THREAD CHECK INC.

Precision Gage Solutions

- Precision Thread Gages
- ThreadTech V2.21 Software
- Thread Measuring Systems
- Plain Plug and Ring Gages
- Metrology and Industrial Supplies
- Measuring Instruments
- Custom Gages
- Precision Machining and Grinding
- ISO 17025 Registered Calibration

THREAD CHECK INC., TEL: 631-231-1515 FAX: 631-231-1625 800-767-7633 www.threadcheck.com Email: info@threadcheck.com

THREAD CHECK INC.

Dear Valued Customer,

Welcome to the new Thread Check Catalog with an expanded product line of precision gages, measuring instruments, taps, cutting tools, and much more. Our sales staff and manufacturing engineers can offer you sales assistance and technical support for your gaging and manufacturing applications. In addition to thousand of items offered in this catalog, Thread Check can provide you with other products from thousands of companies around the world. Just give us a call and we will be pleased to assist you.

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

RED LINE SERVICE

Thread Check offers express manufacturing and delivery on many items at a premium charge.
Call for price and Red Line delivery

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 your special gaging requirements from concept to completion.

Thread Check offers calibration services through an ISO 9002 and ISO 17025 (Guide 25) Registered 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 gages and precision measuring instruments are traceable to N.I.S.T.

Thread Check gages are inspected at 68° F & 50% humidity.

Items stocked are indicated by the "STOCKED" symbol.

CONTACT INFORMATION

Thread Check, Inc.
390 Oser Ave.
Hauppauge, New York 11788
USA

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

Sales@Threadcheck.com
TechSupport@Threadcheck.com
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Web Address:www.threadcheck.com

Office Hours:
Monday-Friday 9:00 AM - 5:00 PM
(09:00 - 17:00 hrs.) Eastern Time

AMTMA MEMBER AMERICAN MEASURING TOOL MANUFACTURERS ASSOCIATION

HOW TO ORDER:

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

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

To place an order by phone,
call 800 767-7633 in the United States and Canada.

International customers call **631 231-1515**

24 Hour Sales Fax: 631 231-1625

Email: sales@threadcheck.com

Thread Check's accepted methods of payment

CREDIT ACCOUNT - TERMS NET 30 DAYS
To set up a Thread Check 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 3 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.

Prices in catalog are subject to change without notice.

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- Plain Plugs & Rings
- Custom Gages
- Precision Machining & Grinding

THREAD GAGES

Thread Plug Gages
Thread Ring Gages
Thread Setting Plugs
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API Gages
AMO Gages
ANPT Gages
Asymetric Gages
Buttress Gages
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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

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
Chucking Reamers
Taper Reamers
Taper Pipe Reamers
Taper Pin Reamers
Special Reamers

END MILLS

Assorted Styles, Sizes, and Materials

SCREW MACHINE PRODUCTS

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

PRECISION GRINDING

THREAD CHECK INC.

THREAD PLUG GAGES

MADE IN USA

TAPERLOCK STYLE

RED LINE SERVICE

REVERSIBLE STYLE

Chrome and Carbide 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™V2.21 for Windows. The most complete and accurate screw thread program. See back cover.

TAPERLOCK DESIGN								REVERSIBLE DESIGN		
GO or NO GO				THREADS PER INCH (TPI)				GO or NO GO		
Handle Only	2B-3B Member	Complete D.E. Gage	Size Dec.	Frac.	UNC	UNF	UNEF	2B-3B Member	Complete D.E. Gage	Handle Only
$7.0	$29.25	$65.50	.060	#0		80		$42.00	$90.00	$6.0
7.0	29.25	65.50	.073	#1	64	72		42.00	90.00	6.0
7.0	29.25	65.50	.086	#2	56	64		31.00	70.00	8.0
7.0	26.00	59.00	.099	#3	48	56		31.00	70.00	8.0
7.0	26.00	59.00	.112	#4	40	48		31.00	70.00	8.0
7.0	24.00	55.00	.125	#5	40	44		27.50	63.00	8.0
7.0	24.00	55.00	.138	#6	32	40		27.50	63.00	8.0
7.0	24.00	55.00	.164	#8	32	36		27.50	63.00	8.0
7.0	24.00	55.00	.190	#10	24	32		27.25	64.00	8.50
7.0	24.00	55.00	.216	#12	24	28		28.75	66.00	8.50
7.0	32.00	71.00	.216	#12			32	44.25	97.00	8.50
6.0	20.00	46.00	.250	1/4	20	28		26.75	62.00	8.50
6.0	37.50	81.00	.250	1/4			32	50.25	109.00	8.50
6.0	20.00	46.00	.3125	5/16	18	24		26.00	61.00	9.00
6.0	40.00	86.00	.3125	5/16			32	48.00	105.00	9.00
6.0	22.00	50.00	.375	3/8	16	24		30.00	69.00	9.00
6.0	47.00	100.00	.375	3/8			32	50.00	109.00	9.00
6.0	21.50	49.00	.4375	7/16	14	20		30.00	70.00	10.00
6.0	47.00	100.00	.4375	7/16			28	50.00	110.00	10.00
6.0	22.50	51.00	.500	1/2	13	20		31.00	72.00	10.00
6.0	47.00	100.00	.500	1/2			28	60.00	130.00	10.00
7.0	30.00	67.00	.5625	9/16	12	18		40.00	92.00	12.00
7.0	49.00	105.00	.5625	9/16			24	43.50	99.00	12.00
7.0	30.00	67.00	.625	5/8	11	18		41.00	94.00	12.00
7.0	50.00	107.00	.625	5/8			24	45.00	102.00	12.00
7.0	49.00	105.00	.6875	11/16			24	45.50	103.00	12.00
7.0	33.00	73.00	.750	3/4	10	16		37.00	86.00	12.00
7.0	52.00	111.00	.750	3/4			20	58.50	129.00	12.00
7.0	55.00	117.00	.8125	13/16			20	–	–	–
7.0	37.00	81.00	.875	7/8	9	14		–	–	–
7.0	56.00	119.00	.875	7/8			20	–	–	–
7.0	58.00	123.00	.9375	15/16			20	–	–	–
7.0	40.00	87.00	1.0	1	8	12,14		–	–	–
7.0	67.00	141.00	1.0	1			20	–	–	–
8.0	67.00	142.00	1.0625	1-1/16		12	18	–	–	–
8.0	51.50	111.00	1.125	1-1/8	7	12		–	–	–
8.0	70.00	148.00	1.125	1-1/8			18	–	–	–
8.0	75.00	158.00	1.1875	1-3/16		12	18	–	–	–
8.0	61.00	130.00	1.250	1-1/4	7	12		–	–	–
8.0	68.50	145.00	1.250	1-1/4			18	–	–	–
8.0	75.00	158.00	1.3125	1-5/16		12	18	–	–	–
8.0	66.50	141.00	1.375	1-3/8	6	12		–	–	–
8.0	77.50	163.00	1.375	1-3/8			18	–	–	–
8.0	81.00	170.00	1.4375	1-7/16		12	18	–	–	–
8.0	83.00	174.00	1.50	1-1/2	6	12		–	–	–
8.0	82.50	173.00	1.50	1-1/2			18	–	–	–

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 AND THREAD SET PLUGS

AGD THREAD RING GAGES								TRUNCATED SETTING PLUGS		
				THREADS PER INCH (TPI)				GO Members Class 1A,2A,3A		
Holder Only	GO Member Class 1A,2A,3A	NO GO Member Class 2A,3A	Size Dec.	Frac.	UNC	UNF	UNEF	NO GO Class 2A,3A	Complete D.E.Gage	Handle Only
$12.00	$108.00	$108.00	.060	#0		80		$64.00	$136.00	$8.00
12.00	101.00	101.00	.073	#1	64	72		64.00	136.00	8.00
12.00	85.00	85.00	.086	#2	56	64		64.00	136.00	8.00
12.00	84.50	84.50	.099	#3	48	56		60.00	128.00	8.00
12.00	77.00	77.00	.112	#4	40	48		60.00	128.00	8.00
12.00	77.00	77.00	.125	#5	40	44		55.00	118.00	8.00
12.00	67.50	67.50	.138	#6	32	40		55.00	118.00	8.00
12.00	70.00	70.00	.164	#8	32	36		55.00	118.00	8.00
12.00	70.00	70.00	.190	#10	24	32		55.00	118.00	8.00
12.00	70.00	70.00	.216	#12	24	28		57.00	122.00	8.00
12.00	97.00	97.00	.216	#12			32	73.00	154.00	8.00
12.00	64.00	64.00	.250	1/4	20	28		49.00	106.00	8.00
12.00	95.00	95.00	.250	1/4			32	73.00	154.00	8.00
12.00	63.00	63.00	.3125	5/16	18	24		49.00	106.00	8.00
12.00	95.00	95.00	.3125	5/16			32	75.00	158.00	8.00
16.00	70.00	70.00	.375	3/8	16	24		54.00	116.00	8.00
16.00	100.00	100.00	.375	3/8			32	78.00	164.00	8.00
16.00	70.00	70.00	.4375	7/16	14	20		54.00	116.00	8.00
16.00	101.00	101.00	.4375	7/16			28	81.00	170.00	8.00
16.00	75.00	75.00	.500	1/2	13	20		59.00	126.00	8.00
16.00	103.00	103.00	.500	1/2			28	89.00	187.00	8.00
20.00	85.00	85.00	.5625	9/16	12	18		61.00	130.00	8.00
20.00	108.00	108.00	.5625	9/16			24	99.00	206.00	8.00
20.00	85.00	85.00	.625	5/8	11	18		68.00	144.00	8.00
20.00	112.00	112.00	.625	5/8			24	101.00	210.00	8.00
20.00	128.00	128.00	.6875	11/16			24	101.00	210.00	8.00
20.00	107.00	107.00	.750	3/4	10	16		73.00	154.00	8.00
20.00	129.00	129.00	.750	3/4			20	102.00	212.00	8.00
20.00	137.00	137.00	.8125	13/16			20	105.00	218.00	8.00
25.00	119.00	119.00	.875	7/8	9	14		85.00	179.00	9.00
25.00	137.00	137.00	.875	7/8			20	105.00	219.00	9.00
25.00	144.00	144.00	.9375	15/16			20	110.00	229.00	9.00
25.00	145.00	145.00	1.0	1	8	12,14		95.00	199.00	9.00
25.00	161.00	161.00	1.0	1			20	118.00	245.00	9.00
25.00	161.00	161.00	1.0625	1-1/16		12	18	120.00	249.00	9.00
25.00	156.00	156.00	1.125	1-1/8	7	12		115.00	239.00	9.00
25.00	175.00	175.00	1.125	1-1/8			18	129.00	267.00	9.00
25.00	181.00	181.00	1.1875	1-3/16		12	18	132.00	273.00	9.00
30.00	183.00	183.00	1.250	1-1/4	7	12		130.00	269.00	9.00
30.00	192.00	192.00	1.250	1- 1/4			18	141.00	291.00	9.00
30.00	193.00	193.00	1.3125	1-5/16		12	18	148.00	305.00	9.00
30.00	203.00	203.00	1.375	1-3/8	6	12		149.00	307.00	9.00
30.00	210.00	210.00	1.375	1-3/8			18	158.00	325.00	9.00
30.00	215.00	215.00	1.4375	1-7/16		12	18	162.00	333.00	9.00
30.00	225.00	225.00	1.50	1-1/2	6	12		152.00	313.00	9.00
30.00	235.00	235.00	1.50	1-1/2			18	150.00	309.00	9.00

AGD Adjustable Thread Ring Gages and Set Plugs
Unified Thread Series (UNC-UNF-UNEF)
Standard (ANSI/ASME B1.2) 'X' Tolerance Class 2B or 3B

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 $25. TO GO MEMBER

THREAD SET PLUG

THREAD RING GAGES

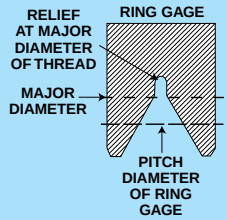
Chrome thread gages priced on request.

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 28 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.

THREAD CHECK INC.

METRIC THREAD PLUG GAGES

MADE IN USA

TAPERLOCK STYLE
6H Tolerance

RED LINE SERVICE

REVERSIBLE STYLE
6H Tolerance

Chrome and Carbide 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™V2.21 for Windows. The most complete and accurate screw thread program. See back cover.

