGD standard and ASME/ANSI B89.1.5 standard. Gaging surface is hardened to Rc 60-62.



**Unilateral Tolerance  
GO – Plus Tolerance  
NOGO – Minus Tolerance**

Chrome Plated – Add 30%

Carbide gages priced on request.

XXX Add 100% to XX prices up to 1.510”.

Quantity discounts available on identical units.

Larger diameters quoted on request

All Taperlock gages are ring lapped to size and polished.

Use reversible style gages for sizes below .105 diameter.

Use Trilock style gages for sizes above 1.5100”



GO



NOGO

SIZE - RANGE	TOLERANCE CLASS	LENGTH	GO MEMBER	LENGTH	NOGO MEMBER	HANDLE NO.	PRICE
.1050" - .1500" 2.67mm - 3.81mm	XX	3/8" 9.5mm	\$55.00	7/32" 5.6mm	\$54.00	00	\$11.00
	X		43.00		42.00		
	Y		40.00		39.00		
	Z		38.00		37.00		
.1501" - .2300" 3.811mm - 5.84mm	XX	13/32" 10.3mm	55.00	9/32" 7.1mm	54.00	0	11.00
	X		43.00		42.00		
	Y		40.00		38.00		
	Z		38.00		37.00		
.2301" - .3650" 5.841mm - 9.27mm	XX	3/4" 19.1mm	55.00	5/16 7.1mm	54.00	1	11.00
	X		43.00		42.00		
	Y		41.00		39.00		
	Z		39.00		37.00		
.3651" - .5100" 9.271mm - 12.95mm	XX	1" 25.4mm	57.00	3/8" 9.5mm	55.00	2	11.00
	X		44.00		43.00		
	Y		41.00		40.00		
	Z		39.00		38.00		
.5101" - .8250" 12.951mm - 20.96mm	XX	1-1/4" 31.8mm	61.00	1/2" 12.7mm	60.00		11.00
	X		47.00		46.00		
	Y		45.00		43.00		
	Z		43.00		41.00		
.8251" - 1.135" 20.961mm - 28.83mm	XX	1-1/2" 38.1mm	63.00	5/8" 15.9mm	61.00	4	12.00
	X		48.00		47.00		
	Y		45.00		44.00		
	Z		42.00		40.00		
1.1351" - 1.5100" 29.831mm - 38.35mm	XX	1-5/8" 41.3mm	65.00	3/4" 19.1mm	64.00	5	12.00
	X		51.00		50.00		
	Y		49.00		47.00		
	Z		47.00		45.00		

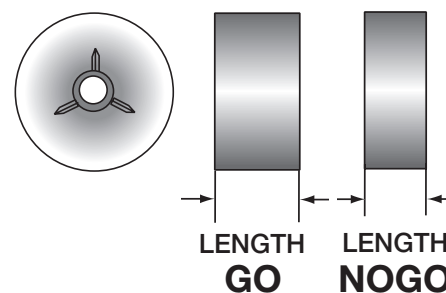
Long Form Calibration available at an additional charge.

# TRILOCK PLUG GAGES

All Cylindrical Trilock plug gages are manufactured to ASME/ANSI B47.1 AGD standard and ASME/ANSI B89.1.5 standard. Gaging surface is hardened to Rc 60-62.

SIZE - RANGE	TOLERANCE CLASS	LENGTH	GO MEMBER	LENGTH	NOGO MEMBER	HANDLE NO.	HANDLE
.7600" - .9470" 19.30mm-24.05mm	XX	1-1/4"	\$68.00	3/4"	\$67.00	2-1/2	\$14.00
	X		53.00		52.00		
	Y	31.8mm	50.00	19.1mm	49.00		
	Z		48.00		47.00		
.9471" - 1.135" 24.051mm-28.83mm	XX	1-3/8"	75.00	3/4"	74.00	3-1/2	14.00
	X		55.00		53.00		
	Y	34.9mm	53.00	19.1mm	50.00		
	Z		51.00		49.00		
1.1351" - 1.510" 28.831mm-38.35mm	XX	1-1/2"	70.00	3/4"	68.00	4-1/2	15.00
	X		55.00		53.00		
	Y	38.1mm	53.00	19.1mm	50.00		
	Z		51.00		49.00		
1.5101" - 2.010" 38.351mm-51.05mm	XX	1-7/8"	94.00	7/8"	90.00	5-1/2	17.00
	X		73.00		70.00		
	Y	47.6mm	68.00	22.2mm	66.00		
	Z		64.00		62.00		
2.0101" - 2.510" 51.051mm-63.75mm	XX	2"	114.00	7/8"	102.00	6	18.00
	X		85.00		78.00		
	Y	50.8mm	80.00	22.2mm	74.00		
	Z		78.00		73.00		
2.5101" - 3.010" 63.751mm-76.45mm	XX	2"	125.00	1"	114.00	7	19.00
	X		105.00		86.00		
	Y	50.8mm	89.00	25.4mm	76.00		
	Z		81.00		75.00		
3.0101" - 3.510" 76.451mm-89.15mm	XX	2"	180.00	1"	150.00	7	19.00
	X		148.00		115.00		
	Y	50.8mm	140.00	25.4mm	110.00		
	Z		137.00		108.00		
3.5101" - 4.010" 89.151mm-101.85mm	XX	2-1/8"	192.00	1"	154.00	7	19.00
	X		151.00		120.00		
	Y	54.0mm	143.00	25.4mm	115.00		
	Z		137.00		105.00		
4.0101" - 4.510" 101.851mm-114.55mm	XX	2-1/8"	210.00	1"	165.00	7	19.00
	X		171.00		135.00		
	Y	54.0mm	168.00	25.4mm	124.00		
	Z		164.00		120.00		
4.5101" - 5.010" 114.551mm-127.25mm	XX	2-1/8"	262.00	1"	192.00	7	19.00
	X		203.00		157.00		
	Y	54.0mm	195.00	25.4mm	148.00		
	Z		174.00		139.00		
5.0101" - 5.510" 127.251mm-139.95mm	XX	2-1/8"	269.00	1"	224.00	7	19.00
	X		210.00		173.00		
	Y	54.0mm	198.00	25.4mm	168.00		
	Z		191.00		146.00		
5.5101" - 6.010" 139.951mm-152.65	XX	2-1/8"	280.00	1"	256.00	7	19.00
	X		218.00		204.00		
	Y	54.0mm	205.00	25.4mm	188.00		
	Z		203.00		184.00		
6.0101" - 6.510" 152.651mm-165.35mm	XX	2 1/8"	293.00	1"	281.00	7	19.00
	X		225.00		198.00		
	Y	54.0mm	216.00	25.4mm	183.00		
	Z		212.00		181.00		
6.5101" - 7.010" 165.351mm-178.05mm	XX	2 1/8"	445.00	1"	290.00	7	19.00
	X		340.00		216.00		
	Y	54.0mm	329.00	25.4mm	213.00		
	Z		320.00		207.00		
7.0101" - 7.510" 178.051mm-190.75mm	XX	2 1/8"	453.00	1"	310.00	7	19.00
	X		354.00		284.00		
	Y	54.0mm	337.00	25.4mm	268.00		
	Z		333.00		260.00		
7.5101" - 8.010" 190.751mm-203.45mm	XX	2 1/8"	468.00	1"	340.00	7	19.00
	X		373.00		310.00		
	Y	54.0mm	354.00	25.4mm	296.00		
	Z		347.00		263.00		

Long Form Calibration available at an additional charge.



Trilock gages are used to inspect large diameters. Like reversible gages, when one end wears out, the gage end can be turned around. This design significantly increases the gaging life of the gage. Gage members are securely attached to the trilock handle with mounting bolts.

**Unilateral Tolerance**  
**GO – Plus Tolerance**  
**NOGO – Minus Tolerance**  
 Chrome Plated – Add 30%

Carbide priced on request.

XXX Add 100% to  
 XX prices up to 1.510".  
 Quantity discounts available on identical units.

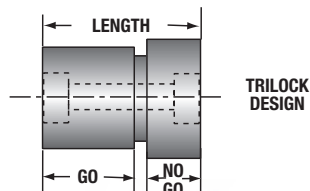
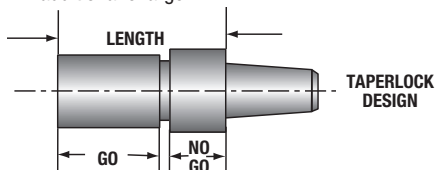
Larger diameters quoted on request

# PROGRESSIVE CYLINDRICAL PLUG GAGES

## Quick GO/NOGO checking

Progressive plug gages are your best choice for checking parts quickly. Both the GO and NOGO diameters are stepped on a single gage member, so parts can be inspected in one operation. Members are securely attached to either a Taperlock handle or Trilock handle with mounting bolts. Progressive plug gages are available up to 8" in all class tolerances and materials.

- Class XX,X,Y,Z or ZZ
- Go, NoGo tolerances
- NIST traceable
- Tool Steel; 60/62 Rc (Cold Stabilized), Chrome Plated tool steel; 70/72 Rc
- 2 microinch finish or better on Class XX,X
- up to 1.5100" and over – Trilock style
- Certificate of Accuracy included
- Long Form Calibration available at an additional charge



TAPERLOCK STYLE					
SIZE	CLASS	TOLERANCE	LENGTH	PRICE	HANDLE PRICE
.1050" - .1500" 2.670mm - 3.810mm	XX	.000020"	Go 3/8 NoGo 7/32 Length 23/32	\$90.00	\$11.00
	X	.000040"		84.00	11.00
	Y	.000070"		77.00	11.00
	Z	.0001"		76.00	11.00
.1501" - .2300" 3.811mm - 5.840mm	XX	.000020"	Go 13/32 NoGo 9/32 Length 13/16	90.00	11.00
	X	.000040"		77.00	11.00
	Y	.000070"		75.00	11.00
	Z	.0001"		73.00	11.00
.2301" - .3650" 5.841mm - 9.270mm	XX	.000020"	Go 3/4 NoGo 5/16 Length 1-3/16	92.00	11.00
	X	.000040"		80.00	11.00
	Y	.000070"		76.00	11.00
	Z	.0001"		74.00	11.00
.3651" - .5100" 9.271mm - 12.950mm	XX	.000020"	Go 1.0 NoGo 3/8 Length 1-1/2	93.00	11.00
	X	.000040"		81.00	11.00
	Y	.000070"		76.00	11.00
	Z	.0001"		75.00	11.00
.5101" - .8250" 12.951mm - 20.960mm	XX	.000020"	Go 1-1/4 NoGo 1/2 Length 1-7/8	98.00	11.00
	X	.000040"		88.00	11.00
	Y	.000070"		81.00	11.00
	Z	.0001"		79.00	11.00
.8251" - 1.1350" 20.961mm - 28.830mm	XX	.000030"	Go 1-3/8 NoGo 5/8 Length 2-1/8	111.00	12.00
	X	.000060"		95.00	12.00
	Y	.000090"		91.00	12.00
	Z	.00012"		89.00	12.00
1.1351" - 1.5100" 28.831mm - 38.350mm	XX	.000030"	Go 1-1/2 NoGo 3/4 Length 2-3/8	127.00	12.00
	X	.000060"		98.00	12.00
	Y	.000090"		93.00	12.00
	Z	.00012"		91.00	12.00
TRILOCK STYLE					
1.5101" - 2.0100" 38.351mm - 51.050mm	XX	.000040"	Go 1-7/8 NoGo 7/8 Length 2-7/8	174.00	17.00
	X	.000080"		158.00	17.00
	Y	.00012"		150.00	17.00
	Z	.00016"		147.00	17.00
2.0101" - 2.5100" 51.051mm - 63.750mm	XX	.000040"	Go 2.0 NoGo 7/8 Length 3	220.00	18.00
	X	.000080"		184.00	18.00
	Y	.00012"		176.00	18.00
	Z	.00016"		172.00	18.00
2.5101" - 3.0100" 63.751mm - 76.450mm	XX	.000050"	Go 2.0 NoGo 7/8 Length 3	268.00	19.00
	X	.0001"		210.00	19.00
	Y	.00015"		189.00	19.00
	Z	.0002"		183.00	19.00
3.0101" - 3.5100" 76.451mm - 89.150mm	XX	.000050"	Go 2-1/8 NoGo 7/8 Length 3-1/8	298.00	19.00
	X	.0001"		245.00	19.00
	Y	.00015"		214.00	19.00
	Z	.0002"		201.00	19.00
3.5101" - 4.0100" 89.151mm - 101.850mm	XX	.000050"	Go 2-1/8 NoGo 7/8 Length 3-1/8	379.00	19.00
	X	.0001"		286.00	19.00
	Y	.00015"		248.00	19.00
	Z	.0002"		243.00	19.00
4.0101" - 4.5100" 101.851mm - 114.550mm	XX	.000050"	Go 2-1/8 NoGo 7/8 Length 3-1/8	426.00	19.00
	X	.0001"		326.00	19.00
	Y	.00015"		275.00	19.00
	Z	.0002"		267.00	19.00



# CUSTOM HEX PLUG GAGES

D.E. HEX GAGES TO ANSI B18.3	
FRACTIONAL SIZES	
SIZE	PRICE
0.028	\$297.00
0.035	283.00
0.05	246.00
1/16	246.00
5/64	246.00
3/32	246.00
7/64	246.00
1/8	215.00
9/64	215.00
5/32	215.00
3/16	215.00
7/32	215.00
1/4	215.00
5/16	225.00
3/8	234.00
7/16	234.00
1/2	234.00
9/16	256.00
5/8	256.00
3/4	265.00
7/8	293.00
1	319.00
METRIC	
0.70mm	\$299.00
0.90mm	283.00
1.30mm	246.00
1.50mm	246.00
2.00mm	246.00
2.50mm	246.00
3.00mm	215.00
4.00mm	215.00
5.00mm	215.00
6.00mm	215.00
8.00mm	215.00
10.00mm	225.00
12.00mm	234.00
14.00mm	234.00
17.00mm	256.00
19.00mm	266.00
22.00mm	293.00
24.00mm	319.00

Go member – Hex shape

NoGo member – Rectangular shape

D.E. HEX GAGES TO ANSI/ASME B107.17M	
FRACTIONAL SIZES	
SIZE	PRICE
1/8	\$215.00
5/32	215.00
3/16	215.00
13/64	215.00
7/32	215.00
15/64	215.00
1/4	215.00
9/32	224.00
5/16	224.00
11/32	224.00
3/8	224.00
1/2	224.00
9/16	224.00
19/32	224.00
5/8	232.00
21/32	232.00
11/16	232.00
3/4	232.00
25/32	257.00
13/16	257.00
7/8	257.00
15/16	257.00
1	257.00
1-1/16	285.00
1-1/8	285.00
1-3/16	285.00
1-1/4	285.00
1-5/16	310.00
1-3/8	342.00
1-7/16	376.00
1-1/2	382.00
1-9/16	382.00
1-5/8	382.00
1-11/16	382.00
1-3/4	382.00
1-13/16	441.00
1-7/8	441.00
1-15/16	441.00
2	441.00
2-1/16	441.00
2-1/8	441.00
2-3/16	473.00
2-1/4	473.00
2-5/16	473.00
2-3/8	473.00
2-7/16	498.00
2-1/2	498.00
2-9/16	498.00
2-5/8	498.00
2-11/16	498.00
2-3/4	574.00
2-13/16	574.00
2-7/8	574.00
2-15/16	574.00
3	574.00

D.E. HEX GAGES TO ANSI/ASME B107.17M	
METRIC SIZES	
SIZE	PRICE
2mm	\$246.00
3mm	246.00
3.2mm	214.00
4mm	214.00
5mm	214.00
5.5mm	214.00
6mm	214.00
6.3mm	214.00
7mm	224.00
8mm	224.00
9mm	224.00
10mm	224.00
11mm	224.00
12mm	224.00
13mm	224.00
14mm	224.00
15mm	224.00
16mm	232.00
17mm	232.00
18mm	232.00
19mm	257.00
20mm	257.00
21mm	257.00
22mm	257.00
23mm	257.00
24mm	257.00
25mm	257.00
26mm	282.00
27mm	282.00
28mm	282.00
29mm	282.00
30mm	282.00
31mm	282.00
32mm	310.00
33mm	310.00
34mm	342.00
35mm	342.00
36mm	376.00
37mm	381.00
38mm	381.00
39mm	381.00
40mm	381.00
41mm	381.00
42mm	381.00
43mm	381.00
44mm	439.00
45mm	439.00
46mm	439.00
47mm	439.00
48mm	439.00
49mm	439.00
50mm	439.00
55mm	473.00
60mm	473.00
65mm	497.00
70mm	497.00
75mm	573.00

Thread Check, Inc. offers a complete line of GO/NOGO Hex plug gages manufactured to both specs ANSI/ASME B107.17M and ANSI B18.3. Special diameter Hex gages are also available. Hex gages are perfect for inspecting machine head fasteners.