TAPERLOCK DESIGN			NOMINAL SIZE & PITCH			REVERSIBLE DESIGN		
	GO or NO GO					GO or NO GO		
HANDLE ONLY	6H MEMBER	COMPLETE D.E. GAGE	SIZE MM	COARSE	FINE	6H MEMBER	COMPLETE D.E. GAGE	HANDLE ONLY
$8.00	$39.00	$86.00	M1.6	.35	——	$48.00	$104.00	$8.00
8.00	39.00	86.00	M1.8	.35	——	48.00	104.00	8.00
8.00	39.00	86.00	M2	.40	——	48.00	104.00	8.00
8.00	39.00	86.00	M2.2	.45	——	48.00	104.00	8.00
8.00	35.00	78.00	M2.5	.45	——	48.00	104.00	8.00
8.00	35.00	78.00	M3	.5	——	45.00	98.00	8.00
8.00	33.00	74.00	M3.5	.6	——	38.00	85.00	9.00
8.00	33.00	74.00	M4	.7	——	38.00	86.00	10.00
8.00	33.00	74.00	M4.5	.75	——	40.00	90.00	10.00
8.00	33.00	74.00	M5	.8	——	38.00	86.00	10.00
8.00	25.00	58.00	M6	1.0	——	32.00	74.00	10.00
8.00	26.00	60.00	M7	1.0	——	32.00	74.00	10.00
8.00	26.00	60.00	M8	1.25	1.0	32.00	74.00	10.00
8.00	27.50	63.00	M10	1.5	1.25	33.00	76.00	10.00
8.00	29.50	67.00	M12	1.75	1.25	33.00	76.00	10.00
8.00	49.00	105.00	M12	1.5	——	33.00	78.00	12.00
8.00	31.00	70.00	M12	——	1.0	33.00	78.00	12.00
8.00	35.00	78.00	M14	2.0	1.5,1.0	39.50	92.00	13.00
8.00	35.00	78.00	M16	2.0	1.5	41.50	98.00	15.00
8.00	39.00	86.00	M18	2.5	1.5	51.00	117.00	15.00
9.00	41.50	92.00	M20	2.5	1.5	52.00	119.00	15.00
9.00	41.50	92.00	M22	2.5	1.5	NA	NA	NA
9.00	48.50	106.00	M24	3.0	2.0	NA	NA	NA
9.00	61.00	131.00	M27	3.0	2.0	NA	NA	NA
9.00	73.50	156.00	M30	3.5	2.0	NA	NA	NA
9.00	78.50	166.00	M33	3.5	2.0	NA	NA	NA
9.00	82.00	173.00	M36	4.0	3.0	NA	NA	NA
9.00	95.50	199.00	M39	4.0	3.0	NA	NA	NA

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

METRIC RING GAGES			NOMINAL SIZE & PITCH			METRIC SET PLUGS		
HOLDER ONLY	GO MEMBER Class 6g	NO GO MEMBER Class 6g	SIZE MM	COARSE	FINE	GO or NO GO MEMBER Class 6g	COMPLETE D.E. GAGE	HANDLE ONLY
$13.00	$118.00	$118.00	M1.6	.35	——	$78.00	$164.00	$8.00
13.00	118.00	118.00	M1.8	.35	——	78.00	164.00	8.00
13.00	107.00	107.00	M2	.40	——	72.00	152.00	8.00
13.00	107.00	107.00	M2.2	.45	——	72.00	152.00	8.00
13.00	107.00	107.00	M2.5	.45	——	72.00	152.00	8.00
13.00	93.00	93.00	M3	.5	——	70.00	147.00	7.00
13.00	93.00	93.00	M3.5	.6	——	70.00	147.00	7.00
13.00	85.00	85.00	M4	.7	——	70.00	147.00	7.00
13.00	85.00	85.00	M4.5	.75	——	70.00	147.00	7.00
13.00	79.00	79.00	M5	.8	——	70.00	147.00	7.00
13.00	75.00	75.00	M6	1.0	——	58.00	123.00	7.00
13.00	75.00	75.00	M7	1.0	——	58.00	123.00	7.00
13.00	75.00	75.00	M8	1.25	1.0	58.00	124.00	8.00
17.00	83.00	83.00	M10	1.5	1.25	60.00	128.00	8.00
17.00	87.00	87.00	M12	1.75	1.25,1.0	65.00	138.00	8.00
21.00	99.00	99.00	M14	2.0	1.5,1.0	73.00	154.00	8.00
21.00	99.00	99.00	M16	2.0	1.5	73.00	154.00	8.00
21.00	132.00	132.00	M18	2.5	1.5	82.00	172.00	8.00
21.00	153.00	153.00	M20	2.5	1.5	97.00	203.00	9.00
26.00	157.00	157.00	M22	2.5	1.5	105.00	219.00	9.00
26.00	186.00	186.00	M24	3.0	2.0	114.00	237.00	9.00
26.00	195.00	195.00	M27	3.0	2.0	127.00	263.00	9.00
31.00	201.00	201.00	M30	3.5	2.0	129.00	267.00	9.00
31.00	215.00	215.00	M33	3.5	2.0	150.00	309.00	9.00
31.00	247.00	247.00	M36	4.0	3.0	163.00	335.00	9.00
31.00	262.00	262.00	M39	4.0	3.0	179.00	367.00	9.00

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%.

METRIC THREAD RING GAGES 6g Tolerance

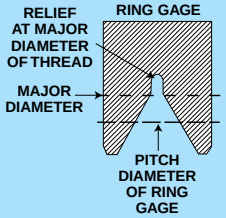
METRIC THREAD PLUG GAGES 6g Tolerance

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 28 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.

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.

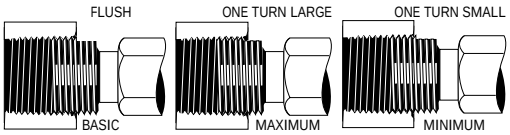


Fig. 1 Gaging internal American National Taper pipe threads with working gage. When the internal thread is chambered, the gaging point shall be the intersection of the chamber and the pitch cone of the thread.

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.

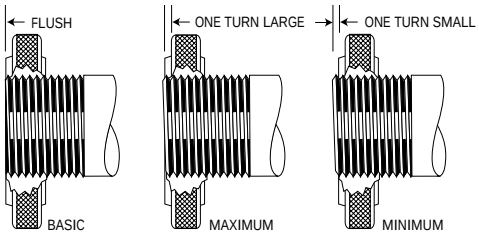


Fig. 2 Gaging external NPT threads.

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.

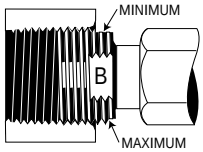


Fig. 3
L^1 limit type Plug Gage

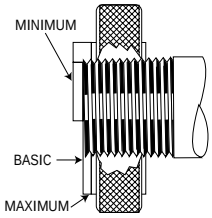


Fig. 4
L^2 limit type Ring Gage

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.

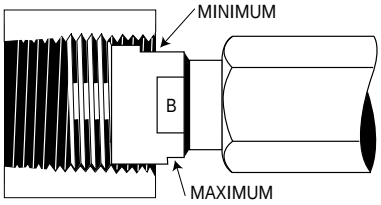


Fig. 5 Checking fitting with L^3 thread Plug Gages.

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 L^3 taper thread plug gage. This is also a limit type gage with the length equal to L^1 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.

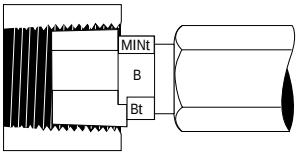


Fig. 6 Checking minor diameter truncation with 6 step plain Plug Gages.

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.

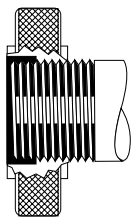


Fig. 7 L2 Thick Ring Gage

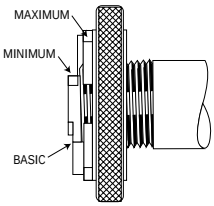


Fig. 8 Checking major diameter truncation with 6 step plain ring gage.

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.

GAGES REQUIRED TO CHECK OTHER PIPE THREADS

Gages priced on request.

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	NPTF L1 Plug Gage	Mates with NPTF external threads
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 / N0G0Thread Ring	GO / N0G0 Thread Plug

TAPER PIPE THREAD GAGES - NPT AND NPTF

STOCKED

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
1/6-27	$65.00	$106.00	$77.00	$119.00	$111.00	$156.00	$190.00	$8.00
1/8-27	43.00	74.00	54.00	119.00	76.00	151.00	190.00	8.00
1/4-18	51.00	81.00	65.00	119.00	92.00	156.00	190.00	8.00
3/8-18	61.00	94.00	78.00	119.00	98.00	165.00	190.00	8.50
1/2-14	71.00	106.00	89.00	119.00	109.00	172.00	190.00	8.50
3/4-14	79.00	119.00	99.00	126.00	122.00	190.00	212.00	9.00
1.0-11 1/2	86.00	136.00	109.00	137.00	142.00	207.00	212.00	9.00
1 1/4-11 1/2	99.00	149.00	116.00	145.00	151.00	224.00	212.00	9.00
1 1/2-11 1/2	124.00	177.00	133.00	159.00	182.00	246.00	246.00	9.00
2.0-11 1/2	137.00	212.00	158.00	222.00	258.00	285.00	298.00	9.00
2 1/2-8	179.00	249.00	251.00	341.00	280.00	341.00	253.00	13.00
3.0-8	223.00	312.00	284.00	370.00	319.00	404.00	432.00	13.00

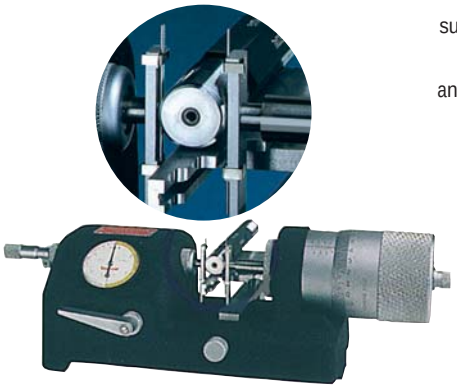
NPSF 2B TAPERLOCK THREAD PLUG GAGES

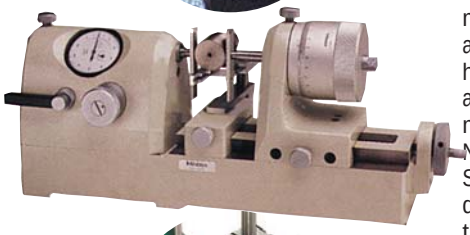
SIZE	PITCH MIN.	DIA. MAX.	GO OR NOGO PER MEMBER	HANDLE	GO & NOGO WITH HANDLE
1/16-27	.2768	.2803	$57.00	$7.00	$121.00
1/8-27	.3692	.3727	63.00	7.00	121.00
1/4-18	.4852	.4904	59.00	8.00	126.00
3/8-18	.6205	.6257	64.00	8.00	126.00
1/2-14	.7700	.7767	69.00	9.00	137.00
3/4-14	.9805	.9872	76.00	9.00	137.00
1-11 1/2	1.2284	1.2365	79.00	9.00	167.00

NPSF 2A and NPSM thread gages priced on request.

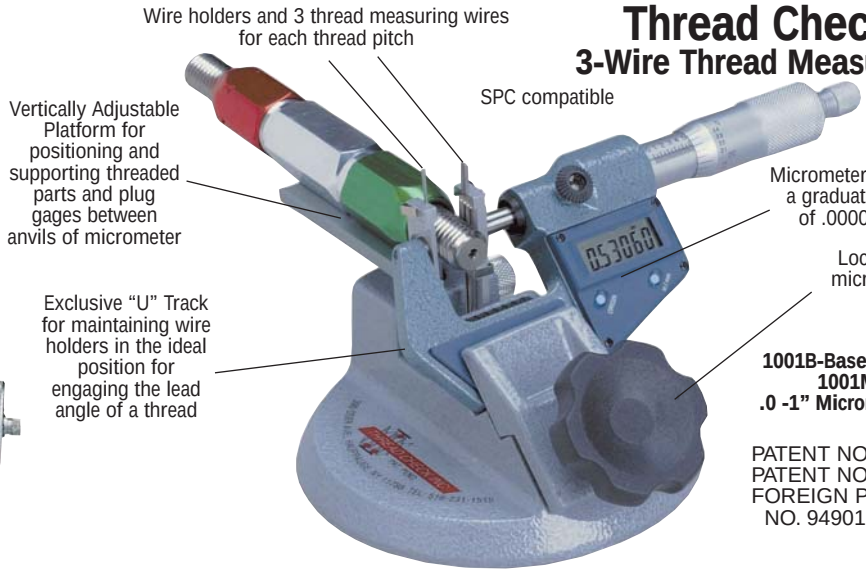
3-Wire Thread Measuring Systems

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





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



1001B-Base assembly…$198.00
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.