- ANSI/ASME B107.17M
- ANSI B18.3
- Go, NoGo Class Z tolerances
- NIST traceable
- Tool Steel: 60/62 Rc (Cold Stabilized)
- Certificate of Accuracy included
- Long Form Calibration available at an additional charge

Prices are for complete  
Double end Go & NoGo assemblies.



Single End



Double End



Use plain ring gages for masters and GO/NOGO gaging.

Use plain ring gages to efficiently inspect external dimensions of manufactured parts.

With GO/NOGO ring gages, an inspector can quickly pass/fail parts without taking time consuming readings from a measuring instrument.

Plain ring gages are also ideal for use as masters for setting bore gages, air gages, and internal micrometers. By using the same size master ring gage, lead error on measurements can be eliminated.

## DIRECTION OF TOLERANCES

**MASTER** - Bilateral (Split) Tolerance

**GO** - Unilateral (Minus) Tolerance

**NOGO** - Unilateral (Plus) Tolerance

- Ring gages manufactured in accordance with ANSI Specification B89.1.6-1981.
- Gage blanks meet all requirements of B47.1-1981
- All ring gages regardless of size are lapped and polished.
- Non-gaging areas are black oxidized and ring faces are surface ground.
- Rings above 5.510 will not include tapped holes for ball handles unless specified.
- Roundness and taper of all gages will not exceed 50% of the applicable gagemaker's size tolerance and are non-accumulative.
- XXX rings - add 100% to XX prices for sizes up to 1.5101 inches.
- Larger sizes priced on request.
- Call for quantity discounts.

## LONG FORM CALIBRATION

SIZE	PRICE
.015" – .03999"	priced on request
.040" – 5.510"	\$15.00
5.5101" – 11.000"	\$20.00
11.001 – 15.000"	\$30.00
15.001 – 22.000"	\$75.00
Above 22.00"	priced on request

XXX - Add 100% to above prices



SIZE-RANGE	CLASS	STANDARD A.G.D. BLANK SIZE LENGTH/O.D.		STEEL	CHROME
.015 in. To .025 in. 0.381mm To 0.635mm	XX X Y Z	#000 Blank 3/32 15/16" 2.38mm 23.8 mm		\$275.00 220.00 210.00 210.00	CALL FOR PRICES
.0251 in. To .040 in. 0.636mm To 1.02mm	XX X Y Z	#000 Blank 3/32 15/16" 2.38mm 23.8 mm		250.00 210.00 200.00 200.00	
.0401 in. to .070 in. 1.021 mm to 1.78 mm	XX X Y Z	#00 Blank 3/16" 15/16" 4.8mm 23.8 mm		160.00 130.00 125.00 125.00	
.0701 in. to .150 in. 1.781 mm to 3.81 mm	XX X Y Z	#00 Blank 3/16" 15/16" 4.8mm 23.8mm		140.00 120.00 115.00 113.00	
.1501 in. to .230 in. 3.811 mm to 5.84 in.	XX X Y Z	#0 Blank 3/8" 15/16" 9.5mm 23.8mm		103.00 90.00 88.00 86.00	
.2301 in. to .365 in. 5.841 mm to 9.27 m	XX X Y Z	#1 Blank 9/16" 1-1/8" 14.3mm 28.6mm		93.00 83.00 78.00 75.00	
.3651 in. to .510 in. 9.271 mm to 12.95 mm	XX X Y Z	#2 Blank 3/4" 1-3/8" 19.1mm 34.9mm		93.00 86.00 83.00 81.00	
.5101 in. to .825 in. 12.951mm to 20.96 mm	XX X Y Z	#3 Blank 15/16" 1-3/4" 23.8mm 44.4mm		96.00 88.00 85.00 83.00	
.8251 in. to 1.135 in. 20.961mm to 28.83mm	XX X Y Z	#4 Blank 1-1/8" 2-1/8" 28.6mm 54.0mm		101.00 93.00 90.00 88.00	
1.1351 in. to 1.510 in. 28.831mm to 38.35mm	XX X Y Z	#5 Blank 1-5/16" 2-1/2" 33.3mm 63.5mm		110.00 92.00 88.00 85.00	
1.5101 in. to 2.010 in. 38.351mm to 51.05mm	XX X Y Z	#6 Blank 1-1/2" 4" 38.1mm 101.6mm		133.00 122.00 115.00 107.00	
2.0101 in. to 2.510 in. 51.051mm to 63.75mm	XX X Y Z	#7 Blank 1-1/2" 4-1/2" 38.1mm 114.3mm		173.00 145.00 136.00 130.00	225.00 189.00 177.00 170.00
2.5101 in. to 3.010 in. 63.751mm to 76.45mm	XX X Y Z	#8 Blank 1-1/2" 5" 38.1mm 127.00mm		200.00 173.00 147.00 145.00	
3.0101 in. to 3.510 in. 76.451mm to 89.15mm	XX X Y Z	#9 Blank 1-1/2" 5-1/2" 38.1mm 139.7mm		233.00 202.00 179.00 171.00	
3.5101 in. to 4.010 in. 89.151mm to 101.85 in.	XX X Y Z	#10 Blank 1-1/2" 6-3/8" 38.1mm 161.9mm		266.00 220.00 205.00 200.00	
4.0101 in. to 4.760 in. 101.851mm to 120.90mm	XX X Y Z	#11 Blank 1-1/2" 7-1/4" 38.1mm 184.2mm		298.00 265.00 235.00 230.00	
4.7601 in. to 5.510 in. 120.901mm to 139.95mm	XX X Y Z	#12 Blank 1-1/2" 8-1/4" 38.01mm 209.6mm		399.00 335.00 310.00 300.00	

continued on next page

# PLAIN RING GAGES

continued from previous page

SIZE-RANGE	CLASS	STANDARD A.G.D. BLANK SIZE LENGTH/O.D.	STEEL	CHROME
5.5101 in.	XX	#13 Blank 1-1/2" 9-1/4" 38.1mm 235.0mm	\$506.00	\$657.00
to 6.260 in.	X		428.00	553.00
139.951mm	Y		391.00	506.00
to 159.00mm	Z		388.00	498.00
6.2601 in.	XX	#14 Blank 1-1/2" 10-1/4" 38.1mm 260.4mm	616.00	798.00
to 7.010 in.	X		572.00	743.00
159.001mm	Y		544.00	708.00
178.05mm	Z		539.00	705.00
7.0101 in.	XX	#15 Blank 1-1/2" 11-1/4" 38.1mm 285.8mm	641.00	829.00
to 7.760 in.	X		581.00	759.00
178.051mm	Y		561.00	729.00
to 179.10mm	Z		558.00	723.00
7.7601 in.	XX	#16 Blank 1-1/2" 12-1/4" 38.1mm 311.2mm	730.00	938.00
to 8.510 in.	X		668.00	851.00
197.101mm	Y		638.00	815.00
to 216.15mm	Z		621.00	808.00
8.5101 in.	XX	#17 Blank 1-1/2" 13-1/4" 38.1mm 336.6mm	821.00	1051.00
to 9.260 in.	X		748.00	970.00
216.151mm	Y		718.00	920.00
to 235.20mm	Z		698.00	914.00
9.2601 in.	XX	#18 Blank 1-1/2" 14-1/4" 38.1mm 362.0mm	920.00	1210.00
to 10.010 in.	X		817.00	1060.00
235.201mm	Y		782.00	997.00
to 254.25mm	Z		760.00	970.00
10.0101 in.	XX	#19 Blank 1-1/2" 15-1/4" 38.1mm 387.4mm	1085.00	1385.00
to 10.760 in.	X		920.00	1205.00
254.251mm	Y		801.00	1045.00
273.30mm	Z		798.00	1028.00
10.7601 in.	XX	#20 Blank 1-1/2" 16-1/4" 38.1mm 387.4mm	1178.00	1520.00
to 11.510 in.	X		1011.00	1320.00
273.301mm	Y		937.00	1220.00
to 292.35mm	Z		928.00	1210.00
11.5101 in.	XX	#21 Blank 1-1/2" 17-1/4" 38.1mm 438.2mm	1375.00	1780.00
to 12.260 in.	X		1245.00	1590.00
292.351mm	Y		1175.00	1488.00
to 311.40mm	Z		1157.00	1458.00
12.2601 in.	XX	#22 Blank 1-1/2" 18-1/4" 38.1mm 463.6mm	1669.00	
to 13.010 in.	X		1593.00	
311.401mm	Y		1520.00	
to 330.45mm	Z		1486.00	
13.0101 in.	XX	#23 Blank 1-1/2" 19-1/4" 38.1mm 489.0mm	1698.00	
to 13.760 in.	X		1640.00	
330.451mm	Y		1596.00	
to 349.50mm	Z		1570.00	
13.7601 in.	XX	#24 Blank 1-1/2" 20-1/4" 38.1mm 514.4mm	1753.00	
to 14.510 in.	X		1672.00	
349.501mm	Y		1,590.00	
to 368.55mm	Z		1565.00	
14.5101 in.	XX	#25 Blank 1-1/2" 21-1/4" 38.1mm 539.8mm	1805.00	
to 15.260 in.	X		1780.00	
368.551mm	Y		1710.00	
to 387.60mm	Z		1700.00	
15.2601 in.	XX	#26 Blank 1-1/2" 22-1/4" 38.1mm 565.2mm	1945.00	
to 16.010 in.	X		1895.00	
387.601mm	Y		1845.00	
to 406.65mm	Z		1790.00	

CALL FOR PRICES

Larger sizes up to 30" priced on request.



Cylindrical Ring gages above 1.510" are manufactured with a flanged diameter as pictured above. This design removes excess material to reduce the weight of the gage and makes it easier to use.

**31 SIZES / SAME DAY SHIPPING - ADD 30%.**  
**SAME DAY\* SHIPPING ON FRACTIONAL SIZE RINGS**  
**FROM .125" - 2.000" IN .0625" INCREMENTS.**  
**AVAILABLE IN MASTER CL-X or CL-XX.**

**\*Order must be in by 10:00 a.m. EST**

.1250 = 1/8	1.1250 = 1 1/8
.1875 = 3/16	1.1875 = 1 3/16
.2500 = 1/4	1.2500 = 1 1/4
.3125 = 5/16	1.3125 = 1 5/16
.3750 = 3/8	1.3750 = 1 3/8
.4375 = 7/16	1.4375 = 1 7/16
.5000 = 1/2	1.5000 = 1 1/2
.5625 = 9/16	1.5625 = 1 9/16
.6250 = 5/8	1.6250 = 1 5/8
.6875 = 11/16	1.6875 = 1 11/16
.7500 = 3/4	1.7500 = 1 3/4
.8125 = 13/16	1.8125 = 1 13/16
.8750 = 7/8	1.8750 = 1 7/8
.9375 = 15/16	1.9375 = 1 15/16
1.000 = 1.0	2.0000 = 2.0
1.0625 = 1 1/16	

## PLAIN RING HOLDERS (Black Only)

#000	\$50.00
#0	\$50.00
#1	\$50.00
#2	\$50.00
#3	\$65.00
#4	\$65.00

## LONG FORM CALIBRATION

SIZE	PRICE
.015" - .03999"	priced on request
.040" - 5.510"	\$15.00
5.5101" - 11.000"	\$20.00
11.001 - 15.000"	\$30.00
15.001 - 22.000"	\$75.00
Above 22.00"	priced on request

XXX - Add 100% to above prices







## CYLINDRICAL CARBIDE RING GAGES

Thread Check Inc. Cylindrical Ring Gages are manufactured to ASME/ANSI B47.1 AGD standard and ASME/ANSI B89.1.6 C-2 grade carbide

Pictured above are carbide inserted ring gages. The insert is solid carbide fitted into an outside sleeve of steel. A solid carbide ring gage would be excessively heavy and subject to cracking as carbide is hard and brittle. Use plain ring gages for masters and GO/NOGO gaging.

Use plain ring gages to efficiently inspect external dimensions of manufactured parts.

With GO/NOGO ring gages, an inspector can quickly pass/fail parts without taking time consuming readings from a measuring instrument.

Plain ring gages are also ideal for use as masters for setting bore gages, air gages, and internal micrometers. By using the same size master ring gage, lead error on measurements can be eliminated.

### DIRECTION OF TOLERANCES

**MASTER** - Bilateral (Split) Tolerance

**GO** - Unilateral (Minus) Tolerance

**NOGO** - Unilateral (Plus) Tolerance

- Ring gages manufactured in accordance with ANSI Specification B89.1.6-1981.
- Gage blanks meet all requirements of B47.1-1981
- All ring gages regardless of size are lapped and polished.
- Non-gaging areas are black oxidized and ring faces are surface ground.
- Roundness and taper of all gages will not exceed 50% of the applicable gagemaker's size tolerance and are non-accumulative.
- XXX rings - add 100% to XX prices for sizes up to 1.5101 inches.
- Larger sizes priced on request.
- Call for quantity discounts.

LONG FORM CALIBRATION	
SIZE	PRICE
.015" - .03999"	priced on request
.040" - 5.510"	\$15.00
5.5101" - 11.000"	\$20.00
11.001 - 15.000"	\$30.00
15.001 - 22.000"	\$75.00
Above 22.00"	priced on request



Size	Class	Tolerance	Blank OD/ Length	PRICE \$
.015in to .0399in .381mm to 1.020mm	XX	.000020	#000 Blank 15/16 3/16	\$225.00
	X	.000040		\$193.00
	Y	.000070		\$181.00
	Z	.0001		\$179.00
.040in to .070in 1.021mm to 1.78mm	XX	.000020	#00 Blank 15/16 3/16	\$225.00
	X	.000040		\$193.00
	Y	.000070		\$181.00
	Z	.0001		\$179.00
.0701in to .150in 1.781mm to 3.81mm	XX	.000020	#00 Blank 15/16 3/16	\$200.00
	X	.000040		\$194.00
	Y	.000070		\$178.00
	Z	.0001		\$172.00
.1501in to .230in 3.811mm to 5.84mm	XX	.000020	#0 Blank 15/16 3/8	\$175.00
	X	.000040		\$165.00
	Y	.000070		\$158.00
	Z	.0001		\$156.00
.2301in to .365in 5.841mm to 9.27mm	XX	.000020	#1 Blank 1-1/8 9/16	\$155.00
	X	.000040		\$147.00
	Y	.000070		\$138.00
	Z	.0001		\$135.00
.3651in to .510in 9.271mm to 12.95mm	XX	.000020	#2 Blank 1-3/8 3/4	\$167.00
	X	.000040		\$154.00
	Y	.000070		\$142.00
	Z	.0001		\$139.00
.5101in to .825in 12.951mm to 20.96mm	XX	.000020	#3 Blank 1-3/4 15/16	\$190.00
	X	.000040		\$170.00
	Y	.000070		\$163.00
	Z	.0001		\$159.00
.8251in to 1.135in 20.961mm to 28.83mm	XX	.000030	#4 Blank 2-1/8 1-1/8	\$268.00
	X	.000060		\$248.00
	Y	.000090		\$241.00
	Z	.00012		\$238.00
1.1351in to 1.335in 28.831mm to 33.91mm	XX	.000030	#5 Blank 2-1/2 1-5/16	\$328.00
	X	.000060		\$295.00
	Y	.000090		\$280.00
	Z	.00012		\$279.00
1.3351in to 1.510in 33.911mm to 38.35mm	XX	.000030	#5 Blank 2-1/2 1-5/16	\$345.00
	X	.000060		\$298.00
	Y	.000090		\$278.00
	Z	.00012		\$272.00
1.5101in to 1.760in 38.351mm to 44.70mm	XX	.000040	#6 Blank 4 1-1/2	\$439.00
	X	.000080		\$380.00
	Y	.00012		\$347.00
	Z	.00016		\$340.00
1.7601in to 2.010in 44.701mm to 51.05mm	XX	.000040	#6 Blank 4 1-1/2	\$475.00
	X	.000080		\$440.00
	Y	.00012		\$417.00
	Z	.00016		\$410.00
2.0101in to 2.260in 51.051mm to 57.40mm	XX	.000040	#7 Blank 4-1/2 1-1/2	\$578.00
	X	.000080		\$530.00
	Y	.00012		\$498.00
	Z	.00016		\$493.00
2.2601in to 2.250in 57.401mm to 63.75mm	XX	.000040	#7 Blank 4-1/2 1-1/2	\$650.00
	X	.000080		\$585.00
	Y	.00012		\$554.00
	Z	.00016		\$549.00



## MASTER SETTING DISCS

Use MASTER SETTING DISCS to calibrate and set comparators, snap gages, and other precision measuring instruments. They are furnished with insulating grips to prevent heat distortion. Master Setting Discs are designed to satisfy quality control traceability requirements and are available in 3 styles, unless otherwise specified.

- All MASTER SETTING DISCS
- Conform to ANSI B47.1
- Are ring lapped to size and polished.
- Are furnished with insulator grips to prevent heat distortion.
- Roundness and taper of all gages will not exceed 50% of the application gagemaker's size tolerance and are non-accumulative.

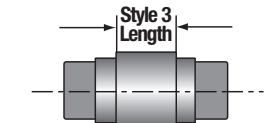
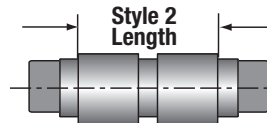
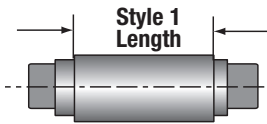
### 3 STYLES:

#### Styles 1 and 3 -

Bilateral tolerance  $\pm 1/2$  tolerance.

#### Style 2-

Unilateral tolerance  
GO - minus tolerance  
NOGO + Plus tolerance



- XXX and Carbide Master Setting Discs are priced on request.
- Larger sizes priced on request.
- Call for quantity discounts.
- Sizes available up to 23 inches in style #3.
- Discs above 8.010 are in trilock design, not annular.

Note: sizes above 1.510" to and including 8.510 - AGD standards call for style #3 in place of style #2. Style #3 master setting are separated by an A.G.D. separator plate and linked together with a tie rod and insulators.

LONG FORM CALIBRATION	
SIZE	PRICE
.015" - .03999"	priced on request
.040" - 5.510"	\$15.00
5.5101" - 11.000"	\$20.00
11.001 - 15.000"	\$30.00
15.001 - 22.000"	\$75.00
Above 22.00"	priced on request

XXX - Add 50% to above prices

RANGE	CLASS	STYLE	LENGTH	STEEL			CHROME		
				PRICE STYLE 1	PRICE STYLE 2	PRICE STYLE 3	PRICE STYLE 1	PRICE STYLE 2	PRICE STYLE 3
.150" - .230" 3.811mm-5.84mm	XX	1	3/4	\$76.00	\$135.00	\$74.00	\$99.00	\$175.00	\$96.00
	X	2	3/4	78.00	121.00	67.00	102.00	158.00	86.00
	Y	3	3/8	62.00	116.00	75.00	81.00	151.00	83.00
.2301" - .365" 5.841mm-9.27mm	XX	1	7/8	77.00	142.00	84.00	100.00	184.00	109.00
	X	2	7/8	67.00	130.00	78.00	87.00	169.00	101.00
	Y	3	7/16	74.00	126.00	66.00	96.00	164.00	84.00
.3651" - .510" 9.271mm-12.95mm	XX	1	1	110.00	142.00	77.00	103.00	185.00	100.00
	X	2	1	79.00	132.00	68.00	103.00	172.00	87.00
	Y	3	1/2	74.00	126.00	65.00	96.00	164.00	83.00
.5101" - .825" 12.951mm-20.96mm	XX	1	1/8	89.00	147.00	80.00	117.00	191.00	104.00
	X	2	1/8	79.00	136.00	70.00	103.00	176.00	91.00
	Y	3	9/16	76.00	126.00	66.00	99.00	164.00	86.00
.8251" - 1.135" 20.961mm-28.83mm	XX	1	1-1/4	91.00	157.00	83.00	118.00	204.00	109.00
	X	2	1-1/4	83.00	135.00	72.00	106.00	187.00	93.00
	Y	3	5/8	79.00	131.00	68.00	102.00	169.00	87.00
1.1351" - 1.510" 28.831mm-38.35mm	XX	1	1-3/8	101.00	173.00	92.00	132.00	226.00	119.00
	X	2	1-3/8	84.00	137.00	73.00	109.00	178.00	95.00
	Y	3	1-1/16	80.00	132.00	69.00	105.00	171.00	90.00
1.5101" - 2.010" 38.351mm-51.05mm	XX	1	1-7/8	122.00	198.00	105.00	156.00	258.00	136.00
	X	2	2	99.00	179.00	94.00	128.00	232.00	122.00
	Y	3	7/8	93.00	168.00	90.00	120.00	219.00	117.00
2.0101" - 2.510" 51.051mm-63.75mm	XX	1	2	134.00	226.00	122.00	173.00	293.00	159.00
	X	2	2	111.00	182.00	95.00	143.00	237.00	123.00
	Y	3	7/8	105.00	174.00	91.00	137.00	226.00	117.00
2.5101" - 3.010" 63.751mm-76.45mm	XX	1	2	152.00	262.00	140.00	196.00	339.00	182.00
	X	2	2-1/4	122.00	221.00	115.00	157.00	287.00	149.00
	Y	3	1	113.00	205.00	111.00	146.00	266.00	144.00
3.0101" - 3.510" 76.451mm-89.15mm	XX	1	2	226.00	357.00	191.00	293.00	465.00	246.00
	X	2	2-1/4	210.00	334.00	173.00	274.00	433.00	224.00
	Y	3	1	200.00	313.00	168.00	260.00	407.00	219.00
3.5101" - 4.010" 89.151mm-101.85mm	XX	1	2-1/8	252.00	373.00	195.00	328.00	484.00	252.00
	X	2	2-1/4	221.00	331.00	177.00	287.00	430.00	229.00
	Y	3	1	208.00	313.00	168.00	270.00	407.00	219.00
4.0101" - 4.510" 101.851mm-114.55mm	XX	1	2-1/8	248.00	380.00	198.00	322.00	492.00	255.00
	X	2	2-1/4	227.00	347.00	178.00	295.00	452.00	230.00
	Y	3	1	219.00	322.00	168.00	285.00	417.00	219.00
4.5101" - 5.010" 114.551mm-127.25mm	XX	1	2-1/8	315.00	387.00	205.00	408.00	502.00	267.00
	X	2	2-1/4	290.00	364.00	191.00	378.00	473.00	248.00
	Y	3	1	274.00	345.00	179.00	355.00	448.00	234.00
5.0101" - 5.510" 127.251mm-139.95mm	XX	1	2-1/8	326.00	417.00	222.00	425.00	540.00	288.00
	X	2	2-1/4	297.00	367.00	193.00	387.00	477.00	250.00
	Y	3	1	284.00	347.00	171.00	369.00	451.00	222.00
5.5101" - 6.010" 139.951mm-152.65mm	XX	1	2-1/8	337.00	451.00	231.00	438.00	586.00	302.00
	X	2	2-1/4	305.00	373.00	198.00	397.00	485.00	258.00
	Y	3	1	293.00	358.00	190.00	381.00	465.00	247.00
6.0101" - 6.510" 152.651mm-165.35mm	XX	1	2-1/8	354.00	488.00	256.00	460.00	634.00	332.00
	X	2	2-1/4	322.00	448.00	207.00	419.00	581.00	267.00
	Y	3	1	307.00	420.00	197.00	397.00	544.00	255.00
6.5101" - 7.010" 165.351mm-178.05mm	XX	1	2-1/8	546.00	609.00	315.00	709.00	792.00	407.00
	X	2	2-1/4	494.00	552.00	293.00	641.00	715.00	400.00
	Y	3	1	470.00	530.00	276.00	610.00	689.00	360.00
7.0101" - 7.510" 178.051mm-190.75mm	XX	1	2-1/8	565.00	625.00	326.00	731.00	809.00	420.00
	X	2	2-1/4	505.00	568.00	295.00	651.00	734.00	378.00
	Y	3	1	483.00	542.00	287.00	625.00	698.00	371.00
7.5101" - 8.010" 190.751mm-203.45mm	XX	1	2-1/8	589.00	636.00	337.00	762.00	825.00	436.00
	X	2	2-1/4	532.00	577.00	307.00	689.00	747.00	395.00
	Y	3	1	507.00	542.00	291.00	653.00	698.00	374.00

Qty discounts are available for identical sizes Qty 2 - less 10% Qty 3 - less 15%

## AGD LIMIT SNAP GAGES



Gaging surfaces are hardened, ground & lapped tool steel.  
Marking discs are supplied on all snap gages.

### MODEL "C" STYLE 108

FRAME #	RANGE	PRICE
1	0 to 1/4	\$125.00
2	1/4 to 1/2	127.00
2X	1/2 to 3/4	127.00
3	3/4 to 1	130.00
3X	1 to 1-1/4	130.00
4	1-1/4 to 1-1/2	133.00
4X	1-1/2 to 1-3/4	133.00
5	1-3/4 to 2	137.00
5X	2 to 2-1/4	137.00
6	2-1/4 to 2-1/2	145.00
6X	2-1/2 to 2-3/4	145.00
7	2-3/4 to 3-1/16	158.00
7X	3-1/16 to 3-7/16	158.00
8	3-7/16 to 3-13/16	169.00
8X	3-13/16 to 4-3/16	169.00
9	4-3/16 to 4-9/16	195.00
9X	4-9/16 to 4-15/16	195.00
10	4-15/16 to 5-5/16	229.00
10X	5-5/16 to 5-11/16	229.00
11	5-11/16 to 6-1/8	295.00
11X	6-1/8 to 6-5/8	295.00
12	6-5/8 to 7-1/8	335.00
12X	7-1/8 to 7-5/8	335.00
13	7-5/8 to 8-1/8	370.00
13X	8-1/8 to 8-5/8	370.00

### MODEL "MC" STYLE 102

FRAME #	RANGE	PRICE
00	.000 to .195	\$139.00
00	.195 to .385	139.00
0	.385 to .570	139.00
0	.570 to .760	139.00

### MODEL "A" STYLE 104

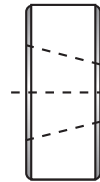
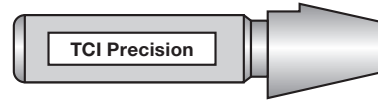
FRAME #	RANGE	PRICE
1	0 to 1/2	\$110.00
2	1/2 to 1	115.00
3	1 to 1- 1/2	120.00
4	1-1/2 to 2	125.00
5	2 to 2-1/2	135.00
6	2-1/2 to 3	140.00
7	3 to 3-3/4	145.00
8	3-3/4 to 4-1/2	160.00
9	4-1/2 to 5-1/4	185.00
10	5-1/4 to 6	200.00

Set & Sealed \$ 15.00  
Unset but Marked \$ 5.00

Long Form Calibration  
available at an additional charge



# CYLINDRICAL TAPER GAGES



## NATIONAL MACHINE TAPERS

Taper #	Large End	Small End	Length	Price Each	
				Plug	Ring
5	.500	.2995	.6875	\$386.00	\$621.00
10	.625	.3698	.8750	301.00	559.00
15	.750	.4401	1.0625	320.00	534.00
20	.875	.4922	1.3125	328.00	508.00
25	1.000	.5443	1.5625	387.00	601.00
30	1.250	.7031	1.8750	447.00	688.00

Taper #	Large End	Small End	Length	Price Each	
				Plug	Ring
35	1.500	.8438	2.2500	\$508.00	\$742.00
40	1.750	1.0026	2.5625	559.00	785.00
45	2.250	1.2839	3.3125	610.00	842.00
50	2.750	1.5833	4.0000	668.00	895.00
55	3.500	1.9870	5.1875	698.00	955.00
60	4.250	2.3906	6.3750	724.00	1,016.00

## JARNO TAPERS - W/O TANG .6000" TPF

Taper #	Large End	Small End	Length	Price Each	
				Plug	Ring
1	.125	.100	.500	\$387.00	\$655.00
2	.250	.200	1.00	371.00	621.00
3	.375	.300	1.50	344.00	585.00
4	.500	.400	2.00	292.00	540.00
5	.625	.500	2.50	308.00	551.00
6	.750	.600	3.00	320.00	530.00
7	.875	.700	3.50	352.00	560.00
8	1.000	.800	4.00	403.00	593.00
9	1.125	.900	4.50	413.00	621.00
10	1.250	1.000	5.00	422.00	645.00

Taper #	Large End	Small End	Length	Price Each	
				Plug	Ring
11	1.375	1.100	5.50	\$447.00	\$689.00
12	1.500	1.200	6.00	483.00	742.00
13	1.625	1.300	6.50	534.00	766.00
14	1.750	1.400	7.00	642.00	903.00
15	1.875	1.500	7.50	674.00	1,000.00
16	2.000	1.600	8.00	750.00	1,031.00
17	2.125	1.700	8.50	763.00	1,069.00
18	2.250	1.800	9.00	784.00	1,097.00
19	2.375	1.900	9.50	791.00	1,130.00
20	2.500	2.000	10.00	822.00	1,156.00