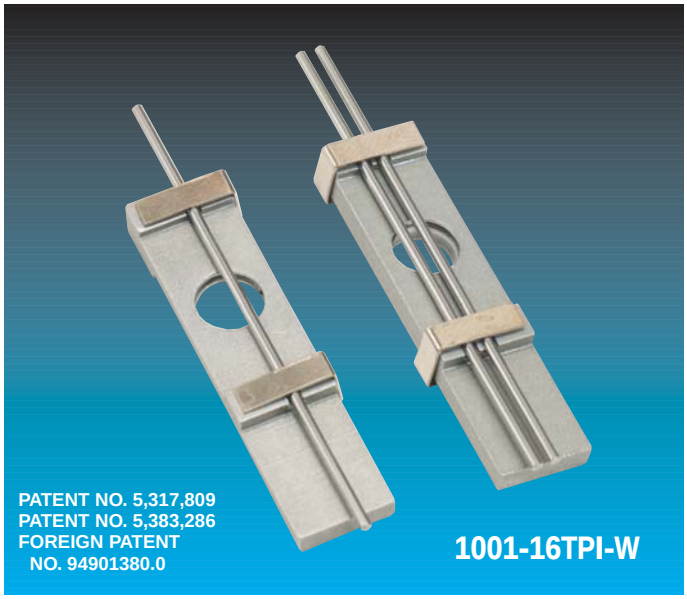
Thread Check offers specially designed wire holders and wires, base assemblies, and vertically adjustable off-set platforms that make thread measurement fast and accurate. Thread Check's holders are fitted with certified full length thread measuring wires that meet or exceed the requirements of the ASME/ANSI 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.

3-Wire Thread Measuring Holders and Wires



MEASURING INSTRUMENTS	ANVIL DIA. INCH	MM	PART NO.
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	.237	6.5	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 .....$110. per set
5 to 9 sets.....105. per set
10 or more sets ..100. 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 or Pitch — W=wires, LW=less wires

1001 - 1.0M - W

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

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

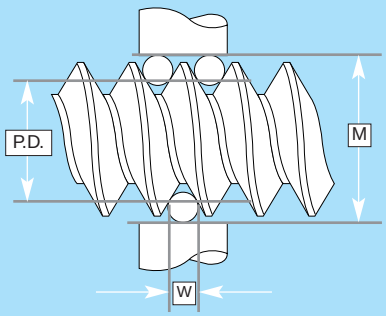
METRIC HOLDERS & WIRES			
Pitch	MM diameter	Inch diameter	Price
.2mm	.1155	.00455	$195.
.225mm	.1299	.00511	195.
.25mm	.1443	.00568	195.
.30mm	.1732	.00682	195.
.35mm	.2021	.00796	195.
.40mm	.2309	.00909	195.
.45mm	.2598	.01023	185.
.50mm	.2887	.01137	185.
.55mm	.3175	.01250	185.
.60mm	.3464	.01364	185.
.70mm	.4041	.01591	155.
.75mm	.4330	.01705	155.
.80mm	.4619	.01818	155.
.85mm	.4907	.01932	155.
.90mm	.5196	.02046	155.
1.00mm	.5774	.02273	155.
1.25mm	.7217	.02841	155.
1.50mm	.8660	.03410	155.
1.75mm	1.0104	.03978	155.
2.00mm	1.1547	.04546	155.
2.50mm	1.4434	.05683	155.
3.00mm	1.7321	.06819	155.
3.50mm	2.0207	.07956	155.
4.00mm	2.3094	.09092	155.
4.50mm	2.5981	.10229	195.
5.00mm	2.8868	.11365	195.
5.50mm	3.1754	.12502	195.
6.00mm	3.4641	.13638	195.
LIBRARIES IN WOODEN CASES			
Partial Library:	.3-3.5 mm		$3140.
Full Library:	.2-4.0 mm		3695.

STANDARD HOLDERS & WIRES		
Threads per inch	Wire diameter	Price
120	.00481	$190.
100	.00577	190.
96	.00601	190.
90	.00642	190.
80	.00722	190.
72	.00802	190.
64	.00902	180.
56	.01031	180.
50	.01155	180.
48	.01203	145.
44	.01312	145.
40	.01443	145.
36	.01604	145.
32	.01804	145.
30	.01925	145.
28	.02062	145.
27	.02138	145.
26	.02221	145.
24	.02406	145.
22	.02624	145.
20	.02887	145.
18	.03208	145.
16	.03608	145.
14	.04124	145.
13	.04441	145.
12	.04811	145.
11.5	.05020	145.
11	.05249	145.
10	.05774	145.
9	.06415	145.
8	.07217	145.
7.5	.07698	145.
7	.08248	145.
6	.09623	145.
5.5	.10497	180.
5	.11547	180
LIBRARIES IN WOODEN CASE		
Partial Library* 6-36		$2700.
Full Library* 5-80		4245.
* 7.5 and 22 TPI not included.		

ACME HOLDERS & WIRES		
Threads per inch	Wire diameter	Price
5	.10329	$190.
5.5	.09390	170.
6	.08608	170.
7	.07378	170.
8	.06456	170.
9	.05738	170.
10	.05164	170.
11	.04695	170.
12	.04304	170.
14	.03689	170.
16	.03228	170.
18	.02869	170.
20	.02582	170.
LIBRARIES IN WOODEN CASE		
Full Library 5A-20A		$2100.

CERTIFIED THREAD MEASURING WIRES

THREAD CHECK INC.



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
47½°	.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.

60° METRIC

Pitch mm	Nominal Best Wire Diameter mm	Price Set of 3
.2	.1155	$65.00
.225	.1299	65.00
.25	.1443	65.00
.3	.1732	65.00
.35	.2021	65.00
.4	.2309	65.00
.45	.2598	65.00
.5	.2887	65.00
.6	.3464	65.00
.7	.4041	65.00
.75	.4330	40.00
.8	.4619	40.00
.9	.5196	40.00
1.0	.5774	40.00
1.25	.7217	40.00
1.5	.8660	40.00
1.75	1.0104	40.00
2.0	1.1547	40.00
2.5	1.4434	40.00
3.0	1.7321	40.00
3.5	2.0207	40.00
4.0	2.3094	40.00
4.5	2.5981	40.00
5.0	2.8868	65.00
5.5	3.1754	65.00
6.0	3.4641	65.00
7.0	4.0415	65.00
8.0	4.6188	65.00
9.0	5.1962	65.00
10.0	5.7735	65.00

LIBRARY SETS

Set No. 23M, 23 sizes (.3m pitch to 6m pitch) with case	$1100.00
60° Metric Set No. 30M, 30 sizes (.2m pitch to 10m pitch) with case	1500.00

Grand Master Calibration Sets are available for calibration of working wires - call for prices.

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 4½-64 TPI. Price per set of 3 wires: $225

60° INCH

Threads per Inch (n)	Nominal Best Wire Diameter G	Price Set of 3
120	.00481	$65.00
100	.00577	65.00
96	.00601	65.00
90	.00642	65.00
80	.00722	65.00
72	.00802	65.00
64	.00902	65.00
56	.01031	65.00
50	.01155	65.00
48	.01203	40.00
44	.01312	40.00
40	.01443	40.00
36	.01604	40.00
32	.01804	40.00
30	.01925	40.00
28	.02062	40.00
27	.02138	40.00
26	.02221	40.00
24	.02406	40.00
22	.02624	40.00
20	.02887	40.00
18	.03208	40.00
16	.03608	40.00
14	.04124	40.00
13	.04441	40.00
12	.04811	40.00
11½	.05020	40.00
11	.05249	40.00
10	.05774	40.00
9	.06415	40.00
8	.07217	40.00
7½	.07698	40.00
7	.08248	40.00
6	.09623	40.00
5½	.10497	65.00
5	.11547	65.00
4½	.12830	65.00
4	.14434	65.00
3½	.16496	65.00
3¼	.17765	65.00
3	.19245	65.00
2¾	.20995	65.00
2½	.23094	65.00
2	.28868	65.00

LIBRARY SETS

60°Inch Set No. 30 HS* 30 sizes (5-80 TPI) with case	$1300.00
Set No. 34 HS 34 sizes (4-80 TPI) with case	1500.00
Set No.20 HS*20 sizes (6-36 TPI) with case	800.00
Set No. 20 TC 20 sizes (6-36 TPI) with case (tungsten carbide shop set)	Priced on Request

* 7½ & 22 TPI not included in these sets.

29° ACME

Threads per Inch (n)	Nominal Best Wire Diameter G	Price Set of 3
1	.51645	$75.00
1⅓	.38734	75.00
1½	.34430	75.00
1¾	.29511	75.00
2	.25823	75.00
2½	.20658	75.00
3	.17215	75.00
3½	.14756	60.00
4	.12911	60.00
4½	.11477	60.00
5	.10329	60.00
5½	.09390	60.00
6	.08608	60.00
7	.07378	60.00
8	.06456	60.00
9	.05738	60.00
10	.05164	60.00
12	.04304	60.00
14	.03689	60.00
16	.03228	60.00
18	.02869	60.00
20	.02582	60.00

LIBRARY SETS

29° Acme Set No. 22AB, 22 sizes (1 to 20 TPI), with case	$1400.00

SPECIAL THREAD MEASURING WIRES +/– .000020"

Above - including	Set of 3
.004 - .005" .1016mm-.1270mm	$125.00
.005-.007" .1270mm-.1778mm	125.00
.007-.010" .1778mm-.2540mm	95.00
.010"-.135" .2540mm-3.429mm	95.00
.135-.260" 3.429mm-6.604mm	95.00
.260-.385" 6.604mm-9.779mm	105.00
.385-.510" 9.779mm-12.954mm	105.00
.510-.635" 12.954mm-16.129mm	105.00
.635-.760" 16.129mm-19.304mm	125.00
.760-1.010" 19.304mm-25.654mm	125.00

GEAR MEASURING WIRES

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	$65.00
2-1/2	.768	.6912	.672	.576	65.00
3	.640	.576	.560	.480	65.00
4	.480	.432	.420	.360	65.00
5	.384	.3456	.336	.288	45.00
6	.320	.288	.280	.240	45.00
7	.27428	.24686	.240	.20571	45.00
8	.240	.216	.210	.180	35.00
9	.21333	.192	.18666	.160	35.00
10	.192	.1728	.168	.144	35.00
11	.17454	.15709	.15273	.13091	35.00
12	.160	.144	.140	.120	35.00
14	.13714	.12343	.120	.10286	35.00
16	.120	.108	.105	.090	35.00
18	.10667	.096	.09333	.080	35.00
20	.096	.0864	.084	.072	35.00
22	.08727	.07855	.07636	.06545	35.00
24	.080	.072	.070	.060	35.00
28	.06857	.06171	.060	.05143	35.00
32	.060	.054	.0525	.045	35.00
36	.05333	.048	.04667	.040	35.00
40	.048	.0432	.042	.036	35.00
48	.040	.036	.035	.030	35.00
64	.030	.027	.02625	.0225	35.00
72	.02667	.024	.02333	.020	35.00
80	.024	.0216	.021	.018	35.00
96	.020	.018	.0175	.015	35.00
100	.0192	.01728	.0168	.0144	35.00
120	.0160	.0144	.014	.012	55.00
128	.0150	.0135	.01312	.01125	55.00
200	.0096	.00864	.0084	.0072	55.00

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.

Long Form Certification - $16. per pitch.

SPECIAL GEAR MEASURING WIRES +/– .000010" Range						
Inch Above	–	To	Metric Above	–	To	Price per 2 wire set
.004	-	.005"	.1016mm	-	.1270mm	$90.00
.005	-	.007"	.1270mm	-	.1778mm	90.00
.007	-	.010"	.1778mm	-	.2540mm	70.00
.010	-	.135"	.2540mm	-	3.429mm	70.00
.135	-	.260"	3.429mm	-	6.604mm	70.00
.260	-	.385"	6.604mm	-	9.779mm	70.00
.385	-	.510"	9.779mm	-	12.954mm	70.00
.510	-	.635"	12.954mm	-	16.129mm	70.00
.635	-	.760"	16.129mm	-	19.304mm	90.00
.760	-	1.010"	19.304mm	-	25.654mm	90.00

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 $16.00 per Pitch

Set No. 84 **$3499.00**
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 **$2999.00**
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 **$1999.00**
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 **$999.00**
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 **$999.00**
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 **$999.00**
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 **$699.00**
Includes 2 wires each of 15 sizes from 1.92" series for 2½ , 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 **$1100.00**
Includes 2 wires each of 15 sizes from 1.92" series for 2½ , 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 **$299.00**
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 no 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.