## BROWN & SHARPE TAPERS

Taper #	Large End	Small End	Length	TPF	Plug Price		Ring Price	
					W/O TANG	W/TANG	W/O TANG	W/TANG
1	.23922	.20000	15/16	.50200	\$387.00	\$481.00	\$645.00	\$852.00
2	.29968	.25000	1 3/16	.50200	370.00	438.00	621.00	801.00
3	.37525	.31250	1 1/2	.50200	344.00	413.00	585.00	777.00
4	.42060	.35000	1 11/16	.50240	288.00	352.00	534.00	704.00
5	.53880	.45000	2 1/8	.50160	292.00	370.00	541.00	724.00
6	.59960	.50000	2 3/8	.50329	308.00	379.00	551.00	741.00
7	.72010	.60000	2 7/8	.50147	320.00	395.00	489.00	656.00
8	.89870	.75000	3 9/16	.50100	352.00	438.00	443.00	621.00
9	1.07750	.90010	4 1/4	.50085	403.00	500.00	594.00	785.00
10	1.25970	1.04465	5.00	.51612	422.00	508.00	602.00	790.00
11	1.49780	1.24995	5 15/16	.50100	551.00	673.00	775.00	1,008.00
12	1.79680	1.50010	7 1/8	.49973	559.00	681.00	785.00	1,016.00
13	2.07310	1.75005	7 3/4	.50020	655.00	777.00	896.00	1,146.00
14	2.34380	2.00000	8 1/4	.50000	663.00	785.00	904.00	1,163.00
15	2.61460	2.25000	8 3/4	.50000	689.00	809.00	930.00	1,189.00
16	2.88540	2.50000	9 1/4	.50000	856.00	869.00	1,016.00	1,232.00
17	3.15630	2.75000	9 3/4	.50000	835.00	998.00	1,171.00	1,419.00
18	3.42710	3.00000	10 1/4	.50000	964.00	1,153.00	1,352.00	1,646.00

All Standard Tapers manufactured to ASME/ANSI B5.10 class Z unless otherwise specified

Thread Check Inc. can manufacture special tapers per customer design

Medical Luer Tapers

Steep Machine Tapers

Cat V Flange Tapers

Long Form Calibration \$50 per gage

## MORSE TAPERS

Taper #	Large End	Small End	Length	TPF	Plug Price		Ring Price	
					W/O TANG	W/TANG	W/O TANG	W/TANG
0	.3561	.2520	2.00	.62460	\$361.00	\$438.00	\$712.00	\$827.00
1	.4750	.3690	2 1/8	.59858	295.00	370.00	607.00	789.00
2	.7000	.5720	2 9/16	.59941	320.00	395.00	557.00	736.00
3	.9380	.7780	3 3/16	.60235	352.00	438.00	515.00	687.00
4	1.2310	1.0200	4 1/16	.62326	403.00	501.00	595.00	785.00
4 1/2	1.500	1.2660	4 1/2	.62400	475.00	577.00	681.00	885.00
5	1.7480	1.4750	5 3/16	.63151	534.00	655.00	768.00	998.00
6	2.4940	2.1160	7 1/4	.62565	681.00	801.00	930.00	1,171.00
7	3.2700	2.7500	10	.62400	724.00	869.00	1,016.00	1,232.00

## MICROMETER SET MASTERS

Model #	Price
01-1E (English)	\$280.00
01-1M (Metric)	\$280.00
Certification	\$70.00
16-1E (English)	\$470.00
16-1M (Metric)	\$470.00
Certification	\$70.00
16-1/2E (English)	\$700.00
16-1/2M (Metric)	\$700.00
Certification	\$140.00
112E (English)	\$1,450.00
112M (Metric)	\$1,450.00
Certification	\$180.00

Micrometer masters are used to calibrate and set micrometers. The master is superior to gage block calibration because they do not require block stacks so it is much faster to inspect the linear range of the tool. Micrometer set masters indicate the wear on the micrometer anvil because they replicate how the micrometer is used.



## VERNIER CALIPER MASTERS

Model #	Price
VC-1E(English)	\$320.00
VC-1M(Metric)	\$320.00
Cetification	\$70.00
Storage Case	\$20.00

Thread Check Inc. vernier masters are used to calibrate vernier calipers. The master is superior to gage block calibration because they do not require block stacks so it is much faster to inspect the linear range of the tool. In addition they indicate wear on the caliper anvils because both the I.D. and O.D. jaws are inspected without additional setup.



## DEPTH MICROMETER MASTERS

Model #	Price
DM-1E(English)	\$682.00
DM-1M(Metric)	\$682.00
Certification	\$70.00
ADM-E(English)	\$2,080.00
ADM-M(Metric)	\$2,080.00
Certification	\$185.00

Thread Check Inc. depth micrometer masters are used to calibrate vernier calipers. The master is superior to gage block calibration because they do not require block stacks so it is much faster to inspect the linear range of the tool.



## QUICKCHEK

Model #	Price
8 inch	\$4,000.00
Re-Calibration	\$255.00
16 inch	\$9,000.00
Re-Calibration	\$355.00

Thread Check Inc. QUICKCHECK is used to calibrate Coordinate Measuring Machines( CMM ). The QUICKCHECK provides an easy way to ensure the CMM is providing accurate readings.



## GEOMETRIC CHEK

Model #	Price
GC-1	\$1,400.00
Re-Calibration	\$155.00

Thread Check Inc. GEOMETRIC Check Master is used to calibrate and check geometry systems. The master checks for perpendicularity, roundness, parallelism, and concentricity.



## Z AXIS CHEK

Model #	Price
LX-1	\$635.00
GX-1	\$572.00
Re-Calibration	\$50.00

Thread Check Inc. Z Axis Check Master is used to calibrate and set the Z axis on optical measuring machines. The master is superior to gage block calibration because they do not require block stacks so it is much faster to inspect the linear range of the tool.



# FLEXBAR TRIGA-BORE™/TRUE-BORE

## 3 POINT BORE GAGING SYSTEM

For the accurate and precise measurement of internal diameters.

MEASURING RANGE: .236"/6mm to 7.87"/200mm

Premium quality made in England.



Ergonomically designed pistol style handle allows precision self-centered measurements to be performed.



True-Bore lever style handles in use with True-Bore heads and a variety of indicator options.

### FEATURES:

- True-Bore heads have a large measuring range and are supplied with fixed anvils eliminating operator error. 24 heads cover .236"-7.87" (6-200mm range).
- Unique system design allows two measuring handles or pistol grip Triga-Bore to cover .236"-7.87" (6-200mm range).
- Extensions available for increased gaging depths.
- Accuracy: See chart on page 39.
- Repeatability: .0001"/0.0002mm
- High degree of accuracy can be achieved without need for special skills.
- Customer can specify type of output.
- Can be used for special applications such as threads 'o' ring grooves, spherical forms, etc.
- Ergonomically designed handle offers single handed operation.
- Accurate calibration and linearity checks can also be made using Flexbar's True-Cal System (Available on request).
- Triga-Bore system sets covering a range from .236"/6mm to 3.932"/100mm are priced on request.

### SPECIAL APPLICATION MEASURING HEADS

#### GROOVE MEASUREMENT:

Precise groove measurements are made easily and accurately. Application requirements are; groove width minimum is .060"/1.5mm. Groove depth may not exceed half the travel range of the True-Bore head. This dimension is .079"/2mm to .394"/10mm.

#### THREAD MEASUREMENT:

Inside pitch diameter thread measurement becomes highly productive. Application requirements are minimum diameter of .625"/16mm. Any thread form including specials can be supplied (UN, ACME, METRIC). Different pitch diameters having the same pitch can be measured with one head.

#### BALL SCREW MEASUREMENT:

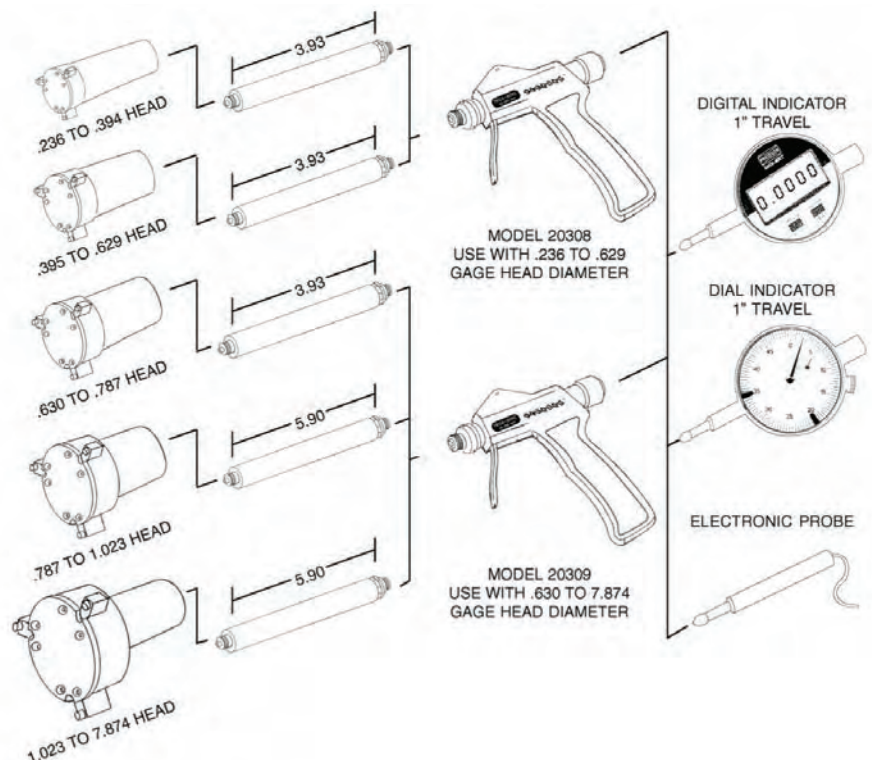
Inside ball screw diameter measurements are quickly completed. Application requirements are minimum diameter of .625"/16mm. Different pitch diameters with the same pitch can be measured with one head.

#### SPHERICAL OR IRREGULAR SHAPE MEASUREMENT:

Spherical shaped heads are useful in deep bores where holding the bore gage straight in the bore is difficult. The spherical shape allows only a single contact point per anvil on the bore wall. All special shaped head applications can be reviewed on request.

All of the above applications and any others are quoted on request.

### GAGE HEADS (II) EXTENSION (III) TRIGA-BORE (I) INDICATORS (IV)







# FLEXBAR TRIGA-BORE™ SYSTEM

Pistol grip handle for Flexbar 3 Point Bore Gage Systems

## Specifications for ordering Handles, Gage Heads and Setting Rings

### 1. TRIGA-BORE™ PISTOL GRIP AND LEVER STYLE BORE GAGE HANDLES\*

Pistol grip style handle accepts heads: .236"/6mm - .630"/16mm . . . **Model 20308, Priced on request**

Pistol grip style handle accepts heads: .630"/16mm - 7.874"/200mm **Model 20309, Priced on request**

Lever style handle accepts heads: .236"/6mm - .630"/16mm . . . . **Model 20310, Priced on request**

Lever style handle accepts heads: .630"/16mm - 7.874"/200mm . . **Model 20311, Priced on request**

\*All gage handles accept 3/8" indicator stem probes. An 8mm stem bushing is included.

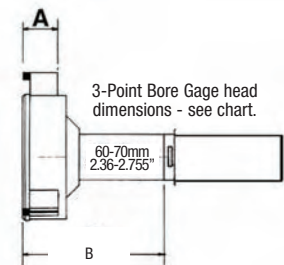


Triga-Bore handle shown with True-Bore Head, Digital Indicator, and Master Setting Ring.

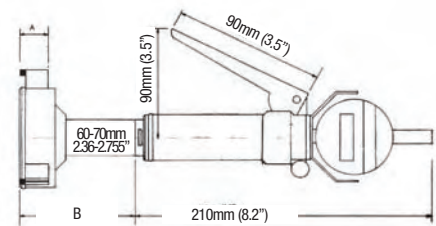
### 2. 3-POINT BORE HEADS AND MASTER SETTING RING

(AGD Style Master Rings with calibration)

MODEL	HEAD SIZE		CONTACT LINE A	LENGTH B	HEAD ACCURACY	PRICE	SETTING CLASS Z SIZE	RING STEEL PRICE
	MM	IN	IN	IN	IN			
20312	6-8	.236-.315	.109	2.36	.0001	PRICED ON REQUEST	.2912	PRICED ON REQUEST
20313	8-10	.315-.394	.118	2.36	.0001		.3437	
20314	10-13	.394-.511	.157	2.36	.00015		.4375	
20315	13-16	.511-.630	.157	2.36	.00015		.5625	
20316	16-20	.630-.787	.280	2.36	.00015		.7187	
20317	20-26	.787-1.023	.390	2.36	.00015		.9062	
20318	26-32	1.023-1.260	.390	2.36	.00015		1.0312	
20319	32-40	1.260-1.575	.433	2.75	.00015		1.4062	
20320	40-50	1.575-1.968	.591	2.75	.00015		1.7500	
20321	50-60	1.968-2.362	.591	2.75	.00015		2.1875	
20322	60-70	2.362-2.756	.591	2.75	.00015		2.5625	
20323	70-80	2.756-3.150	.591	2.75	.00015		2.9375	
20324	80-90	3.150-3.543	.591	2.75	.00015		3.3437	
20325	90-100	3.543-3.937	.591	2.75	.00015		3.7500	
20326	100-110	3.937-4.330	.767	2.75	.00015		4.1250	
20327	110-120	4.330-4.724	.767	2.75	.00015		4.5625	
20328	120-130	4.724-5.118	.767	2.75	.00015		4.9062	
20329	130-140	5.118-5.512	.767	2.75	.00015		5.3125	
20330	140-150	5.512-5.906	.767	2.75	.00015		5.7187	
20331	150-160	5.906-6.299	.767	2.75	.00015		6.1093	
20332	160-170	6.299-6.693	.866	2.75	.0002		6.5000	
20333	170-180	6.693-7.087	.866	2.75	.0002		6.9062	
20334	180-190	7.087-7.480	.866	2.75	.0002		7.2912	
20335	190-200	7.480-7.874	.866	2.75	.0002		7.6875	



3-Point Bore Gage head dimensions - see chart.



Flexbar Lever Style Bore Gage Handles can be used with the entire range of True-Bore 3-Point Bore gage Heads. Ideal for use in vertical gaging applications and tight access situations.

### 3. EXTENSIONS (for longer depths).

Model No.	For use with Gage heads Nos.	Length		Price
		mm	inch	
20345	20312-20313	100	3.937	PRICED ON REQUEST
20346	20314-20315	100	3.937	
20347	20316	100	3.937	
20348	20317	150	5.905	
20349	20318-20335	150	5.905	

Extensions may be combined for longer gaging depths.

### 4. ELECTRONIC DIGITAL INDICATORS (with absolute/preset measuring mode).

Available gages include: Flexbar-Preisser Digi-Met Plus....**Model 18318, Priced on Request**

### 5. GAGE STEM EXTENSIONS (For indicators with less than 1" travel)

1/2" length for 1/2" Indicator Travel (4-48 thread).....**Model 17262, CALL FOR PRICES**

### 6. Triga-Bore stand, supports Triga-Bore handle/head when not in use. ....Model 20336, CALL FOR PRICES

Stand, Model 20336



# REFERENCE BOOKS

Through the publisher, Industrial Press, Thread Check inc. offers hundreds of the best technical and reference books for Education and Industry.

For nearly 100 years, Machinery's Handbook has been a world-renowned reference and "The Bible" of the Metalworking and Mechanical Industries. The 28th Edition includes the most comprehensive and up-to-date practical technical information, data and standards for these industries.

Industrial Press also continues to expand its publishing program across a number of subject areas and offers a wide range of new titles on machining, manufacturing, metalworking, maintenance and CAD/CAM reference works, for both students and seasoned professionals.

Visit our website at [www.threadcheck.com](http://www.threadcheck.com) for a wide range of titles.



**MACHINERY'S HANDBOOK, 28th Edition, Larger Print Edition** Oberg, Jones, Horton, Ryffel, McCauley, Heald and Hussain. 2000 2640 pp Illustrated 0-8311-2635-3 After more than 100 years of continuous publication, the Machinery's Handbook remains unchallenged as "The Bible" in its field, and the new 28th edition remains true to the Handbook's original design as a comprehensive yet practical and easy to read. Nearly 100 pages longer than prior editions. An expanded table of contents and index to make finding Mathematics. Mechanics. Strength of Materials. Properties, Treatment, and Testing of Materials. Plastics. Dimensioning, Gaging, and Measuring. Tooling and Toolmaking. Machining Operations. Manufacturing Processes. Fasteners. Threads & Threading Gears, Industrial Press, Inc.

**\$109.95**

**MACHINERY'S HANDBOOK, 28th Edition, Toolbox Edition** Oberg, Jones, Horton, Ryffel, McCauley, Heald and Hussain. 2000 2640 pp Illustrated 0-8311-2625-6 After more than 100 years of continuous publication, Machinery's Handbook remains unchallenged as "The Bible" in its field, and the new 28th edition remains true to the Handbook's original design as an extraordinarily comprehensive yet practical and easy. Nearly 100 pages longer overall than prior editions. An expanded table of contents and index to make finding Mathematics. Mechanics. Strength of Materials. Properties, Treatment, and Testing of Materials. Plastics. Dimensioning, Gaging, & Measuring. Tooling and Toolmaking. Machining Operations. Manufacturing Processes. Fasteners. Threads & Threading Gears, Industrial Press, Inc.

**\$95.00**

**GUIDE TO WORLD SCREW THREADS** P. A. Sidders. 1969 318 Illustrated 0-8311-1092-9 Provides encyclopedic coverage of the different types of threads standardized throughout the world. Includes Unified & American thread series; American translational and American pipe threads; British threads of Whitworth and non-Whitworth forms; ISO. British Threads of Whitworth Form. British Threads of Non-Whitworth Form. Unified and American Series. American Translational Threads. American Pipe Threads. A.P.I. Casing & Standard Tubing. Continental Forms and Series. Hotological Screws. Industrial Press, Inc.

**\$49.95**

**INSPECTION AND GAGING, Sixth Edition** Clifford W. Kennedy, Edward G. Hoffman, and Steven D. Bond. 1987 654 pp. Illustrated. 0-8311-1149-6. Highly acclaimed training manual and reference discusses a range of manual and automatic measuring devices along with their specific functions and the specialized functions involved in their use. Analyzes the methods and duties of inspectors. Ideal for use by inspection supervisors, and plant managers. The Need and Function of Inspection in Industry. How Specifications Aid the Inspector. Tolerances and Allowances. How Standards Aid the Inspection. Basic Principles and Techniques of Measurement. Comparison & Fixed Gages. Surface Plate Methods & Equip. Industrial Press, Inc.

**\$54.95**

**HANDBOOK OF DIMENSIONAL MEASUREMENT, Fourth Edition** Francis Farago and Mark Curtis. 1994 602 pp Illustrated 0-8311-3053-9 Nineteen fact-filled chapters that contain authoritative treatment of all aspects of dimensional measurement technology make Handbook of Dimensional Measurement the most readable and comprehensive guide available for engineers and technicians. Provides complete coverage of dimensional measurement techniques and equipment. Hundreds of changes, additions and scores of new illustrations, Line Graduated Measuring Instruments. Fixed Gages. Gage Blocks. Comparative Length Measurements with Mechanical Indicators. Pneumatic Gaging. Electronic Gages. Engineering Microscopes. Optical Projectors. Angle Measurements. The Measurement of Straightness. Industrial Press, Inc.

**\$79.95**

**INTRODUCTION TO MEASUREMENT AND CALIBRATION** Paul Campbell. 1995 208 pp Illustrated 0-8311-3060-1 Provides illustrations of the devices throughout with descriptions of how they are used in industry. Offers a vast amount of new material that can be applied to virtually any imaginable measurement or calibration task. Measurement Systems. Mechanical Measuring Devices. Squares and Surface Plate Instruments. Gages. Angular Measuring Devices. Electronic Measuring Devices. Optical Measuring Devices. Miscellaneous Measuring Devices. Appendices. Metric/English Conversions, Industrial Press, Inc.

**\$46.95**

**BLUEPRINT READING BASICS, Third Edition** Warren Hammer. 1996 320 pp Illustrated 0-8311-3062-8 The new second edition of this widely used text and self-training manual has been expanded to include many new worksheets designed to facilitate the reader's ability to form a mental picture from a drawing. Written in a non-technical and easy to understand manner that is appropriate for machinists, mechanics, technicians, and inspectors, as well as students taking blueprint reading, engineering. The Basics of Blueprints. The Reading of Blueprints. The Lines and Views of Blueprints. The Total Blueprint. Dimensions. Tolerances. Surface Texture. Threads. Fasteners. Gears. Machine Terms and Holes. Machining Requirements. Geometric Dimensioning & Tolerances. Industrial Press, Inc.

**\$47.50**

**INTERPRETATION OF GEOMETRIC DIMENSIONING AND TOLERANCING, Second Edition** Daniel E. Puncoschar. 1997 160 Illustrated 0-8311-3072-5 Geometric dimensioning and tolerancing (GD&T) is accepted around the world as the international symbolic language that allows engineers & machinists to use engineering drawings to communicate from the design stage through manufacturing and inspection. Uses "building-block" approach with examples (dimensioned and toleranced in inches and millimeters) to illustrate each concept. Reinforces the explanations with end-of-chapter self evaluation exercises (answers to all questions and problems) Symbols & Abbreviations. Datums. Feature Control Frames. General Rules. Form and Orientation Tolerances. Virtual Condition. Tolerances of Location. Practical Applications. Appendices: Past Practices, Plus/Minus Positional Tolerancing, Symb. Industrial Press, Inc.

**\$47.50**

## Cleveland's Use and Care of Reamers

This book explains and details the proper selection, use, and care of reamers. It provides an excellent introduction to the theories underlying the use and care of reamers.

**\$20.00**

## Cleveland's Use and Care of Taps

This book provides excellent information on taps nomenclature and the selection and use of taps including both hand and machine taps. Other subjects include tapping difficult to machine materials.

**\$20.00**

## Greenfield's Facts about Taps and Tapping

A comprehensive booklet on many aspects of tapping, including the history of tapping, screw thread terms, measuring taps, and ordering special taps.

**\$20.00**

## Greenfield's Metric Screw Thread Manual

This manual shows, in detail, information on the most commonly used sizes of metric screw threads. This document covers a system of metric screw threads for general fastening purposes in mechanisms & structures.

**\$20.00**

## Greenfield's Screw Threads, Unified

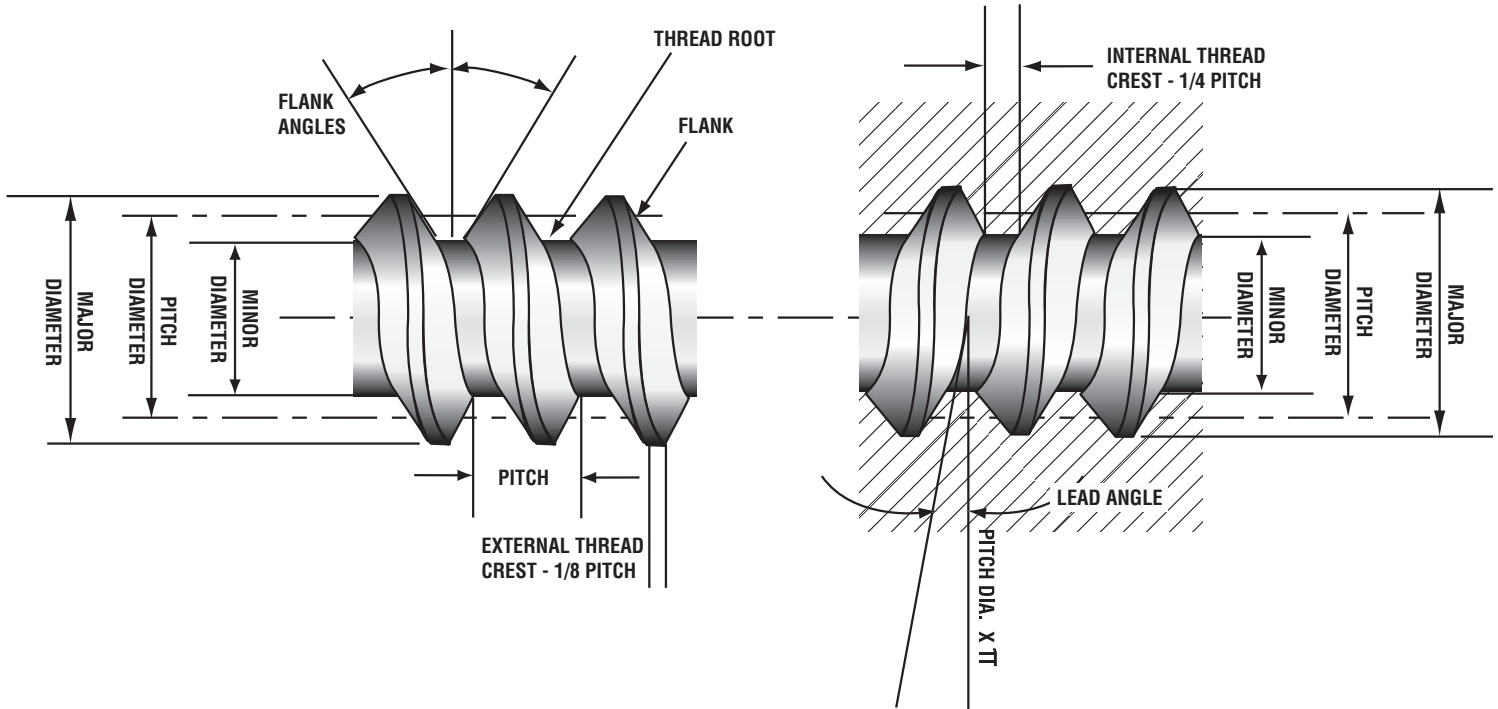
This manual shows, in detail, information on the most commonly used sizes of unified screw threads. This document covers a system of unified screw threads for general fastening purposes in mechanisms & structures.

**\$20.00**



# BASIC SCREW THREAD DESIGNATIONS

External and internal thread diagrams illustrate basic thread geometry.



## 1. Unified Inch Screw Threads: per ASME B1.1 Federal Std. H28/2 Military Std. MIL-S-7742D

### Nominal Size-Basic Major Diameter\*

#### Number of Threads Per Inch (TPI)

#### Thread Form & Series (UN,UNC,UNF,UNEF,UNS)

#### Class of Fit\*\*

#### Gaging System per ASME B1.3M

1/2 - 20 UNF - 2A (21) (21, 22, or 23)

\*Decimal or machine screw number.

\*\*1A,2A, or 3A external (1B, 2B or 3B internal) or (SPL for specials).

## 2. Inch "J" Series Screw Threads: per Military Std. MIL-S-8879C (25 July 1991)

### Nominal Size-Basic Major Diameter\*

#### Number of Threads Per Inch (TPI)

#### Thread Form & Series\*\*

#### Class of Fit (3A ext., 3B int.)

#### Application Category\*\*\*

Safety  
Critical  
Thread

#### Military Standard Number

.1500 - 20 UNJF - 3A Mil-S-8870

\*Expressed as a 4-place inch decimal ONLY.

\*\*UNJ, UNJC, UNJF, UNEF, UNJS.

## 3. Metric Screw Threads: per ASME B1.13M Federal Std. H28/21

### Metric Thread Symbol,ISO 68 Metric Thread Form

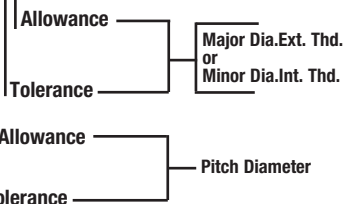
#### Normal Size(Basic Major Dia. in millimeters)

#### Pitch (in millimeters)

#### Tolerance Class

#### Gaging System per ASME B1.3M

M 8 x 1 - 4g6g (22) (21, 22, or 23)



Standard Allowance Grades:

Internal Threads G and H shown as capital letter.

External Threads e, f, g and h shown as lower case letter.

Internal Tolerances Grades:

Internal Threads

Pitch and Minor Diameter 4, 5, 6, 7 and 8.

External Threads:

Pitch Diameter 3,4,5,6,7,8 and 9.

Major Diameter 4, 6 and 8.



# CALIBRATION PRICES – NEW GAGES

Prices are per member

	New Gages ISO 17025 Price	New Gages Standard Calibration Price
<b>Thread Work Plug Gages</b>		
#0 to 1 1/2" Taperlock	\$23.00	\$13.00
3/4" to 13" Trilock	\$28.00	\$13.00

<b>Thread Ring Gages</b>		
Standard Size 0 to 1/2"	\$28.00	\$13.00
Non - Standard Sizes #0 to 5 inch Diameter	\$35.00	\$13.00
Non - Standard Sizes over 5 inch Diameter	\$50.00	\$13.00
<b>Thread Set Plug Gages</b>		
#0 - 1 1/2" Taperlock	\$24.00	\$13.00
3/4" to 13" Trilock	\$30.00	\$13.00

<b>Tapered Pipe Thread Gages - NPT, NPTF, ANPT, NGT</b>		
1/16" to 3" Plug	\$40.00	\$30.00
1/16" to 3" Ring	\$40.00	\$30.00
3 1/2" to 6" Plug	\$40.00	\$30.00
3 1/2" to 6" Ring	\$40.00	\$30.00
Other Tapered Threads	Call	

<b>Straight Pipe Thread Gages - NPSM and NPSF</b>		
1/16" to 3" Plug	\$40.00	\$30.00
1/16" to 3" Ring	\$40.00	\$30.00
3 1/2" to 6" Plug	\$40.00	\$30.00
3 1/2" to 6" Ring	\$40.00	\$30.00
	Call	

<b>Cylindrical Rings, Master Discs &amp; Plug Gages</b>		
.040" to 5.510"	\$22.00	\$15.00
5.510" to 11.000"	\$36.00	\$20.00
11.0001" to 15.000"	\$54.00	\$30.00
15.0001 and up	Call	

<b>Cylindrical Taper Gages</b>		
Standard Tapers, Tapers with Specs	\$45.00	

<b>Snap Gages</b>	\$15	
-------------------	------	--

	New Gages ISO 17025 Price	New Gages Standard Calibration Price
<b>Surveillance Masters</b>		
01 - 1 English or Metric	\$95.00	\$65.00
16 - 1 English or Metric	\$95.00	\$65.00
16 - 1/2 English or Metric	\$190.00	\$130.00
112 English or Metric	\$235.00	\$175.00
VC - 1 English or Metric	\$95.00	\$65.00
DM - 1 English or Metric	\$95.00	\$65.00
ADM - English or Metric	\$210.00	\$150.00
<b>QUICKCHEK</b>		
8"		
16"		
GEOMETRIC CHEK	Included	
Z AXIS CHEK		

<b>Thread and Gear Measuring Wires</b>	\$18.00	\$15.00
--	---------	---------

17025 accredited certs require approximately 1-2 weeks of additional lead-time.