BASIC SPECIFICATIONS						
Frame No.	Range Normal Size Inch Above	Inch to & Incl.	Metric (MM) Above	Metric (MM) to & Incl.	For Threads	Roll Length per Inch
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 and/or range, price, and order number.

1. BASE			Price
			$32.00
2. FRAMES			
Frame No.	Range-Nominal Size Above Inch (Metric)Inch	To & Including (Metric)	
0	.059 (1.5mm)	.073 (1.8mm)	$304.00
1	.073 (1.8mm)	.099 (2.5mm)	304.00
2	.099 (2.5mm)	.164 (4.2mm)	310.00
3	.164 (4.2mm)	.313 (7.9mm)	310.00
4	.313 (7.9mm)	.500 (12.7mm)	316.00
5	.500 (12.7mm)	.750 (19.0mm)	316.00
6	.750 (19.0mm)	1.125 (28.5mm)	332.00
7	1.125 (28.5mm)	1.500 (38.1mm)	332.00
8	1.500 (38.1mm)	1.875 (47.6mm)	497.00
9	1.875 (47.6mm)	2.250 (57.1mm)	527.00
10	2.250 (57.1mm)	2.625 (66.7mm)	553.00
11	2.625 (66.7mm)	3.000 (76.2mm)	656.00
12	3.000 (76.2mm)	3.375 (85.7mm)	701.00
3. DIAL INDICATOR or DIGITAL INDICATOR			Call for options and prices
4. STOP ADJUSTING TOOL			$22.00

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

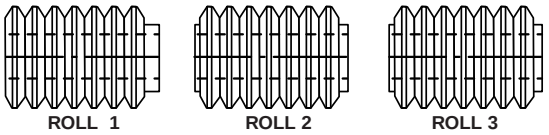
5. GAGING ROLLS - INCH

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	$269.00	Call for price			0-80	0	$156.00
1-64	0	269.00				1-64	0	156.00
1-72	0	269.00				1-72	0	156.00
2-56	1	269.00				2-56	1	156.00
2-64	1	269.00				2-64	1	156.00
3-48	1	269.00				3-48	1	156.00
3-56	1	269.00				3-56	1	156.00
4-40	2	269.00	4-40	2	$234.00	4-40	2	156.00
4-48	2	269.00	4-48	2	315.00	4-48	2	156.00
5-40	2	269.00	5-40	2	234.00	5-40	2	156.00
5-44	2	269.00	5-44	2	234.00	5-44	2	156.00
6-32	2	269.00	6-32	2	234.00	6-32	2	156.00
6-40	2	269.00	6-40	2	234.00	6-40	2	156.00
8-32	2	269.00	8-32	2	234.00	8-32	2	156.00
8-36	2	269.00	8-36	2	234.00	8-36	2	156.00
10-24	3	269.00	10-24	3	234.00	10-24	3	156.00
10-32	3	269.00	10-32	3	234.00	10-32	3	156.00
12-24	3	269.00	12-24	3	234.00	12-24	3	156.00
12-28	3	269.00	12-28	3	234.00	12-28	3	156.00
1/4-20	3	269.00	1/4-20	3	234.00	1/4-20	3	156.00
1/4-28	3	269.00	1/4-28	3	234.00	1/4-28	3	156.00
5/16-18	3	269.00	5/16-18	3	234.00	5/16-18	3	156.00
5/16-24	3	269.00	5/16-24	3	234.00	5/16-24	3	156.00
3/8-16	4	269.00	3/8-16	4	234.00	3/8-16	4	156.00
3/8-24	4	269.00	3/8-24	4	234.00	3/8-24	4	156.00
7/16-14	4	269.00	7/16-14	4	234.00	7/16-14	4	156.00
7/16-20	4	269.00	7/16-20	4	234.00	7/16-20	4	156.00
1/2-13	4	269.00	1/2-13	4	234.00	1/2-13	4	156.00
1/2-20	4	269.00	1/2-20	4	234.00	1/2-20	4	156.00
9/16-12	5	269.00	9/16-12	5	234.00	9/16-12	5	156.00
9/16-18	5	269.00	9/16-18	5	234.00	9/16-18	5	156.00
5/8-11	5	269.00	5/8-11	5	234.00	5/8-11	5	156.00
5/8-18	5	269.00	5/8-18	5	234.00	5/8-18	5	156.00
3/4-10	5	269.00	3/4-10	5	234.00	3/4-10	5	156.00
3/4-16	5	269.00	3/4-16	5	234.00	3/4-16	5	156.00
7/8-9	6	277.00	7/8-9	6	263.00	7/8-9	6	181.00
7/8-14	6	277.00	7/8-14	6	263.00	7/8-14	6	181.00
1"- 8	6	277.00	1"- 8	6	263.00	1"- 8	6	181.00
1"-12	6	277.00	1"-12	6	263.00	1"-12	6	181.00
1"- 14	6	277.00	1"- 14	6	263.00	1"- 14	6	181.00
1 1/8-7	6	277.00	1 1/8-7	6	263.00	1 1/8-7	6	181.00
1 1/8-12	6	277.00	1 1/8-12	6	263.00	1 1/8-12	6	181.00
1 1/4-7	7	277.00	1 1/4-7	7	263.00	1 1/4-7	7	181.00
1 1/4-12	7	277.00	1 1/4-12	7	263.00	1 1/4-12	7	181.00
1 3/8-6	7	277.00	1 3/8-6	7	263.00	1 3/8-6	7	181.00
1 3/8-12	7	277.00	1 3/8-12	7	263.00	1 3/8-12	7	181.00
1 1/2-6	7	277.00	1 1/2-6	7	263.00	1 1/2-6	7	181.00
1 1/2-12	7	277.00	1 1/2-12	7	263.00	1 1/2-12	7	181.00

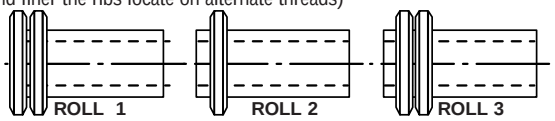
5. GAGING ROLLS - METRIC

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	$156.00
M2 x .4	1	$269.00				M2 x .4	1	156.00
M2.5 x .45	1	269.00				M2.5 x .5	1	156.00
M3 x .5	2	269.00				M3 x .45	1	156.00
M3.5 x .6	2	269.00	M3.5 x .6	2	$234.00	M3.5 x .6	2	156.00
M4 x .7	2	269.00	M4 x .7	2	234.00	M4 x .7	2	156.00
M5 x .8	3	269.00	M5 x .8	3	234.00	M5 x .8	3	156.00
M6 x 1	3	269.00	M6 x 1	3	234.00	M6 x 1	3	156.00
M8 x 1.25	4	269.00	M8 x 1.25	4	234.00	M8 x 1.25	4	156.00
M10 x1.5	4	269.00	M10 x 1.5	4	234.00	M10 x 1.5	4	156.00
M10 x1.25	4	269.00	M10 x1.25	4	234.00	M10 x 1.25	4	156.00
M12 x1.75	4	269.00	M12 x1.75	4	234.00	M12 x 1.75	4	156.00
M12 x1.25	4	269.00	M12 x1.25	4	234.00	M12 x 1.25	4	156.00
M14 x 2	5	269.00	M14 x 2	5	234.00	M14 x 2	5	156.00
M14 x 1.5	5	269.00	M14 x 1.5	5	234.00	M14 x 1.5	5	156.00
M16 x 2	5	269.00	M16 x 2	5	234.00	M16 x 2	5	156.00
M20 x 1.5	6	277.00	M20 x 1.5	6	263.00	M20 x 1.5	6	181.00
M22 x 1.5	6	277.00	M22 x 1.5	6	263.00	M22 x 1.5	6	181.00
M24 x 3	6	277.00	M24 x 3	6	263.00	M24 x 3	6	181.00

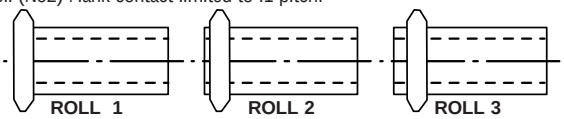
SELECTING GAGING ROLLS



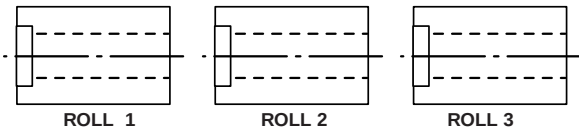
TYPE 3: Full Profile-Functional Diameter size. Full ribbed rolls for functional diameter size for pitches coarser than 48 T.P.I. (for 48 T.P.I. and finer the ribs locate on alternate threads)



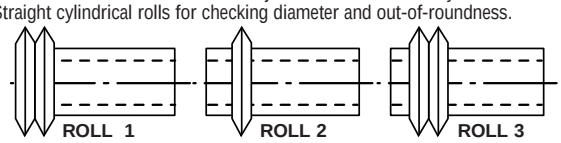
TYPE 4: Cone and Vee-Single Element Pitch Diameter. Two ribs ("vee"-type) on lower rolls (No.1 and 3). One rib ("cone" type) on upper roll (No2) Flank contact limited to .1 pitch.



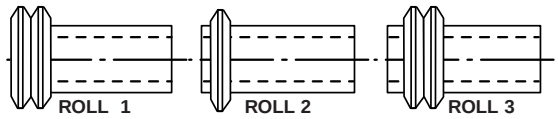
TYPE 5: "Best Wire" Size Radius-Single Element Pitch Diameter. Single ribs only with "best wire" size radius for any given pitch (T.P.I.).



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.

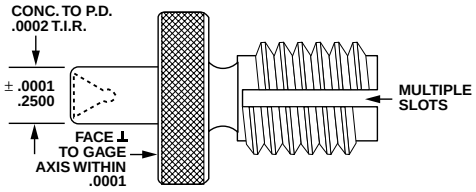
THREAD CHECK INC.

FLEXIBLE HOLE LOCATION GAGES

Inch Flexible Hole Location Gages Threads Per Inch			
Size	UNC	UNF	Price
0	-	80	$82.00
1	64	72	81.00
2	56	64	80.00
3	48	56	76.00
4	40	48	73.00
5	40	44	74.00
6	32	40	77.00
8	32	36	74.00
10	24	32	71.00
12	24	28	70.00
1/4	20	28	61.00
5/16	18	24	61.00
3/8	16	24	67.00
7/16	14	20	67.00
1/2	13	20	70.00
9/16	12	18	70.00
5/8	11	18	72.00
3/4	10	16	74.00
7/8	9	14	87.00
1	8	12	120.00

Metric Flexible Hole Location Gages	
Size	Price
M1.6 x .35	$98.00
M2 x 0.4	95.00
M2.5 x 0.45	95.00
M3 x 0.5	91.00
M3.5 x 0.6	91.00
M4 x 0.7	87.00
M5 x 0.8	83.00
M6 x 1.0	73.00
M8 x 1.25	72.00
M8 x 1.0	72.00
M10 x 1.5	76.00
M10 x 1.25	77.00
M10 x .75	103.00
M12 x 1.75	80.00
M12 x 1.5	80.00
M12 x 1.25	83.00
M12 x 1.0	83.00
M14 x 2.0	85.00
M14 x 1.5	85.00
M15 x 1.0	85.00
M16 x 2.0	85.00
M16 x 1.5	87.00
M17 x 1.0	89.00
M18 x 1.5	89.00
M20 x 2.5	89.00
M20 x 1.5	91.00
M20 x 1.0	91.00
M22 x 2.5	101.00
M22 x 1.5	101.00
M24 x 3.0	109.00
M24 x 2.0	109.00

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



Flexible Hole Location Gage 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 Gage 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(7.0mm +/- .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 **$870**

2 each of #6-32 thru 3/8-16 Unified (Coarse Pitches) with case **$1075**

2 each of #6-32 thru 1/2-13 Unified (Coarse Pitches) with case **$1370**

Complete set of 2 each from 9/16-12 thru 1-12 Unified (Coarse Pitches) and Unified Fine with case **$1870**