Special thread ring gages require the purchase or supply of master setplugs to perform 17025 accredited calibration.

Visit [www.threadcheck.com](http://www.threadcheck.com) or call for information on our In - Service (customer property) 17025 Accredited calibration services.

All gages are supplied with a Certificate of Compliance traceable to N.I.S.T. free of charge.

No specific size or dimensional data is supplied with this type of cert. Prices subject to change without notice.



# CALIBRATION PROCEDURES FOR THREAD RING GAGES

1. Select the corresponding master set plug. Confirm all pitch diameters and class size match the ring gages. The set plug must be clean and calibrated to ensure it is not nicked, tapered, or out of tolerance. Lubricate the setting plug gage with a thin film of light viscosity oil.
2. Clean and inspect ring gages for nicks and embedded metal filings and burrs. Carefully remove the sealing wax with a knife.
3. Turn the ring gage locking screw counter-clockwise until it is loosened.
4. Turn the adjusting screw clock-wise which opens the ring to a larger pitch diameter than the setting plug.
5. Turn the ring gage onto the setting plug all the way to the back (Full form section) so that approximately one thread extends beyond the last thread of the setting plug. This will promote more uniform wear over the entire thread length of the plug.
6. Turn the adjusting screw counter-clockwise and rotate the ring on the setting plug until there is a slight drag between the two gages. The ring should have a noticeable amount of drag when rotated on the set plug. This procedure may have to be repeated more than once to obtain the proper amount of drag. Be patient! The degree of drag is subjective. Smaller ring gages and those set to set plugs near the low limit would require less drag than larger rings or rings set to setting plugs on the high limit.
7. To ensure that the ring has been properly seated, tap the ring with a small hammer and then recheck the amount of drag to ensure it has not changed. If the drag has changed, the ring gage has not been properly seated. Repeat step 6.
8. Turn the ring gage from the full form section to the truncated section at the front of the set plug. The drag should be essentially the same. The ring should not feel “shaky” or loose. A loose or “shaky” gage indicates lose of root relief or flank angles are worn out of tolerance and the gage should be removed for possible rework or replacement.
9. Remove the set plug from the ring. Now turn the ring onto the set plug 1 to 2 threads at the front. There should be some drag or resistance even at this short engagement. Remembering the feel at the 1 to 2 thread engagement, turn the ring further onto the truncated section. The drag should remain approximately the same although it may be slightly greater at full engagement due to more flank contact. Repeat step 9 on the other side of the ring gage. The drag should be essentially the same on both sides.
10. The minor diameter of the ring gage should be measured with either a bore gage, internal measuring machine, or fixed limit GO/NOGO plug gages. For plug gages, the GO member plug gage should GO and the NOGO member should not.
11. The locking and adjusting screws should be sealed with wax to prevent tampering.
12. The gage is now ready for service.

## IMPORTANT NOTES

The setting of a thread ring gage is specific to the particular set plug the ring is set to. The ring gage will have a different feel on another set plug without readjustment.

It is recommended that a set plug be readily available in house to inspect gages being heavily used or for gages that have been dropped or impacted.

For high volume inspection it is good practice to have a new backup gage for comparison and reference inspection against the heavily used gage.

Go thread ring gages may want to be set slightly snugger than NOGO thread ring gages particularly when shipping components to customers for incoming inspection and assembly.

Keep gages lubricated and handle with care for longer gage life. Spinning ring gages onto parts or forcing rings past burrs will reduce gage life.

# NPTF CLASS 2 SPECIFICATIONS

Basic Dimensions for L1 Plug Gages, NPTF														Basic Dimensions for L3 Plug Gages									
Nominal Size & T.P.I	Basic Length L1	Small End		Basic Dim. at L1 Plane		Min. Range		Basic Range		Max. Range		Basic		Small End		Min. Range		Basic Range		Max. Range			
		Pitch Dia.	Major Dia.	Pitch Dia.	Major Dia.	Min. Step 1	Max. Step 2	Min. Step 2	Max. Step 3	Min. Step 3	Max. Step 4	Length L1+L3	Pitch Dia.	Major Dia.	Thread L3+p	Min. Step 1	Max. Step 2	Min. Step 2	Max. Step 3	Min. Step 3	Max. Step 4		
1/16-27	.1600	.27118	.29289	.28118	.30289	.12296	.14766	.14766	.17234	.17234	.19704	.2711	.2642	.2815	.1482	.23406	.25876	.25876	.28344	.28344	.30814		
1/8-27	.1615	.36351	.38522	.37360	.39531	.12446	.14916	.14916	.17384	.17384	.19854	.2726	.3566	.3738	.1482	.23556	.26026	.26026	.28494	.28494	.30964		
1/4-18	.2278	.47739	.51339	.49168	.52763	.17224	.20928	.20928	.24632	.24632	.28336	.3945	.4670	.4928	.2222	.33894	.37598	.37598	.41302	.41302	.45006		
3/8-18	.2400	.61201	.64801	.62701	.66301	.18444	.22148	.22148	.25852	.25852	.29556	.4067	.6016	.6275	.2222	.35114	.38818	.38818	.42522	.42522	.46226		
1/2-14	.3200	.75843	.80815	.77843	.82815	.24857	.29619	.29619	.34381	.34381	.39143	.5343	.7451	.7783	.2857	.46287	.51049	.51049	.55811	.55811	.60573		
3/4-14	.3390	.96768	1.01740	.98887	1.03859	.26757	.31519	.31519	.36281	.36281	.41043	.5533	.9543	.9876	.2857	.48187	.52949	.52949	.57711	.57711	.62473		
1-11/2	.4000	1.21363	1.27329	1.23863	1.29829	.31304	.37102	.37102	.42898	.42898	.48696	.6609	1.1973	1.2379	.3478	.57394	.63192	.63192	.68988	.68988	.74786		
1 1/4-11/2	.4200	1.55713	1.61679	1.58338	1.64304	.33304	.39102	.39102	.44898	.44898	.50696	.6809	1.5408	1.5814	.3478	.59394	.65192	.65192	.70988	.70988	.76786		
1 1/2-11 1/2	.4200	1.79609	1.85575	1.82234	1.88200	.33304	.39102	.39102	.44898	.44898	.50696	.6809	1.7798	1.8203	.3478	.59394	.65192	.65192	.70988	.70988	.76786		
2-11 1/2	.4360	2.26902	2.32868	2.29627	2.35593	.34904	.40702	.40702	.46498	.46498	.52296	.6969	2.2527	2.2932	.3478	.60994	.66792	.66792	.72588	.72588	.78386		

Basic Dimensions for Crest Check Plug Gages								Max. Dia.at L1+L3 length from end of fitting Basic Thread with Min. Truncation	Max. width of crest at Major Dia.	Basic Dimensions for Root Check Plug Gages					
Nominal Size & T.P.I	Max.Dia. at L3 Basic Thread with Max. Truncation	Basic Pipe Thread		Min. Thread		Max. Thread				Basic Pipe Thread		Min. Thread		Max. Thread	
		Min. Truncation	Max. Truncation	Min. Truncation	Max. Truncation	Min. Truncation	Max. Truncation			Min. Truncation	Max. Truncation	Min. Truncation	Max. Truncation	Min. Truncation	Max. Truncation
	+ .00015		+ .000		+ .000		+ .000	+ .0002			+ .002		+ .002		+ .002
	- .00000	+/- .001	- .002	+/- .001	- .002	+/- .001	- .002	- .0000		+/- .001	- .000	+/- .001	- .000	+/- .001	- .000
1/16-27	.2391	.2154	.2711	.1907	.2464	.2401	.2958	.2893	.003	.2711	.2166	.2464	.1919	.2958	.2413
1/8-27	.3315	.2169	.2726	.1922	.2479	.2416	.2973	.3817	.003	.2726	.2181	.2479	.1934	.2973	.2428
1/4-18	.4276	.3394	.3945	.3024	.3575	.3764	.4315	.5064	.004	.3945	.3394	.3575	.3024	.4315	.3764
3/8-18	.5622	.3516	.4067	.3146	.3697	.3886	.4437	.6410	.004	.4067	.3516	.3697	.3146	.4437	.3886
1/2-14	.6918	.4794	.5343	.4318	.4867	.5270	.5819	.7984	.004	.5343	.4772	.4867	.4296	.5819	.5248
3/4-14	.9010	.4984	.5533	.4508	.5057	.5460	.6009	1.0076	.004	.5533	.4962	.5057	.4486	.6009	.5438
1-11½	1.1324	.6052	.6609	.5472	.6029	.6632	.7189	1.2622	.005	.6609	.5774	.6029	.5194	.7189	.6354
1¼-11½	1.4759	.6252	.6809	.5672	.6229	.6832	.7389	1.6057	.005	.6809	.5974	.6229	.5394	.7389	.6554
1½-11½	1.7149	.6252	.6809	.5672	.6229	.6832	.7389	1.8447	.005	.6809	.5974	.6229	.5394	.7389	.6554
2-11½	2.1878	.6412	.6969	.5832	.6389	.6992	.7549	2.3176	.005	.6969	.6134	.6389	.5554	.7549	.6714

Basic Dimensions for L1 Ring Gages										Basic Dimensions L2 Ring Gages									
Nominal Size & T.P.I.	Large End			Maximum Range		Basic Range		Minimum Range		Basic Length L2	Large End			Maximum Range		Basic Range		Minimum Range	
	Basic Length L1	Pitch Dia.	Minor Dia.	Max.	Min.	Max.	Min.	Max.	Min.		Pitch Dia.	Minor Dia.	Max.	Min.	Max.	Min.	Max.	Min.	
				Step 1 (L1- p)	Step 2 (L1-1/3p)	Step 2 (L1-1/3p)	Step 3 (L1+1/3p)	Step 3 (L1+1/3p)	Step 4 (L1+p)		Step 1 L2 - p	Step 2 L2-1/3p	Step 2 L2-1/3p	Step 3 L2+1/3p	Step 3 L2+1/3p	Step 4 L2 + p			
1/16-27	.1600	.28118	.25947	.12296	.14766	.14766	.17234	.17234	.19704	.26113	.28750	.27024	.22409	.24879	.24879	.27347	.27347	.29817	
1/8-27	.1615	.37360	.35189	.12446	.14916	.14916	.17384	.17384	.19854	.26385	.38000	.36274	.22681	.25151	.25151	.27619	.27619	.30089	
1/4-18	.2278	.49163	.45563	.17224	.20928	.20928	.24632	.24632	.28336	.40178	.50250	.47661	.34622	.38326	.38326	.42030	.42030	.45734	
3/8-18	.2400	.62701	.59101	.18444	.22148	.22148	.25852	.25852	.29556	.40778	.63750	.61161	.35222	.38926	.38926	.42630	.42630	.46334	
1/2-14	.3200	.77843	.72871	.24857	.29619	.29619	.34381	.34381	.39143	.53371	.79179	.75850	.46228	.50990	.50990	.55752	.55752	.60514	
3/4-14	.3390	.98887	.93915	.26757	.31519	.31519	.36281	.36281	.41043	.54571	1.00179	.96850	.47428	.52190	.52190	.56952	.56952	.61714	
1-11½	.4000	1.23853	1.17897	.31304	.37102	.37102	.42898	.42898	.48696	.68278	1.25630	1.21577	.59582	.65379	.65379	.71176	.71176	.76974	
1¼-11½	.4200	1.58338	1.52372	.33304	.39102	.39102	.44898	.44898	.50696	.70678	1.60130	1.56077	.61982	.67780	.67780	.73576	.73576	.79374	
1½-11½	.4200	1.82234	1.76268	.33304	.39102	.39102	.44898	.44898	.50696	.72348	1.84130	1.80077	.63652	.69450	.69450	.75246	.75246	.81044	
2-11½	.4360	2.29627	2.23661	.34904	.40702	.40702	.46498	.46498	.52296	.75652	2.31630	2.27577	.66956	.72754	.72754	.78550	.78550	.84348	

Basic Dimensions for Crest Check Ring Gages										Basic Dimensions for Root Check Ring Gages									
Nominal Size & T.P.I	Major Dia. at L2 Basic Thread with Max. Trunc. D	Basic Pipe Thread		Min. Thread		Max. Thread		Minor Dia. at L2 length from end of pipe Basic thread with Min. Trunc. D	Max. width of Crest at Minor Dia. F	Basic Pipe Thread		Min. Thread		Max. Thread					
	Min. Trunc. B	Max. Trunc. Bt	Min. Trunc. MN	Max. Trunc. MNt	Min. Trunc. MX	Max. Trunc. MXt	Ring Diameter			Min. Trunc. B	Max. Trunc. Bt	Min. Trunc. MN	Max. Trunc. MNt	Min. Trunc. MX	Max. Trunc. MXt				
	-.00015		+.000		+.000		+.000		+.0002			+.002		+.002		+.002			
	+.0000	+/--.001	-.002	+/--.001	-.002	+/--.001	-.002	+/--.03	-.0000		+/--.001	-.000	+/--.001	-.000	+/--.001	-.000			
1/16-27	.3126	.2054	.2611	.2301	.2858	.1807	.2364	1-1/4.2624	.003	.2611	.2066	.2858	.2313	.2364	.1819				
1/8-27	.4051	.2082	.2639	.2329	.2886	.1835	.2392	1-1/4	.3549	.003	.2639	.2094	.2886	.2341	.2392	.1847			
1/4-18	.5419	.3467	.4018	.3837	.4388	.3097	.3648	1-1/2	.4631	.004	.4018	.3467	.4388	.3837	.3648	.3097			
3/8-18	.6769	.3527	.4078	.3897	.4448	.3157	.3708	1-3/4	.5981	.004	.4078	.3527	.4448	.3897	.3708	.3157			
1/2-14	.8451	.4788	.5337	.5264	.5813	.4312	.4861	2	.7385	.004	.5337	.4766	.5813	.5242	.4861	.4290			
3/4-14	1.0551	.4908	.5457	.5384	.5933	.4432	.4981	2-1/4	.9485	.004	.5457	.4886	.5933	.5362	.4981	.4410			
1-11½	1.3212	.6272	.6828	.6852	.7408	.5692	.6248	2-5/8	1.1914	.005	.6828	.5993	.7408	.6573	.6248	.5413			
1¼-11½	1.6662	.6512	.7068	.7092	.7648	.5932	.6488	3-1/8	1.5364	.005	.7068	.6233	.7648	.6813	.6488	.5653			
1½-11½	1.9062	.6678	.7235	.7258	.7815	.6098	.6655	3-3/8	1.7764	.005	.7235	.6400	.7815	.6980	.6655	.5820			
2-11½	2.3812	.7008	.7565	.7588	.8145	.6428	.6985	4.00	2.2514	.005	.7565	.6730	.8145	.7310	.6985	.6150			