2 each of #0-80 thru #5-44 Unified (Fine Pitches) with case **$1050**

2 each of #6-40 thru 3/8-24 Unified (Fine Pitches) with case **$1100**

2 each of #6-40 thru 1/2-20 Unified (Fine Pitches) with case **$1400**

Complete set of 2 each from #0-80 thru 1/2-20 Unified (Coarse Pitches) and Unified (Fine Pitches) with case **$4350**

S.T.I. THREAD PLUG GAGES

S.T.I. THREAD PLUG GAGES ("HELICAL COIL" CLASS X TAPERLOCK)					
Size	Pitch UNC	Pitch UNF	GO NOGO Member	D/E w/HANDLE	HANDLE
#2	56		$39.00	$87.00	$9.00
#3	48	56	37.00	83.00	9.00
#4	40	48	35.00	79.00	9.00
#5	40		35.00	79.00	9.00
#6	32	40	35.00	79.00	9.00
#8	32	36	33.00	75.00	9.00
#10	24	32	33.00	75.00	9.00
#12	24		33.00	74.00	8.00
1/4	20	28	32.00	72.00	8.00
5/16	18	24	32.00	72.00	8.00
3/8	16	24	33.00	74.00	8.00
7/16	14	20	35.00	78.00	8.00
1/2	13	20	37.00	82.00	8.00
9/16	12	18	30.00	68.00	8.00
5/8	11	18	30.00	68.00	8.00
3/4	10	16	32.00	73.00	9.00
7/8	9	14	53.00	115.00	9.00
1.0	8	12	55.00	119.00	9.00
1.0	14		55.00	119.00	9.00

STEEL MEASURING BALLS

Library Set #23: includes 23 Sets of 3 balls each 1/16" to 1/2" in 1/32", 1/2 to 1" in 1/16 : within .0003 of nominal size. Balls are measured to within +/- .000025". Set includes a mahogany case. **$440**

Individual Sets One Set = 3 Balls	Per Set
1/16",3/32",1/8",5/32", 3/16",7/32", 1/4"	$15.00 each size
9/32",5/16",11/32",3/8", 13/32",7/16",15/32", 1/2"	18.00 each size
9/16",5/8",11/16", 3/4"	22.00 each size
13/16",7/8" ,15/16",1.000"	30.00 each size

MASTER MEASURING ROLLS

Library Set #17: Includes a set of all 17 Master Measuring Rolls offered for inspection room use for the accurate measurement of splines, dovetails and angles. Rolls are 1" long and are accurate within .00002" for roundness and plus or minus .00002" for size. **$600**

Standard Sizes 2 Rolls Per Set	Per set
.050", .0625, .100"	$22.00 each size
.125", .150", .1875", .200"	30.00 each size
.250", .300", .400", .500"	40.00 each size
.600", .700", .750", .800", .900", 1.00"	50.00 each size

Special rolls priced on request. Class XX rolls plus 50%.

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
165.35mm 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

THREAD CHECK INC.

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

Economical and General Purpose Pin Gages

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.

Pin gage set

Pin gage library

Pin gage set

- 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

STOCKED

METRIC SETS (.02MM INCREMENTS)			
Range	No of Gages	Wt. Lbs.	Price
0.20mm to 1.28mm	55	2	$70.00
0.21mm to 1.29mm	55	2	70.00
1.30mm to 4.98mm	185	6	150.00
1.31mm to 4.99mm	185	6	150.00
5.00mm to 9.98mm	250	14	225.00
5.01mm to 9.99mm	250	14	225.00
10.00mm to 13.98mm	200	24	200.00
10.01mm to 13.99mm	200	24	200.00
14.00mm to 16.48mm	125	24	250.00
14.01mm to 16.49mm	125	24	250.00
16.50mm to 18.98mm	125	30	295.00
16.51mm to 18.99mm	125	30	295.00
19.00mm to 20.98mm	100	32	560.00
19.01mm to 20.99mm	100	32	560.00
21.00mm to 22.48mm	75	29	475.00
21.01mm to 22.49mm	75	29	475.00
22.50mm to 23.98mm	75	33	500.00
22.51mm to 23.99mm	75	33	500.00
24.00mm to 25.48mm	75	36	525.00
24.01mm to 25.49mm	75	36	525.00
METRIC LIBRARIES (.02MM INCREMENTS)			
.20mm to 13.98mm	690	46	$845.00
.21mm to 13.99mm	690	46	845.00
.20mm to 18.98mm	940	100	1415.00
.21mm to 18.99mm	940	100	1415.00
.20mm to 22.48mm	1115	161	2625.00
.21mm to 22.49mm.	1115	161	2625.00
.20mm to 25.48mm	1265	230	4375.00
.21mm to 25.49mm	1265	230	4375.00
1.30mm to 16.48mm	760	68	1025.00
1.31mm to 16.49mm	760	68	1025.00
1.30mm to 20.98mm	985	130	1905.00
1.31mm to 20.99mm	985	130	1905.00
1.30mm to 23.98mm	1135	192	3615.00
1.31mm to 23.99mm	1135	192	3615.00
1.30mm to 25.48mm	1210	228	4165.00
1.31mm to 25.49mm	1210	228	4165.00

INCH SETS (.001" INCREMENTS)			
Range	No of Gages	Wt. Lbs.	Price
.0060" to .0600"	55	2	$75.00
.0065" to .0605"	55	2	75.00
.0110" to .0600"	50	2	60.00
.0115" to .0605"	50	2	60.00
.0110" to .2500"	240	6	190.00
.0115" to .2505"	240	6	190.00
.0610" to .2500"	190	6	135.00
.0615" to .2505"	190	6	135.00
.2510" to .5000"	250	20	200.00
.2515" to .5005"	250	20	200.00
.5010" to .6250"	125	21	235.00
.5015" to .6255"	125	21	235.00
.6260" to .7500	125	31	260.00
.6265" to .7505"	125	31	260.00
.7510" to .8320"	82	27	450.00
.7515" to .8325"	82	27	450.00
.8330" to .9160"	84	33	525.00
.8335" to .9165"	84	33	525.00
.9170" to 1.0000"	84	38	550.00
.9175" to 1.0005"	84	38	550.00
INCH LIBRARIES (.001 INCREMENTS)			
.0060" to .6250"	620	49	$750.00
.0065" to .6255"	620	49	750.00
.0060" to .8320"	827	107	1500.00
.0065" to .8325"	827	107	1500.00
.0110" to .7500"	740	78	925.00
.0115" to .7505"	740	78	925.00
.0110" to .9160"	906	138	2000.00
.0115" to .9165"	906	138	2000.00
.0110" to .1.000"	990	176	2595.00
.0115" to 1.0005"	990	176	2595.00
.0610" to .7500"	690	78	900.00
.0615" to .7505"	690	78	900.00
.0610" to .9160"	856	138	1950.00
.0615" to .9165"	856	138	1950.00
.0610" to 1.000"	940	176	2550.00
.0615" to 1.0005"	940	176	2550.00
.2510" to .8320"	582	99	1225.00
.2515" to .8325"	582	99	1225.00
.2510" to 1.0000"	750	170	2350.00
.2515" to 1.0005"	750	170	2350.00
.5010" to .9160"	416	112	1550.00
.5015" to .9165"	416	112	1550.00
.5010" to 1.0000"	500	150	2150.00
.5015" to 1.0005"	500	150	2150.00
.6260" to 1.0000"	375	129	1875.00
.6265" to 1.0005"	375	129	1875.00
.7510" to 1.0000"	250	98	1695.00
.7515" to 1.0005"	250	98	1695.00

Please specify plus or minus tolerance when ordering.

CLASS ZZ REPLACEMENT PIN GAGES & ASSEMBLIES

Replacement Pins

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 page.

INCH	
Range	Price
.0040" to .0105"	$ 4.75
.0110" to .0605"	2.25
.0610" to .5005"	2.00
.5010" to .6255"	2.75
.6260" to .7505"	4.00
.7510" to .8325"	6.00
.8330" to .9165"	7.00
.9170" to 1.0005"	7.25
METRIC	
Range	Price
.20mm to 1.29mm	$ 2.75
1.30mm to 4.99mm	2.50
5.00mm to 9.99mm	2.50
10.00mm to 13.99mm	3.00
14.00mm to 16.49mm	4.00
16.50mm to 18.99mm	4.75
19.00mm to 20.99mm	6.25
21.00mm to 22.49mm	7.00
22.50mm to 23.99mm	8.00
24.00mm to 25.49mm	8.75

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		
Range	Price Single-End Assembly	Price Double-End Assembly
.0040" to .0750"	$ 8.00	$ 12.00
.0755" to .1800"	8.00	12.00
.1805" to .2810"	9.00	13.00
.2815" to .4060"	9.00	13.00
.4065" to .5100"	11.00	15.00
.5105" to .6350"	15.00	21.00
.6355" to .7600"	16.00	23.00
.7605" to .8320"	26.00	35.00
.8325" to 1.0005"	27.00	37.00
METRIC		
Range	Price	
.20mm to 1.90mm	$ 8.00	$ 13.00
1.92mm to 4.56mm	9.00	13.00
4.58mm to 7.14mm	9.00	14.00
7.16mm to 10.30mm	10.00	14.00
10.32mm to 12.94mm	12.00	17.00
12.96mm to 16.12mm	16.00	23.00
16.14mm to 19.30mm	18.00	26.00
19.32mm to 21.00mm	26.00	35.00
21.02mm to 22.40mm	27.00	37.00
22.42mm to 24.00mm	28.00	39.00
24.02mm to 24.49mm	29.00	40.00

Double End Assembly

Single End Assembly

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)
- 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

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

STOCKED

INCH	Price per piece			
Range	1	2-4	5-9	10-49
.0040” to .0150”	$15.50	$14.75	$13.50	$12.50
.0151” to .0300”	13.50	13.00	12.00	11.00
.0301” to .0750”	8.00	6.75	5.75	5.25
.0751” to .1800”	8.75	7.50	6.75	6.00
.1801” to .2810”	9.25	7.75	6.50	6.00
.2811” to .4060”	9.50	8.00	6.75	6.00
.4061” to .5100”	10.25	10.00	7.00	6.25
.5101” to .6350”	10.50	10.25	9.00	8.75
.6351” to .7600”	14.75	14.00	13.00	12.50
.7601” to 1.000”	15.75	15.00	13.75	13.50

Combine all sizes on any one order. For best quantity column pricing.

BULK PACKAGED	
Range	Price 50 & up pieces
.0040” to .0150”	$11.50
.0151” to .0300”	10.00
.0301” to .0750”	4.75
.0751” to .1800”	5.50
.1801” to .2810”	5.50
.2811” to .4060”	5.50
.4061” to .5100”	5.50
.5101” to .6350	8.00
.6351” tp .7600”	11.25
.7601” to 1.000”	12.25

Purchase more than 10 pieces of any one size with a total order of 50 pieces or more and really save. One Certificate of Accuracy Included for each size.

INCH	REVERSIBLE GAGE HANDLES			
	Single-End Handle		Double-End Handle	
Range	Handle No.	Price	Handle No.	Price
.0040” - .0750”	1WSE	$3.75	1WDE	$4.25
.0751” - .1800”	2WSE	4.25	2WDE	4.75
.1801” - .2810”	3WSE	4.75	3WDE	5.25
.2811” - .4060”	4WSE	5.25	4WDE	5.75
.4061” - .5100”	5WSE	7.25	5WDE	7.75
.5101” - .6350”	6WSE	9.75	6WDE	10.25
.6351” - .7600”	7WSE	10.75	7WDE	11.25
.7601” – 1.0100”	7WSE	17.25	7WDE	17.75
METRIC				
.10mm to1.90mm	1WSE	$3.75	1WDE	$4.25
1.91mm to 4.56mm	2WSE	4.25	2WDE	4.75
4.57mm to 7.14mm	3WSE	4.75	3WDE	5.25
7.15mm to 10.30mm	4WSE	5.25	4WDE	5.75
10.31mm to 12.94mm	5WSE	7.25	5WDE	7.75
12.95mm to 16.12mm	6WSE	9.75	6WDE	10.75
16.13mm to 19.30mm	7WSE	10.75	7WDE	11.25
19.31mm to 25.64mm	8WSE	17.25	8WDE	17.75

STOCKED

BUSHING PRICES	
Up to .5100”	$1.75
.5101” and Up	2.50

CALL
800-767-7633

CUSTOM REVERSIBLE PLAIN PLUG GAGES

Range	Tolerance Class	STEEL Price Member Only	STEEL Price Single-End Assembly	STEEL Price Double-End Assembly	CHROME Price Member Only	CHROME Price Single-End Assembly	CHROME Price Double-End Assembly	CARBIDE Price Member Only	CARBIDE Price Single-End Assembly	CARBIDE Price Double-End Assembly
	XX				CALL FOR PRICES					
.0040" to 0150"	X	$18.25	$23.50	$41.50						
.11mm to .38mm	Y	14.50	19.75	36.75						
	Z,ZZ	9.25	14.50	26.25						
	XX	38.00	43.00	83.00						
.0151" to .0300	X	16.75	22.00	38.00						
.39mm to .76mm	Y	13.50	18.75	34.75						
	Z,ZZ	8.50	13.75	24.75						
	XX	20.25	25.00	45.00	$27.00	$31.00	$59.00			
.0301" to .0750"	X	10.25	15.50	26.00	19.00	24.00	45.00	$26.75	$33.00	$61.75
.77mm to 1.91mm	Y	8.25	13.50	24.25	17.25	22.00	41.00	25.75	32.00	59.75
	Z,ZZ	5.25	10.50	18.25	14.00	19.00	35.00	25.25	31.50	58.75
	XX	21.25	27.00	50.00	28.00	33.00	63.00	34.75	40.75	77.75
.0751" to .1800"	X	10.00	15.75	27.00	22.50	28.00	52.00	25.50	32.25	59.75
1.92mm to 4.57mm	Y	8.00	13.75	24.25	21.00	26.00	49.00	24.75	31.50	58.25
	Z,ZZ	5.00	10.75	18.25	17.25	23.00	42.00	24.75	31.00	57.25
	XX	23.75	30.00	55.00	30.00	36.00	68.00	38.75	45.25	86.25
.1801" to .2810"	X	12.00	18.25	30.00	23.75	30.00	55.00	29.50	36.75	68.25
4.58mm to 7.14mm	Y	9.50	15.75	27.75	22.00	28.00	52.00	28.50	35.75	66.25
	Z,ZZ	6.00	12.25	20.75	17.75	24.00	43.00	28.00	35.25	65.25
	XX	25.00	31.00	58.00	33.00	39.00	74.00	45.00	52.00	99.25
.2811" to .4060"	X	12.50	19.25	31.25	26.25	33.00	61.00	36.25	44.00	82.25
7.15mm to 10.31mm	Y	10.00	16.75	29.25	24.00	30.00	56.00	33.75	41.50	77.25
	Z,ZZ	6.25	13.00	21.75	18.50	25.00	45.00	33.25	41.00	76.25
	XX	26.25	35.00	63.00	34.50	43.00	79.00	53.50	62.50	118.25
.4061" to .5100"	X	13.25	22.00	34.75	27.50	36.00	65.00	43.50	53.25	98.75
10.32mm to 12.95mm	Y	10.50	19.25	32.25	25.50	34.00	61.00	42.75	52.50	97.25
	Z,ZZ	6.75	15.50	24.75	20.25	29.00	51.00	42.25	52.00	94.25
	XX	29.50	41.00	73.00	36.50	48.00	87.00	74.00	87.00	163.75
.5101" .6350"	X	14.75	26.75	40.00	29.75	41.00	74.00	63.00	76.00	141.75
12.96mm to 16.13mm	Y	11.75	23.75	38.25	27.00	39.00	67.00	62.75	75.75	141.25
	Z,ZZ	7.50	19.50	29.75	21.75	33.00	58.00	62.00	75.00	139.75
	XX	30.00	43.00	75.00	39.00	52.00	93.00	100.00	114.00	216.75
.6351" to .7600"	X	18.75	31.75	49.75	33.00	46.00	81.00	86.75	100.75	190.25
16.14mm to 19.30mm	Y	15.00	28.00	45.75	28.75	41.00	71.00	86.25	100.25	189.25
	Z,ZZ	9.50	22.50	34.75	23.00	36.00	61.00	85.00	99.00	186.75
	XX	46.50	64.00	111.00	60.00	79.00	142.00	CALL FOR PRICES		
.7601" to 1.0100"	X	20.50	40.00	58.00	49.00	68.00	120.00			
19.31mm to 25.65mm	Y	16.25	35.75	54.25	45.00	64.00	112.00			
	Z,ZZ	10.25	29.75	42.25	40.00	59.00	102.00			

- 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 certification available at an additional charge

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

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

Unilateral Tolerance
GO – Plus Tolerance
NOGO – Minus Tolerance

Chrome Plated – Add 30%

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 gages for sizes below .105 diameter.

NOGO

GO

SIZE - RANGE	TOLERANCE CLASS	LENGTH	GO MEMBER	LENGTH	NOGO MEMBER	HANDLE NO.	PRICE
.1050" - .1500" 2.67mm - 3.81mm	Z	3/8" 9.5mm	$23.00	7/32" 5.6mm	$21.00	00	$8.00
	Y		27.00		24.00		
	X		32.00		29.00		
	XX		44.00		43.00		
.1501" - .2300" 3.82mm - 5.84mm	Z	13/32" 10.3mm	21.00	9/32" 7.1mm	18.00	0	8.00
	Y		26.00		24.00		
	X		32.00		27.00		
	XX		44.00		42.00		
.2301" - .3650" 5.85mm - 9.27mm	Z	3/4" 19.1mm	22.00	5/16 7.1mm	19.00	1	8.00
	Y		27.00		24.00		
	X		31.00		29.00		
	XX		39.00		43.00		
.3651" - .5100" 9.28mm - 12.95mm	Z	1" 25.4mm	23.00	3/8" 9.5mm	21.00	2	8.00
	Y		29.00		26.00		
	X		33.00		30.00		
	XX		45.00		44.00		
.5101" - .8250" 12.96mm - 20.96mm	Z	1 1/4" 31.8mm	24.00	1/2" 12.7mm	22.00	3	8.00
	Y		31.00		27.00		
	X		34.00		31.00		
	XX		42.00		39.00		
.8251" - 1.135" 20.97mm - 28.83mm	Z	1 1/2" 38.1mm	27.00	5/8" 15.9mm	25.00	4	9.00
	Y		32.00		29.00		
	X		39.00		34.00		
	XX		51.00		45.00		
1.1351" - 1.5100" 29.84mm - 38.35mm	Z	1 5/8" 41.3mm	32.00	3/4" 19.1mm	30.00	5	9.00
	Y		39.00		34.00		
	X		49.00		43.00		
	XX		55.00		51.00		

CUSTOM HEX PLUG GAGES

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 tolerances
- NIST traceable
- Tool Steel; 60/62 Rc (Cold Stabilized)
- Certificate of Accuracy included

CALL FOR PRICING
800-767-7633

PROGRESSIVE 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

CALL FOR PRICING
800-767-7633

TRILOCK PLUG GAGES

SIZE-RANGE	TOLERANCE CLASS	LENGTH	GO MEMBER	LENGTH	NOGO MEMBER	HANDLE NO.	HANDLE
.7600" - .9470" 19.30mm-24.05mm	Z	1-1/4 31.8mm	$26.00	3/4" 19.1mm	$24.00	2-1/2	$11.00
	Y		33.00		30.00		
	X		40.00		37.00		
	XX		49.00		43.00		
.9471" – 1.135" 24.06mm-28.83mm	Z	1 3/8" 34.9mm	29.00	3/4" 19.1mm	26.00	3-1/2	11.00
	Y		34.00		31.00		
	X		42.00		38.00		
	XX		50.00		46.00		
1.1351" – 1.510" 28.84mm-38.35mm	Z	1 1/2" 38.1mm	30.00	3/4" 19.1mm	27.00	4-1/2	12.00
	Y		38.00		36.00		
	X		47.00		41.00		
	XX		55.00		49.00		
1.5101" – 2.010" 38.36mm-51.05mm	Z	1 7/8" 47.6mm	46.00	7/8" 22.2mm	41.00	5-1/2	14.00
	Y		58.00		49.00		
	X		66.00		56.00		
	XX		81.00		72.00		
2.0101" – 2.510" 51.06mm-63.75mm	Z	2" 50.8mm	58.00	7/8" 22.2mm	50.00	6	15.00
	Y		71.00		61.00		
	X		82.00		73.00		
	XX		101.00		91.00		
2.5101" – 3.010" 63.76mm-76.45mm	Z	2" 50.8mm	67.00	1" 25.4mm	59.00	7	16.00
	Y		83.00		71.00		
	X		98.00		81.00		
	XX		118.00		102.00		
3.0101" – 3.510" 76.46mm-89.15mm	Z	2" 50.8mm	80.00	1" 25.4mm	69.00	7	16.00
	Y		96.00		82.00		
	X		104.00		96.00		
	XX		141.00		119.00		
3.5101" – 4.010" 89.16mm-101.85mm	Z	2 1/8" 54.0mm	94.00	1" 25.4mm	82.00	7	16.00
	Y		112.00		97.00		
	X		135.00		110.00		
	XX		165.00		137.00		
4.0101" – 4.510" 101.86mm-114.55mm	Z	2 1/8" 54.0mm	106.00	1" 25.4mm	90.00	7	16.00
	Y		128.00		111.00		
	X		151.00		125.00		
	XX		189.00		154.00		
4.5101" – 5.010" 114.56mm-127.25mm	Z	2 1/8" 54.0mm	135.00	1" 25.4mm	122.00	7	16.00
	Y		150.00		133.00		
	X		167.00		147.00		
	XX		217.00		174.00		
5.0101" – 5.510" 127.26mm-139.95mm	Z	2 1/8" 54.0mm	151.00	1" 25.4mm	135.00	7	16.00
	Y		168.00		150.00		
	X		187.00		163.00		
	XX		237.00		201.00		
5.5101" –6.010" 139.96mm-152.65mm	Z	2 1/8" 54.0mm	169.00	1" 25.4mm	150.00	7	16.00
	Y		189.00		175.00		
	X		206.00		189.00		
	XX		255.00		216.00		
6.010" – 6.510" 152.66mm-165.35mm	Z	2 1/8" 54.0mm	186.00	1" 25.4mm	163.00	7	16.00
	Y		207.00		190.00		
	X		224.00		203.00		
	XX		274.00		234.00		
6.511" – 7.010" 165.36mm-178.05mm	Z	2 1/8" 54.0mm	206.00	1" 25.4mm	187.00	7	16.00
	Y		227.00		207.00		
	X		245.00		219.00		
	XX		301.00		245.00		
7.011" – 7.510" 178.06mm-190.75mm	Z	2 1/8" 54.0mm	257.00	1" 25.4mm	216.00	7	16.00
	Y		273.00		239.00		
	X		289.00		250.00		
	XX		354.00		271.00		
7.511" – 8.010" 190.76mm-203.45mm	Z	2 1/8" 54.0mm	273.00	1" 25.4mm	241.00	7	16.00
	Y		304.00		275.00		
	X		313.00		288.00		
	XX		365.00		309.00		

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%

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

Quantity discounts available on identical units.

Larger diameters quoted on request

THREAD CHECK INC.

PLAIN RING GAGES

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 oxided 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 75% to XX prices for sizes up to 1.5101 inches.

Larger sizes priced on request.
Call for quantity discounts.