# GAGE TOLERANCES

## W TOLERANCE

## X TOLERANCE

Threads per inch	PITCH DIAMETER					MAJOR & MINOR			LEAD			PITCH DIAMETER					MAJOR & MINOR			LEAD
	To and incl. 1/2" dia.	Above 1/2" to 1 1/2" diameter	Above 1 1/2" to 4" diameter	Above 4" to 8" diameter	Above 8" to 12" diameter	To and incl. 1/2" diameter	Above 1/2" to 4" diameter	Above 4" Dia.	1/2 Angle Tol. 0 Deg. +/- Min.	To and incl. 1/2"	Above 1/2"	Threads per inch	To and incl. 1-1/2"	Above 1-1/2" to 4"	Above 4" to 8"	Above 8" to 12"	To and including 4" diameter	Above 4"	1/2 Angle Tol. 0 Deg. +/- Min.	Lead Tolerance
72	.0001	.00015				.0003	.0003		20'	.0001	.00015	80	.0002				.0003		30'	.0002
64	.0001	.00015				.0003	.0004		20'	.0001	.00015	72	.0002				.0003		30'	.0002
56	.0001	.00015	.0002			.0003	.0004		20'	.0001	.00015	64	.0002				.0004		30'	.0002
48	.0001	.00015	.0002			.0003	.0004		18'	.0001	.00015	56	.0002	.0003			.0004		30'	.0002
44	.0001	.00015	.0002			.0003	.0004		15'	.0001	.00015	48	.0002	.0003			.0004		30'	.0002
40	.0001	.00015	.0002			.0003	.0004		15'	.0001	.00015	44	.0002	.0003			.0004		20'	.0002
36	.0001	.00015	.0002			.0003	.0004		12'	.0001	.00015	40	.0002	.0003			.0004		20'	.0002
32	.0001	.00015	.0002	.00025	.0003	.0003	.0005	.0007	12'	.0001	.00015	36	.0002	.0003			.0004		20'	.0002
28	.0001	.00015	.0002	.00025	.0003	.0005	.0005	.0007	8'	.00015	.00015	32	.0003	.0004	.0005	.0006	.0005	.0007	15'	.0003
27	.0001	.00015	.0002	.00025	.0003	.0005	.0005	.0007	8'	.00015	.00015	28	.0003	.0004	.0005	.0006	.0005	.0007	15'	.0003
24	.0001	.00015	.0002	.00025	.0003	.0005	.0005	.0007	8'	.00015	.00015	27	.0003	.0004	.0005	.0006	.0005	.0007	15'	.0003
20	.0001	.00015	.0002	.00025	.0003	.0005	.0005	.0007	8'	.00015	.00015	24	.0003	.0004	.0005	.0006	.0005	.0007	15'	.0003
18	.0001	.00015	.0002	.00025	.0003	.0005	.0005	.0007	8'	.00015	.00015	20	.0003	.0004	.0005	.0006	.0005	.0007	15'	.0003
16	.0001	.0002	.00025	.0003	.0004	.0006	.0006	.0009	8'	.00015	.00015	18	.0003	.0004	.0005	.0006	.0005	.0007	10'	.0003
14	.00015	.0002	.00025	.0003	.0004	.0006	.0006	.0009	6'	.0002	.0002	16	.0003	.0004	.0006	.0008	.0006	.0009	10'	.0003
13	.00015	.0002	.00025	.0003	.0004	.0006	.0006	.0009	6'	.0002	.0002	14	.0003	.0004	.0006	.0008	.0006	.0009	10'	.0003
12	.00015	.0002	.00025	.0003	.0004	.0006	.0006	.0009	6'	.0002	.0002	13	.0003	.0004	.0006	.0008	.0006	.0009	10'	.0003
11½	.00015	.0002	.00025	.0003	.0004	.0006	.0006	.0009	6'	.0002	.0002	12	.0003	.0004	.0006	.0008	.0006	.0009	10'	.0003
11	.00015	.0002	.00025	.0003	.0004	.0006	.0006	.0009	6'	.0002	.0002	11	.0003	.0004	.0006	.0008	.0006	.0009	10'	.0003
10		.0002	.00025	.0003	.0004		.0006	.0009	6'		.00025	10	.0003	.0004	.0006	.0008	.0006	.0009	10'	.0003
9		.0002	.00025	.0003	.0004		.0007	.0011	6'		.00025	9	.0003	.0004	.0006	.0008	.0007	.0011	10'	.0003
8		.0002	.00025	.0003	.0004		.0007	.0011	5'		.00025	8	.0004	.0005	.0006	.0008	.0007	.0011	5'	.0004
7		.0002	.00025	.0003	.0004		.0007	.0011	5'		.0003	7	.0004	.0005	.0006	.0008	.0007	.0011	5'	.0004
6		.0002	.00025	.0003	.0004		.0008	.0013	5'		.0003	6	.0004	.0005	.0006	.0008	.0008	.0013	5'	.0004
5			.00025	.0003	.0004		.0008	.0013	4'		.0003	5		.0005	.0006	.0008	.0008	.0013	5'	.0004
4½			.00025	.0003	.0004		.0008	.0013	4'		.0003	4½		.0005	.0006	.0008	.0008	.0013	5'	.0004
4			.00025	.0003	.0004		.0009	.0015	4'		.0003	4		.0005	.0006	.0008	.0009	.0015	5'	.0004

## GAGEMAHER'S TOLERANCE CHART

RANGE	XXXX	XXX	XX	X	Y	Z	ZZ
.0009" to .8250"	.000005"	.00001"	.00002"	.00004"	.00007"	.0001"	.00020"
.8251" to 1.5100"	.000008"	.000015"	.00003"	.00006"	.00009"	.00012"	.00024"
1.5101" to 2.5101"	.00001"	.00002"	.00004"	.00008"	.00012"	.00016"	.00032"
2.5101" to 4.5100"	.000013"	.000025"	.00005"	.00010"	.00015"	.00020"	.00040"
4.5101" to 6.5100"	.000017"	.000033"	.000065"	.00013"	.00019"	.000250"	.00050"
6.5101" to 9.0100"	.00002"	.00004"	.00008"	.00016"	.00024"	.000320"	.00064"
9.0101" to 12.600"	.000025"	.00005"	.0001"	.0002"	.0003"	.000400"	.00080"

## METRIC EQUIVALENTS

RANGE	XX	X	Y	Z	ZZ
.74mm to 20.96mm	.00051	.00102	.00178	.00254	.005
20.96mm to 38.35mm	.00076	.00152	.00229	.00305	.006
38.35mm to 63.75mm	.00102	.00203	.00305	.00406	.008
63.75mm to 114.55mm	.00127	.00254	.00381	.00508	.010
114.55mm to 163.35mm	.00165	.00330	.00483	.00635	.013
163.35mm to 228.85mm	.00203	.00406	.00610	.00813	.016
228.85mm to 311.40mm	.00254	.00508	.00762	.01016	.020

# ANSI AND INTERNATIONAL THREAD SERIES DESIGNATIONS

Thread Check Inc. manufactures gages to the following

## ANSI Thread Series Designations:

Designations	Thread Series	Reference
UN	Unified Inch Screw Thread, Constant-Pitch Series	B1.1
UNC	Unified Inch Screw Thread, Coarse-Pitch Series	B1.1
UNF	Unified Inch Screw Thread, Fine-Pitch Series	B1.1
UNEF	Unified Inch Screw Thread, Extra-Fine Series	B1.1
UNS	Unified Inch Screw Thread, Special Diameter Pitch, or Length of Engagement	B1.1
UNJ	Unified Inch Screw Thread, Constant-Pitch Series with Rounded Root of Radius 0.15011P to 0.18042P (3)	B1.15
UNJC	Unified Inch Screw Thread, Coarse-Pitch Series, with Rounded Root of Radius 0.15011P to 0.18042P (3)	B1.15
UNJF	Unified Inch Screw Thread, Fine-Pitch Series, with Rounded Root of Radius 0.15011P to 0.18042P (3)	B1.15
UNJEF	Unified Inch Screw Thread, Extra-Fine Pitch Series, with Rounded Root of Radius 0.15011P to 0.18042P (3)	B1.15
UNR	Unified Inch Screw Thread, Constant-Pitch Series, with Rounded Root of Radius Not Less Than 0.108P	B1.1
UNRC	Unified Inch Screw Thread, Coarse-Pitch Series, with Rounded Root of Radius Not Less Than 0.108P	B1.1
UNRF	Unified Inch Screw Thread, Fine-Pitch Series, with Rounded Root of Radius Not Less Than 0.108P	B1.1
UNREF	Unified Inch Screw Thread, Extra-Fine Pitch Series, with Rounded Root of Radius Not Less Than 0.108P	B1.1
NC5	Class 5 Interference Fit External Threads	B1.12
NC5HF	For Driving in Hard Ferrous Material of Hardness over 160 Bhn	B1.12
NC5CSF	For Driving Copper Alloy and Soft Ferrous Material of 160 Bhn or Less	B1.12
NC5ONF	For Driving in Other NonFerrous Material (Nonferrous Materials Other Than Copper Alloys, Any Hardness)	B1.12
NC5	Class 5 Interference Fit Internal Threads	B1.12
NC5 IF	Entire Ferrous Material Range	B1.12
NC5 INF	Entire Nonferrous Material Range	B1.12
M	Metric Screw Threads-M Profile with Basic ISO 68 Profile	B1.13M B1.18M
MJ	Metric Screw Threads-MJ Profile with Rounded Root of Radius 0.15011P to 0.18042P	B1.21M
MJS	Metric Screw Threads-MJ Profile Special Series	B1.21M
UNM	Unified Miniature Thread Series	B1.10
NPT	American Standard Taper Pipe Threads for General Use	B1.20.3
NPTF	Dryseal American Standard Taper Pipe Threads	B1.20.3B
F-PTF	Dryseal Fine Taper Threads Series	B1.20.3 Appendix.C
PTF-SAE Short	Dryseal SAE Short Taper Pipe Threads	B1.20.3
PTF-SPL Short	Dryseal Special Short Taper Pipe Threads	B1.20.3 Appendix.C
PTF-SPL Extra Short	Dryseal Special Short Taper Pipe Threads	B1.20.3 Appendix.C
SPL-PTF	Dryseal Special Taper Pipe Threads	B1.20.3 Appendix.C
ANPT	Aeronautical National Form Taper Pipe Threads (2)	MIL P-7105B
NPSL	American Standard Straight Pipe Threads for Loose-Fitting Mechanical Joints with Locknuts	B1.20.1
NPSM	American Standard Straight Pipe Threads for Free-Fitting Mechanical Joints for Fixtures	B1.20.1
NPSC	American Standard Straight Pipe Threads in Pipe Couplings	B1.20.1
NPSF	Dryseal American Standard Fuel Internal Straight Pipe Threads	B1.20.3
NPSI	Dryseal American Standard Intermediate Internal Straight Pipe Threads	B1.20.3
NH	American Standard Hose Coupling Threads of Full Form	B1.20.7
NPSH	Dryseal American Standard for Hose Coupling Joints with Straight Internal & External Loose Fitting Threads	B1.20.7
NFPA 1963	Fire Hose Connections	—
NHR	American Standard Hose Coupling Threads for Garden Hose Applications	B1.20.7
NGT	National Gas Taper Threads (See Also SGT)	CGA V-1
NGO	National Gas Outlet Threads (1)	CGA V-1
NGS	National Gas Straight Threads	CGA V-1
SGT	Special Gage Taper Threads	BS.21
R	British Taper Pipe Threads	BS.21
Rc, Rp	British Taper Pipe Threads	BS.21
G	Straight Pipe Threads	BS.2779
BSW	British Parallel Screw Threads	BS.84
BSF	British Parallel Screw Threads	BS.84
BA	British Screw Threads	BS.57
ACME-C	Acme Threads, Centralizing	B1.5
ACME-G	Acme Threads, General Purpose	B1.5
STUB ACME	Stub Acme Threads	B1.8
BUTT	Buttress Threads, Pull Type	B1.9
PUSH-BUTT	Buttress Threads, Push Type	B1.9
AMO	American Standard Microscope Objective Threads	B1.11
AWWA	Underground Service Line Valves and Fittings	C800-84
DIN	German Specifications	—
JIS	Japanese Industrial Standard	—
ISO	International Standard Organization	—

NOTES: ( 1 ) All threads, except NGO, are right hand, unless otherwise designated. For NGO threads, designations RH or LH are required.