SIZE-RANGE	CLASS	STANDARD A.G.D. BLANK SIZE LENGTH/O.D.	STEEL	CHROME	CARBIDE
.040 in.	XX	#00 Blank	$139.00		$179.00
to .070 in.	X	3/16" 15/16"	125.00	N/A	162.00
1.02 mm	Y	4.8mm 23.8 mm	118.00		155.00
to 1.78 mm	Z		113.00		155.00
.0701 in.	XX	#00 Blank	110.00		172.00
to .150 in.	X	3/16" 15/16"	99.00	N/A	156.00
1.78 mm	Y	4.8mm 23.8mm	96.00		149.00
to 3.81 mm	Z		93.00.		149.00
.1501 in.	XX	#0 Blank	72.00	$87.00	155.00
to .230 in.	X	3/8" 15/16"	62.00	75.00	141.00
3.81 mm	Y	9.5mm 23.8mm	57.00	68.00	134.00
to 5.84 in.	Z		54.00	64.00	134.00
.2301 in.	XX	#1 Blank	75.00	90.00	133.00
to .365 in.	X	9/16" 1 1/8"	67.00	80.00	121.00
5.84 mm	Y	14.3mm 28.6mm	64.00	76.00	115.00
to 9.27 m	Z		60.00	72.00	115.00
.3651 in.	XX		76.00	91.00	138.00
to .510 in.	X	3/4" 1 3/8"	68.00	82.00	126.00
9.27 mm	Y	19.1mm 34.9mm	66.00	79.00	120.00
to 12.95 mm	Z		62.00	75.00	120.00
.5101 in.	XX	#3 Blank	81.00	98.00	155.00
to .825 in.	X	15/16" 13/4"	72.00	88.00	140.00
12.95mm	Y	23.8mm 44.4mm	68.00	83.00	134.00
to 20.96 mm	Z		65.00	77.00	134.00
.8251 in.	XX	#4 Blank	89.00	107.00	234.00
to 1.135 in.	X	1-1/8" 2 1/8"	78.00	94.00	213.00
20.96mm	Y	28.6mm 54.0mm	72.00	88.00	203.00
to 28.83mm	Z		69.00	84.00	203.00
1.1351 in.	XX	#5 Blank	100.00	121.00	275.00
to 1.510 in.	X	1 5/16" 2 1/2"	88.00	106.00	237.00
28.83mm	Y	33.3mm 63.5mm	80.00	97.00	222.00
to 38.35mm	Z		77.00	93.00	222.00
1.5101 in.	XX	#6 Blank	123.00	148.00	
to 2.010 in.	X	1 1/2" 4	114.00	137.00	
38.35mm	Y	38.1mm 101.6mm	109.00	131.00	
to 51.05mm	Z		100.00	121.00	
2.0101 in.	XX	#7 Blank	157.00	189.00	
to 2.510 in.	X	11/2" 4 1/2"	136.00	164.00	
51.05mm	Y	38.1mm 114.3mm	124.00	149.00	
63.75mm	Z		118.00	142.00	
2.5101 in.	XX	#8 Blank	182.00	219.00	
to 3.010 in.	X	1 1/2" 5"	161.00	193.00	
63.75mm	Y	38.1mm 127.00mm	142.00	170.00	
to 76.45mm	Z		136.00	164.00	
3.0101 in.	XX	#9 Blank	212.00	255.00	
to 3.510 in.	X	1 1/2" 5 1/2"	184.00	222.00	
76.45mm	Y	38.1mm 139.7mm	163.00	196.00	
to 89.15mm	Z		155.00	187.00	
3.5101 in.	XX	#10 Blank	242.00	291.00	
to 4.010 in.	X	1 1/2" 6 3/8"	210.00	252.00	
89.15mm	Y	38.1mm 161.9mm	192.00	231.00	
to 101.85 in.	Z		185.00	223.00	
4.0101 in.	XX	#11 Blank	271.00	326.00	
to 4.760 in.	X	1 1/2" 7 1/4"	241.00	290.00	
101.85mm	Y	38.1mm 184.2mm	216.00	260.00	
to 120.90mm	Z		210.00	252.00	
4.7601 in.	XX	#12 Blank	340.00	410.00	
to 5.510 in.	X	1 1/2" 8 1/4"	299.00	359.00	
120.90 mm	Y	38.01mm 209.6mm	271.00	326.00	
to 139.95mm	Z		248.00	298.00	

PLAIN RING GAGES

SIZE-RANGE	CLASS	STANDARD A.G.D. BLANK SIZE LENGTH/O.D.	STEEL	CHROME
5.5101 in.	XX	#13 Blank	$395.00	$475.00
to 6.260 in.	X	1 1/2" 9 1/4"	352.00	424.00
139.95mm	Y	38.1mm 235.0mm	332.00	399.00
to 159.00mm	Z		316.00	380.00
6.2601 in.	XX	#14 Blank	475.00	572.00
to 7.010 in.	X	1 1/2" 10 1/4"	444.00	534.00
159.00mm	Y	38.1mm 260.4mm	407.00	490.00
178.05mm	Z		390.00	470.00
7.0101 in.	XX	#15 Block	497.00	599.00
to 7.760 in.	X	1 1/2" 11 1/4"	467.00	562.00
178.05mm	Y	38.1mm 285.8mm	426.00	513.00
to 179.10mm	Z		407.00	490.00
7.7601 in.	XX	#16 Blank	573.00	689.00
to 8.510 in.	X	1 1/2" 12 1/4"	525.00	632.00
197.10mm	Y	38.1mm 311.2mm	482.00	580.00
to 216.15mm	Z		458.00	551.00
8.5101 in.	XX	#17 Blank	641.00	772.00
to 9.260 in.	X	1 1/2" 13 1/4"	604.00	728.00
216.15mm	Y	38.1mm 336.6mm	579.00	697.00
to 235.20mm	Z		563.00	678.00
9.2601 in.	XX	#18 Blank	743.00	894.00
to 10.010 in.	X	1 1/2" 14 1/4"	665.00	800.00
235.20mm	Y	38.1mm 362.0mm	614.00	739.00
to 254.25mm	Z		574.00	691.00
10.0101 in.	XX	#19 Blank	830.00	1074.00
to 10.760 in.	X	1 1/2" 15 1/4"	725.00	942.00
254.25mm	Y	38.1mm 387.4mm	655.00	850.00
273.30mm	Z		605.00	790.00
10.7601 in.	XX	#20 Blank	907.00	1178.00
to 11.510 in.	X	1 1/2" 16 1/4"	780.00	1034.00
273.30mm	Y	38.1mm 387.4mm	719.00	935.00
to 292.35mm	Z		719.00	935.00
11.1501 in.	XX	#21 Blank	1117.00	1453.00
to 12.260 in.	X	1 1/2" 17 1/4"	993.00	1291.00
292.35 mm	Y	38.1mm 438.2mm	915.00	1190.00
to 311.40mm	Z		915.00	1169.00
12.2601 in.	XX	#22 Blank	1240.00	
to 13.010 in.	X	1 1/2" 18 1/4"	1205.00	
311.40mm	Y	38.1mm 463.6mm	1145.00	
to 330.45mm	Z		1145.00	
13.0101 in.	XX	#23 Blank	1280.00	
to 13.760 in.	X	1 1/2" 19 1/4"	1220.00	
330.45mm	Y	38.1mm 489.0mm	1170.00	
to 349.50mm	Z		1170.00	
13.7601 in.	XX	#24 Blank	1325.00	
to 14.510 in.	X	1 1/2" 20 1/4"	1260.00	
349.50mm	Y	38.1mm 514.4mm	1198.00	
to368.55mm	Z		1198.00	
14.5101 in.	XX	#25 Blank	1385.00	
to 15.260 in.	X	1 1/2" 21 1/4"	1320.00	
368.55mm	Y	38.1mm 539.8mm	1260.00	
to 387.60mm	Z		1260.00	
15.2601 in.	XX	#26 Blank	1485.00	
to 16.010 in.	X	1 1/2" 22 1/4"	1408.00	
387.60mm	Y	38.1mm 565.2mm	1370.00	
to 406.65mm	Z		1370.00	

Larger sizes priced on request.

STOCKED

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

PLAIN RING HOLDERS
(Black Only)

#000.....$50.00
#0.....$50.00
#1.....$50.00
#2.....$50.00
#3.....$65.00
#4.....$65.00
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THREAD CHECK INC.

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Use MASTER SETTING DISCS to calibrate and set comparators, snap gages, and other precision measuring instruments. All master setting discs are furnished with insulating grips to prevent heat distortion. Master Setting Discs are designed to satisfy quality control traceability requirements.

Master setting discs are available in 3 styles. Unless otherwise specified, the gagemakers tolerances will be applied bilaterally – +/- 1/2 tolerance on styles-#1 and #3. Style #2 is a unilateral tolerance with minus on the GO and plus on the NOGO.

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

3 STYLES:

Styles 1 and 3 -
Bilateral tolerance +/– 1/2 tolerance.

Style 2-
Uniterlateral 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.

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.

Sizes available up to 23 inches in style #3.

Call Thread Check, Inc. at **800-767-7633** for pricing and delivery.

SIZE RANGE	CLASS	STEEL PRICE STYLE 1	STEEL PRICE STYLE 2	STEEL PRICE STYLE 3	CHROME PRICE STYLE 1	CHROME PRICE STYLE 2	CHROME PRICE STYLE 3
.150' - .230" 3.81mm-5.84mm	Y	$48.00	$80.00	$45.00	$62.00	$103.00	$58.00
	X	52.00	89.00	48.00	68.00	115.00	62.00
	XX	70.00	119.00	62.00	90.00	154.00	80.00
.2301" - .365" 5.84mm-9.27mm	Y	49.00	81.00	46.00	64.00	105.00	60.00
	X	54.00	90.00	49.00	70.00	117.00	64.00
	XX	71.00	120.00	62.00	92.00	155.00	81.00
.3651" - .510" 9.27mm-12.95mm	Y	50.00	85.00	47.00	65.00	111.00	68.00
	X	55.00	92.00	50.00	71.00	120.00	65.00
	XX	71.00	121.00	63.00	93.00	157.00	90.00
.5101" - .825" 12.95mm-20.96mm	Y	51.00	86.00	48.00	67.00	112.00	62.00
	X	56.00	93.00	51.00	72.00	121.00	67.00
	XX	72.00	122.00	67.00	93.00	158.00	87.00
.8251" – 1.135" 20.96mm-28.83mm	Y	59.00	100.00	52.00	77.00	129.00	68.00
	X	60.00	102.00	56.00	78.00	133.00	72.00
	XX	77.00	136.00	74.00	96.00	177.00	95.00
1.1351" – 1.510" 28.83mm-38.35mm	Y	60.00	102.00	54.00	78.00	132.00	70.00
	X	65.00	113.00	59.00	84.00	147.00	77.00
	XX	82.00	149.00	78.00	110.00	194.00	98.00
1.5101" – 2.010" 38.35mm-51.05mm	Y	65.00	115.00	60.00	84.00	150.00	78.00
	X	74.00	126.00	69.00	97.00	164.00	89.00
	XX	100.00	167.00	87.00	130.00	217.00	112.00
2.0101" –2.510" 51.05mm-63.75mm	Y	77.00	128.00	69.00	100.00	167.00	89.00
	X	84.00	147.00	81.00	110.00	191.00	105.00
	XX	118.00	199.00	109.00	145.00	258.00	139.00
2.5101" – 3.010" 63.75mm-76.45mm	Y	87.00	147.00	78.00	113.00	191.00	85.00
	X	103.00	170.00	90.00	134.00	221.00	117.00
	XX	129.00	229.00	114.00	162.00	297.00	158.00
3.0101" – 3.510" 76.45mm-89.15mm	Y	100.00	177.00	89.00	129.00	230.00	115.00
	X	113.00	202.00	106.00	147.00	263.00	138.00
	XX	148.00	270.00	140.00	193.00	350.00	182.00
3.5101"-4.010" 89.15mm-101.85mm	Y	113.00	197.00	103.00	152.00	256.00	134.00
	X	129.00	229.00	121.00	175.00	297.00	157.00
	XX	174.00	289.00	148.00	234.00	376.00	192.00
4.0101" – 4.510" 101.85mm-114.55mm	Y	129.00	224.00	117.00	175.00	291.00	152.00
	X	148.00	250.00	128.00	200.00	324.00	167.00
	XX	196.00	316.00	162.00	264.00	410.00	211.00
4.5101" – 5.010" 114.55mm-127.25mm	Y	148.00	245.00	127.00	200.00	318.00	165.00
	X	167.00	269.00	143.00	225.00	350.00	186.00
	XX	220.00	337.00	172.00	297.00	438.00	224.00
5.0101"- 5.510" 127.25mm-139.95mm	Y	167.00	272.00	141.00	225.00	353.00	183.00
	X	184.00	297.00	154.00	249.00	386.00	200.00
	XX	240.00	364.00	178.00	323.00	473.00	231.00
5.5101" – 6.010" 139.95mm-152.65mm	Y	184.00	308.00	158.00	249.00	400.00	205.00
	X	202.00	330.00	172.00	271.00	429.00	224.00
	XX	256.00	424.00	188.00	346.00	551.00	244.00
6.0101" – 6.510" 152.65mm-165.35mm	Y	205.00	341.00	173.00	276.00	443.00	225.00
	X	224.00	367.00	189.00	303.00	477.00	246.00
	XX	278.00	430.00	219.00	376.00	559.00	285.00
6.5101" – 7.010" 165.35mm-178.05mm	Y	224.00	363.00	181.00	303.00	472.00	235.00
	X	242.00	388.00	198.00	326.00	505.00	257.00
	XX	298.00	437.00	224.00	402.00	568.00	291.00
7.0101" - 7.510" 178.05mm-190.75mm	Y	260.00	384.00	199.00	350.00	499.00	258.00
	X	277.00	409.00	213.00	374.00	532.00	276.00
	XX	388.00	463.00	240.00	524.00	602.00	312.00
7.5101" – 8.010" 190.75mm-203.45mm	Y	293.00	424.00	217.00	396.00	551.00	282.00
	X	314.00	448.00	232.00	423.00	582.00	301.00
	XX	367.00	491.00	257.00	496.00	638.00	334.00

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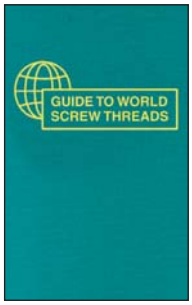

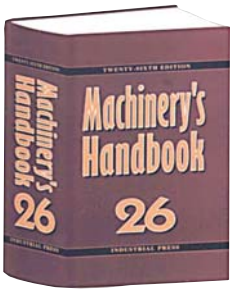

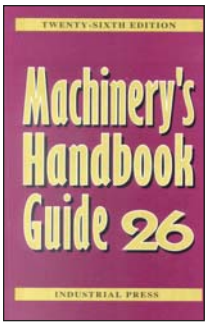

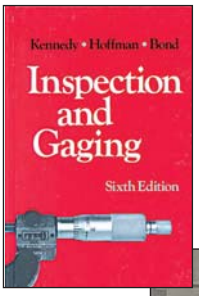

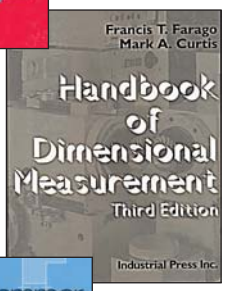

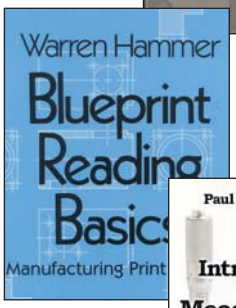

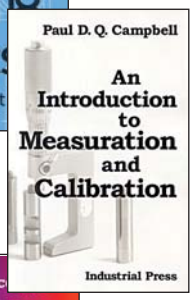

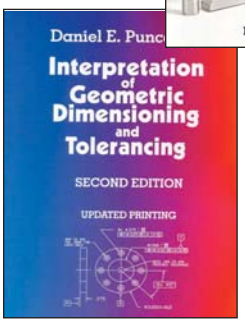

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CALIBRATION PROCEDURES FOR THREAD RING GAGES

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

Nominal Size & T.P.I	Basic Dimensions for L1 Plug Gages, NPTF											Basic Dimensions for L3 Plug Gages									
	Basic Length L1	Small End		Basic Dim. at L1 Plane		Min. Range		Basic Range		Max. Range		Basic Length L1+L3	Small End		Four Thread L3+p	Min. Range		Basic Range		Max. Range	
		Pitch Dia.	Major Dia.	Pitch Dia.	Major Dia.	Min. Step 1 L1-p	Max. Step 2 L1-1/3p	Min. Step 2 L1-1/3p	Max. Step 3 L1+1/3p	Min. Step 3 L1+1/3p	Max. Step 4 L1+p		Pitch Dia.	Major Dia.		Min. Step 1 L1+L3-p	Max. Step 2 L1+L3-1/3p	Min. Step 2 L1+L3-1/3p	Max. Step 3 L1+L3+1/3p	Min. Step 3 L1+L3+1/3p	Max. Step4 L1+L3p+p
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	.49163	.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
1-11½	.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
1¼-11½	.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
1½-11½	.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
2-11½	.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

Nominal Size & T.P.I	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					
	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

Nominal Size & T.P.I.	Basic Dimensions for L1 Ring Gages									Basic Dimensions L2 Ring Gages								
	Basic Length L1	Large End		Maximum Range		Basic Range		Minimum Range		Basic Length L2	Large End		Maximum Range		Basic Range		Minimum Range	
		Pitch Dia.	Minor Dia.	Max. Step1 (L1- p)	Min. Step 2 (L1-1/3p)	Max. Step 2 (L1-1/3p)	Min. Step 3 (L1+1/3p)	Max. Step 3 (L1+1/3p)	Min. Step 4 (L1+p)		Pitch Dia.	Minor Dia.	Max. Step 1 L2 - p	Min. Step 2 L2-1/3p	Max. Step 2 L2-1/3p	Min. Step 3 L2+1/3p	Max. Step 3 L2+1/3p	Min. 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

Nominal Size & T.P.I	Basic Dimensions for Crest Check Ring Gages							Ring Diameter	Minor Dia. at L2 length from end of pipe Basic thread with Min. Trunc. D	Basic Dimensions for Root Check Ring Gages						
	Major Dia. at L2 Basic Thread with Max. Trunc. D	Basic Pipe Thread		Min. Thread		Max. Thread				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				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

Threads per inch	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"
80	.0001	.00015				.0003	.0003		20'	.0001	.00015
72	.0001	.00015				.0003	.0003		20'	.0001	.00015
64	.0001	.00015				.0003	.0004		20'	.0001	.00015
56	.0001	.00015	.0002			.0003	.0004		20'	.0001	.00015
48	.0001	.00015	.0002			.0003	.0004		18'	.0001	.00015
44	.0001	.00015	.0002			.0003	.0004		15'	.0001	.00015
40	.0001	.00015	.0002			.0003	.0004		15'	.0001	.00015
36	.0001	.00015	.0002			.0003	.0004		12'	.0001	.00015
32	.0001	.00015	.0002	.00025	.0003	.0003	.0005	.0007	12'	.0001	.00015
28	.0001	.00015	.0002	.00025	.0003	.0005	.0005	.0007	8'	.00015	.00015
27	.0001	.00015	.0002	.00025	.0003	.0005	.0005	.0007	8'	.00015	.00015
24	.0001	.00015	.0002	.00025	.0003	.0005	.0005	.0007	8'	.00015	.00015
20	.0001	.00015	.0002	.00025	.0003	.0005	.0005	.0007	8'	.00015	.00015
18	.0001	.00015	.0002	.00025	.0003	.0005	.0005	.0007	8'	.00015	.00015
16	.0001	.0002	.00025	.0003	.0004	.0006	.0006	.0009	8'	.00015	.00015
14	.00015	.0002	.00025	.0003	.0004	.0006	.0006	.0009	6'	.0002	.0002
13	.00015	.0002	.00025	.0003	.0004	.0006	.0006	.0009	6'	.0002	.0002
12	.00015	.0002	.00025	.0003	.0004	.0006	.0006	.0009	6'	.0002	.0002
11½	.00015	.0002	.00025	.0003	.0004	.0006	.0006	.0009	6'	.0002	.0002
11	.00015	.0002	.00025	.0003	.0004	.0006	.0006	.0009	6'	.0002	.0002
10		.0002	.00025	.0003	.0004		.0006	.0009	6'		.00025
9		.0002	.00025	.0003	.0004		.0007	.0011	6'		.00025
8		.0002	.00025	.0003	.0004		.0007	.0011	5'		.00025
7		.0002	.00025	.0003	.0004		.0007	.0011	5'		.0003
6		.0002	.00025	.0003	.0004		.0008	.0013	5'		.0003
5			.00025	.0003	.0004		.0008	.0013	4'		.0003
4½			.00025	.0003	.0004		.0008	.0013	4'		.0003
4			.00025	.0003	.0004		.0009	.0015	4'		.0003

X TOLERANCE

Threads per inch	PITCH DIAMETER					MAJOR & MINOR		LEAD
	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
80	.0002					.0003		30'	.0002
72	.0002					.0003		30'	.0002
64	.0002					.0004		30'	.0002
56	.0002	.0003				.0004		30'	.0002
48	.0002	.0003				.0004		30'	.0002
44	.0002	.0003				.0004		20'	.0002
40	.0002	.0003				.0004		20'	.0002
36	.0002	.0003				.0004		20'	.0002
32	.0003	.0004	.0005	.0006		.0005	.0007	15'	.0003
28	.0003	.0004	.0005	.0006		.0005	.0007	15'	.0003
27	.0003	.0004	.0005	.0006		.0005	.0007	15'	.0003
24	.0003	.0004	.0005	.0006		.0005	.0007	15'	.0003
20	.0003	.0004	.0005	.0006		.0005	.0007	15'	.0003
18	.0003	.0004	.0005	.0006		.0005	.0007	10'	.0003
16	.0003	.0004	.0006	.0008		.0006	.0009	10'	.0003
14	.0003	.0004	.0006	.0008		.0006	.0009	10'	.0003
13	.0003	.0004	.0006	.0008		.0006	.0009	10'	.0003
12	.0003	.0004	.0006	.0008		.0006	.0009	10'	.0003
11	.0003	.0004	.0006	.0008		.0006	.0009	10'	.0003
10	.0003	.0004	.0006	.0008		.0006	.0009	10'	.0003
9	.0003	.0004	.0006	.0008		.0007	.0011	10'	.0003
8	.0004	.0005	.0006	.0008		.0007	.0011	5'	.0004
7	.0004	.0005	.0006	.0008		.0007	.0011	5'	.0004
6	.0004	.0005	.0006	.0008		.0008	.0013	5'	.0004
5		.0005	.0006	.0008		.0008	.0013	5'	.0004
4¼		.0005	.0006	.0008		.0008	.0013	5'	.0004
4		.0005	.0006	.0008		.0009	.0015	5'	.0004

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 12.600"	.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
165.35mm 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

THREAD CHECK INC.

STANDARD INCH PITCH DIAMETERS

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

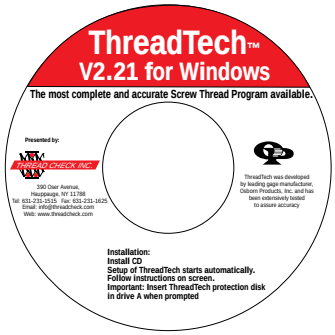
Standard Inch Pitch Diameters

No. or Fracs.	Decimal Size	TPI		Thread Work Plugs Go Basic	2B Hi	3B Hi	Thread Rings & Setting Plugs Class 3A Go	3A Lo	2A Go	2A Lo	No. or Fracs.	Decimal Size	TPI		Thread Work Plugs Go Basic	2B Hi	3B Hi	Thread Rings & Setting Plugs Class 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

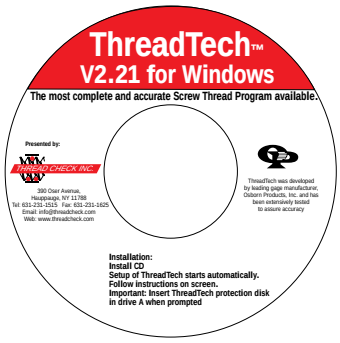


ThreadTech™V2.21 for Windows. The most complete and accurate screw thread program. See back cover.

THREAD CHECK INC.

ThreadTech V2.21™

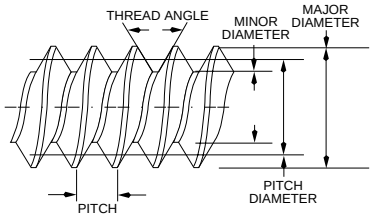
A complete and accurate screw thread program



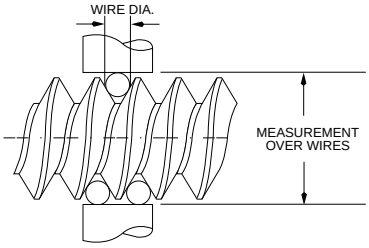
ThreadTech v2.21 for Windows provides data on pitch diameters, minor diameters, gage data, part data, tap data, helix angles, tolerances, crest and root flats, wire sizes, constants and just about anything on threads one would like to know.

ThreadTech v2.21 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
- Aysymetric Threads



SCREW THREAD NOTATION



THREE-WIRE METHOD

The computer program prompts the user with question 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. v2.21 runs on Windows 95, 98, NT, ME, 2000 and XP. Free unlimited technical support is provided.

MADE IN USA

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

 Catalog Number 21668

Designed and Produced by William A. Discount, Hauppauge, NY