( 2 ) As published in Military Specification MIL-P7105

( 3 ) As published in Military Specification MIL-S8879, and ISO 3161



# STANDARD INCH PITCH DIAMETERS

Basic, 2B, 3B, 2A, & 3A

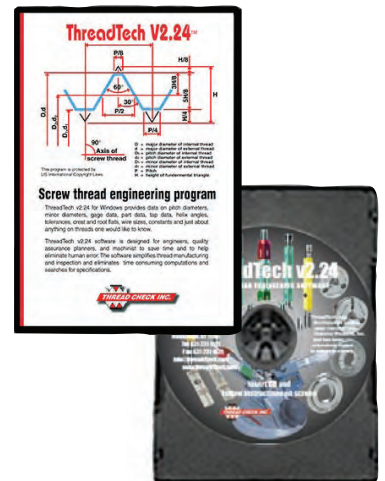
Standard Inch Pitch Diameters																					
No. or Fracs.	Decimal Size	TPI		Thread Work Plugs			Thread Rings & Setting Plugs				No. or Fracs.	Decimal Size	TPI		Thread Work Plugs			Thread Rings & Setting Plugs			
				Go Basic	2B Hi	3B Hi	3A Go	3A Lo	2A Go	2A Lo					Go Basic	2B Hi	3B Hi	3A Go	3A Lo	2A Go	2A Lo
#0	.060	80	UNF	.0519	.0542	.0536	.0519	.0506	.0514	.0496	9/16	.5625	24	UNEF	.5354	.5405	.5392	.5354	.5325	.5342	.5303
#1	.073	64	UNC	.0629	.0655	.0648	.0629	.0614	.0623	.0603	5/8	.625	11	UNC	.5660	.5732	.5714	.5660	.5619	.5644	.5589
#1	.073	72	UNF	.0640	.0665	.0659	.0640	.0626	.0634	.0615	5/8	.625	18	UNF	.5889	.5949	.5934	.5889	.5854	.5875	.5828
#2	.086	56	UNC	.0744	.0772	.0765	.0744	.0728	.0738	.0717	5/8	.625	24	UNEF	.5979	.6031	.6018	.5979	.5949	.5967	.5927
#2	.086	64	UNF	.0759	.0786	.0779	.0759	.0744	.0753	.0733	11/16	.6875	24	UNEF	.6604	.6656	.6643	.6604	.6574	.6592	.6552
#3	.099	48	UNC	.0855	.0885	.0877	.0855	.0838	.0848	.0825	3/4	.75	10	UNC	.6850	.6927	.6907	.6850	.6806	.6832	.6773
#3	.099	56	UNF	.0874	.0902	.0895	.0874	.0858	.0867	.0845	3/4	.75	16	UNF	.7094	.7159	.7143	.7094	.7056	.7079	.7029
#4	.112	40	UNC	.0958	.0991	.0982	.0958	.0939	.0950	.0925	3/4	.75	20	UNEF	.7175	.7232	.7218	.7175	.7142	.7162	.7118
#4	.112	48	UNF	.0985	.1016	.1008	.0985	.0967	.0978	.0954	13/16	.8125	20	UNEF	.7800	.7857	.7843	.7800	.7767	.7787	.7743
#5	.125	40	UNC	.1088	.1121	.1113	.1088	.1069	.1080	.1054	7/8	.875	9	UNC	.8028	.8110	.8089	.8028	.7981	.8009	.7946
#5	.125	44	UNF	.1102	.1134	.1126	.1102	.1083	.1095	.1070	7/8	.875	14	UNF	.8286	.8356	.8339	.8286	.8245	.8270	.8216
#6	.138	32	UNC	.1177	.1214	.1204	.1177	.1156	.1169	.1141	7/8	.875	20	UNEF	.8425	.8482	.8468	.8425	.8392	.8412	.8368
#6	.138	40	UNF	.1218	.1252	.1243	.1218	.1198	.1210	.1184	15/16	.9375	20	UNEF	.9050	.9109	.9094	.9050	.9016	.9036	.8991
#8	.164	32	UNC	.1437	.1475	.1465	.1437	.1415	.1428	.1399	1	1	8	UNC	.9188	.9276	.9254	.9188	.9137	.9168	.9100
#8	.164	36	UNF	.1460	.1496	.1487	.1460	.1439	.1452	.1424	1	1	12	UNF	.9459	.9535	.9516	.9459	.9415	.9441	.9382
#10	.190	24	UNC	.1629	.1672	.1661	.1629	.1604	.1619	.1586	1	1	14	UNS	.9536	.9609	.9590	.9536	.9494	.9519	.9463
#10	.190	32	UNF	.1697	.1736	.1726	.1697	.1674	.1688	.1658	1	1	20	UNEF	.9675	.9734	.9719	.9675	.9641	.9661	.9616
#12	.216	24	UNC	.1889	.1933	.1922	.1889	.1863	.1879	.1845	1-1/16	1.0625	12	UN	1.0084	1.0158	1.0139	1.0084	1.0042	1.0067	1.0010
#12	.216	28	UNF	.1928	.1970	.1959	.1928	.1904	.1918	.1886	1-1/16	1.0625	18	UNEF	1.0264	1.0326	1.0310	1.0264	1.0228	1.0250	1.0203
#12	.216	32	UNEF	.1957	.1998	.1988	.1957	.1933	.1948	.1917	1-1/8	1.125	7	UNC	1.0322	1.0416	1.0393	1.0322	1.0268	1.0300	1.0228
1/4	.250	20	UNC	.2175	.2224	.2211	.2175	.2147	.2164	.2127	1-1/8	1.125	12	UNF	1.0709	1.0787	1.0768	1.0709	1.0664	1.0691	1.0631
1/4	.250	28	UNF	.2268	.2311	.2300	.2268	.2243	.2258	.2225	1-1/8	1.125	18	UNEF	1.0889	1.0951	1.0935	1.0889	1.0853	1.0875	1.0828
1/4	.250	32	UNEF	.2297	.2339	.2328	.2297	.2273	.2287	.2255	1-3/16	1.1875	12	UN	1.1334	1.1409	1.1390	1.1334	1.1291	1.1317	1.1259
5/16	.3125	18	UNC	.2764	.2817	.2803	.2764	.2734	.2752	.2712	1-3/16	1.1875	18	UNEF	1.1514	1.1577	1.1561	1.1514	1.1478	1.1499	1.1450
5/16	.3125	24	UNF	.2854	.2902	.2890	.2854	.2827	.2843	.2806	1-1/4	1.25	7	UNC	1.1572	1.1668	1.1644	1.1572	1.1517	1.1550	1.1476
5/16	.3125	32	UNEF	.2922	.2964	.2953	.2922	.2898	.2912	.2880	1-1/4	1.25	12	UNF	1.1959	1.2039	1.2019	1.1959	1.1913	1.1941	1.1879
3/8	.375	16	UNC	.3344	.3401	.3387	.3344	.3311	.3331	.3287	1-1/4	1.25	18	UNEF	1.2139	1.2202	1.2186	1.2139	1.2103	1.2124	1.2075
3/8	.375	24	UNF	.3479	.3528	.3516	.3479	.3450	.3468	.3430	1-5/16	1.3125	12	UN	1.2584	1.2659	1.2640	1.2584	1.2541	1.2567	1.2509
3/8	.375	32	UNEF	.3547	.3591	.3580	.3547	.3522	.3537	.3503	1-5/16	1.3125	18	UNEF	1.2764	1.2827	1.2811	1.2764	1.2728	1.2749	1.2700
7/16	.4375	14	UNC	.3911	.3972	.3957	.3911	.3876	.3897	.3850	1-3/8	1.375	6	UNC	1.2667	1.2771	1.2745	1.2667	1.2607	1.2643	1.2563
7/16	.4375	20	UNF	.4050	.4104	.4091	.4050	.4019	.4037	.3995	1-3/8	1.375	12	UNF	1.3209	1.3291	1.3270	1.3209	1.3162	1.3190	1.3127
7/16	.4375	28	UNEF	.4143	.4189	.4178	.4143	.4116	.4132	.4096	1-3/8	1.375	18	UNEF	1.3389	1.3452	1.3436	1.3389	1.3353	1.3374	1.3325
1/2	.50	12	UN	.4459	.4529	.4511	.4459	.4419	.4443	.4389	1-7/16	1.4375	12	UN	1.3834	1.3910	1.3891	1.3834	1.3790	1.3816	1.3757
1/2	.50	13	UNC	.4500	.4565	.4548	.4500	.4463	.4485	.4435	1-7/16	1.4375	18	UNEF	1.4014	1.4079	1.4062	1.4014	1.3977	1.3999	1.3949
1/2	.50	20	UNF	.4675	.4731	.4717	.4675	.4643	.4662	.4619	1-1/2	1.500	6	UNC	1.3917	1.4022	1.3996	1.3917	1.3856	1.3893	1.3812
1/2	.50	28	UNEF	.4768	.4816	.4804	.4768	.4740	.4757	.4720	1-1/2	1.500	12	UNF	1.4459	1.4542	1.4522	1.4459	1.4411	1.4440	1.4376
9/16	.5625	12	UNC	.5084	.5152	.5135	.5084	.5045	.5068	.5016	1-1/2	1.500	18	UNEF	1.4639	1.4704	1.4687	1.4639	1.4602	1.4624	1.4574
9/16	.5625	18	UNF	.5264	.5323	.5308	.5264	.5230	.5250	.5205											



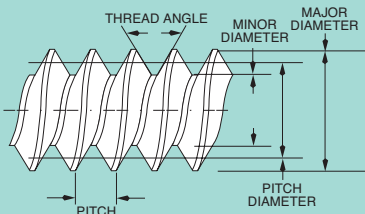
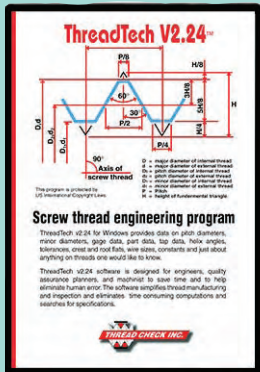
# METRIC PITCH DIAMETERS

6H Thread Work Plugs and 6g Thread Ring and Set Plugs

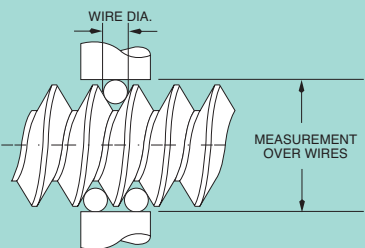
6H Thread Work Plugs					6g Thread Rings & Setting Plugs			
Basic	mm Min. GO	Inch Min. GO	mm Max HI	Inch Max HI	mm Min. GO	Inch Min. GO	mm Max LO	Inch Max LO
M1.6 x .35	1.3730	.05406	1.4580	.05740	1.3540	.05331	1.2910	.05083
M1.8 x .35	1.5730	.06193	1.6580	.06528	1.5540	.06118	1.4910	.05870
M2 x .40	1.7400	.06850	1.8300	.07205	1.7210	.06776	1.6540	.06512
M2.2 x .45	1.9080	.07512	2.0030	.07886	1.8880	.07433	1.8170	.07154
M2.5 x .45	2.2080	.08693	2.3030	.09067	2.1880	.08614	2.1170	.08335
M3 x .5	2.6750	.10531	2.7750	.10925	2.6550	.10453	2.5800	.10157
M3.5 x .6	3.1100	.12244	3.2220	.12685	3.0890	.12161	3.0040	.11827
M4 x .7	3.5450	.13957	3.6630	.14421	3.5230	.13870	3.4330	.13516
M4.5 x .75	4.0130	.15799	4.1310	.16264	3.9910	.15713	3.9010	.15358
M5 x .8	4.4800	.17638	4.6050	.18130	4.4560	.17543	4.3610	.17169
M6 x 1	5.3500	.21063	5.5000	.21654	5.3240	.20961	5.2120	.20520
M7 x 1	6.3500	.25000	6.5000	.25591	6.3240	.24898	6.2120	.24457
M8 x 1.25	7.1880	.28299	7.3480	.28929	7.1600	.28189	7.0420	.27724
M8 x 1	7.3500	.28937	7.5000	.29528	7.3240	.28835	7.2120	.28394
M10 x 1.5	9.0260	.35535	9.2060	.36244	8.9940	.35409	8.8620	.34890
M10 x 1.25	9.1880	.36173	9.3480	.36803	9.1600	.36063	9.0420	.35598
M12 x 1.75	10.8630	.42768	11.0630	.43555	10.8290	.42634	10.6790	.42043
M12 x 1.25	11.1880	.44047	11.3680	.44756	11.1600	.43937	11.0280	.43417
M14 x 2	12.7010	.50004	12.9130	.50839	12.6630	.49854	12.5030	.49224
M14 x 1.5	13.0260	.51283	13.2160	.52031	12.9940	.51157	12.8540	.50606
M16 x 2	14.7010	.57878	14.9130	.58713	14.6630	.57728	14.5030	.57098
M16 x 1.5	15.0260	.59157	15.2160	.59906	14.9940	.59031	14.8540	.58480
M18 x 2.5	16.3760	.64472	16.6000	.65354	16.3340	.64307	16.1640	.63638
M18 x 1.5	17.0260	.67031	17.2160	.67780	16.9940	.66906	16.8540	.66354
M20 x 2.5	18.3760	.72346	18.6000	.73228	18.3340	.72181	18.1640	.71512
M20 x 1.5	19.0260	.74906	19.2160	.75654	18.9940	.74780	18.8540	.74228
M22 x 2.5	20.3760	.80220	20.6000	.81102	20.3340	.80055	20.1640	.79386
M22 x 1.5	21.0260	.82780	21.2160	.83528	20.9940	.82654	20.8540	.82102
M24 x 3	22.0510	.86815	22.3160	.87858	22.0030	.86626	21.8030	.85839
M24 x 2	22.7010	.89374	22.9250	.90256	22.6630	.89224	22.4930	.88555
M27 x 3	25.0510	.98626	25.3160	.99669	25.0030	.98437	24.8030	.97650
M27 x 2	25.7010	1.01185	25.9250	1.02067	25.6630	1.01035	25.4930	1.00366
M30 x 3.5	27.7270	1.09161	28.0070	1.10264	27.6740	1.08953	27.4620	1.08118
M30 x 2	28.7010	1.12996	28.9250	1.13878	28.6630	1.12846	28.4930	1.12177
M33 x 3.5	30.7270	1.20972	31.0070	1.22075	30.6740	1.20764	30.4620	1.19929
M33 x 2	31.7010	1.24807	31.9250	1.25689	31.6630	1.24657	31.4930	1.23988
M36 x 4	33.4020	1.31504	33.7020	1.32685	33.3420	1.31268	33.1180	1.30386
M36 x 3	34.0510	1.34059	34.3160	1.35102	34.0030	1.33870	33.8030	1.33083
M39 x 4	36.4020	1.43315	36.7020	1.44496	36.3420	1.43079	36.1180	1.42197
M39 x 3	37.0510	1.45870	37.3160	1.46913	37.0030	1.45681	36.8030	1.44894



ThreadTech™V2.24 for Windows.  
The most complete and accurate  
screw thread program.  
See back cover.



**SCREW THREAD NOTATION**



**THREE-WIRE METHOD**



# ThreadTech v2.24™ with new British Pipe Thread Module

## A complete and accurate screw thread program

ThreadTech v2.24 for Windows provides data on pitch diameters, minor diameters, gage data, part data, tap data, helix angles, tolerances, crest and root flats, wire sizes, constants and just about anything on threads one would like to know.

ThreadTech v2.24 software is designed for engineers, quality assurance planners, and machinist to save time and to help eliminate human error. This simplifies thread manufacturing and inspection and eliminates time consuming computations and searches for specifications.

- Uses latest government and industry specifications.
- 60 degree English and Metric threads.
- Acme, pipe, STI, British buttress threads, and ISO metric trapezoidal threads
- Threads for Thread Plug Gages, Thread Ring Gages and Thread Setting Plugs
- Default sizes to agree with specifications.
- All diameters, angles, roots, flats, plated or not.
- Pitch Diameter
- Minor Diameter
- Helix Angles
- Gage Data
- Worm gearing calculations utilize Buckingham and Vogel formulas (various included angles).
- Part Data
- Tap Data
- Tolerances
- Crest and Root Flats
- Wire Sizes and Constants
- Measurement Over the Wires
- Standard Plating
- Anodize Plating
- HAE Plating
- Metric and Inch Equivalent
- Asymetric Threads

The computer program prompts the user with questions which must be answered correctly before continuing to the next question. If the user inputs a dimension for plating thicknesses or size combinations that are geometrically impossible or impractical, the program will halt until usable data is input. Metric 60 degree thread information is given in both English and Metric to make double dimensioning, manufacturing or inspection easier. Worm gearing calculations utilize both Vogel and Buckingham formulas.

All formulas and rounding off techniques are consistent with the latest ANSI and government specifications available.

ThreadTech even uses default data in cases where the applicable thread specifications do not agree with the calculated results derived by use of the formulas given but which the government and other

specification writers have perpetrated the errors by not correcting them.

**Easy to use:** No computer skills are necessary to operate the ThreadTech. computer program. The program provides step by step on screen explanations. All data can be easily printed out. ThreadTech. v2.24 runs on Windows XP and Vista. Free unlimited technical support is provided.

### NEW British pipe Thread Module featuring

- ISO 228 – 1 and ISO 228 – 2 for straight British pipe parts and gages
- ISO 7-1 and ISO 7-2 for tapered British pipe parts and gages
- DIN Part 3 and Part 9 trapezoidal threads for parts, rings gages, caliper gages, and plug gages

**Download a FREE 10 day full functioning version of ThreadTech 2.24 at [www.threadcheck.com](http://www.threadcheck.com).**

ThreadTech was designed by a leading gage manufacturer, Osborn Products, Inc. and has been extensively tested to assure accuracy.