

GAGEMAKER CATALOG



PRODUCT INFORMATION

APPLICATION SOFTWARE
CALIBRATION EQUIPMENT
THREAD MEASUREMENT
PREMIUM CONNECTION GAGES



MIC TRAC
MEASUREMENT CENTER
MT-3000

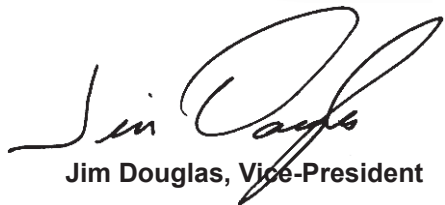
We would like to thank you for taking the time to view our new catalog. It contains many new features and products. We hope this catalog will provide you with the necessary information to familiarize yourself with all of our products, as well as, making it easier to find the best product for you.

Our new catalog is an example of Gagemaker's continued commitment to adapt and improve not only our product, but the industry as a whole. Gagemaker's dynamic innovation and unparalleled products will continue to push the boundaries of the gage calibration industry.

We appreciate your business and hope you continue your patronage with us for all of your gaging and calibration needs.

Thank you,


Nita T. Frank, President


Jim Douglas, Vice-President

Gagemaker LP is a Houston-based manufacturer of precision mechanical inspection equipment for the Quality Control industry. We have provided quality gaging equipment to the oilfield, automotive and general machining industries since 1982.

At Gagemaker, we do more than simply provide quality products. Our MRP gage and other products revolutionized the tapered thread industry. Our designs allow for more accurate dimensions of tubular connections, which aided the development of torque and turn measurements. Plus, our gages provide superior inspection to comparable ring and plug gages.

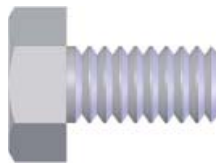
Gagemaker is recognized as a leader in the fields of:

- **Application Software (pg. 3)**
- **Calibration Equipment (pg. 7)**
- **Thread Measurement (pg. 13)**
- **Premium Connection Gages (pg. 35)**

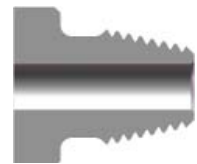
Gagemaker markets and sells our products to over 35 countries around the world. Our employees pride themselves on problem solving and continuous product improvement. The result of these efforts is supplying customers with the best products and service possible.

Gagemaker's catalog provides a detailed listing of our products. The final page (pg. 47) of this catalog offers an index to help with your search.

As you browse through this book, you will find we are a complete source for all your quality gaging needs. If you would like pricing information, please contact Gagemaker directly or any of our authorized distributors.



**STRAIGHT
THREADS**



**TAPERED
THREADS**

The icons above are used throughout the catalog to indicate if a product is designed for straight or tapered threads. You will find the icons at the top of the page or adjacent to the section header. If a product can be used for both straight and tapered threads, both icons will appear. If no icon appears, then the products which follow are for neither tapered nor straight threads.

Some sections are predominantly one type, but have a few of the other type interspersed. Consequently, these sections are labeled at their header with the primary icon, while the differing individual products will be designated with their proper, respective icon. (ex. see pg. 23).

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Application Software



Gagemaker offers both first-rate engineering and calibration application software. Our field-tested, user-friendly software will aid you in your business.

Thread Disk for Windows (TDWIN) is our flagship engineering software package. TDWIN quickly and precisely calculates critical dimensions for your threaded devices. It includes the latest ANSI formulas, tabled gage dimensions and tolerances. The interface is extremely user-friendly and simplified for any user.

TDWIN II Taper is the tapered thread version of our Thread Disk for Windows. Just as easy and reliable as the original, TDWIN II Taper instantly generates critical dimensions for tapered threads.

CERTIFI is our premier gage calibration software. It easily integrates with both our MIC TRAC calibration center and our TDWIN software to allow for an accurate, reliable, and streamlined engineering or calibration process. CERTIFI has exclusive permission to utilize the Gagemaker's latest version of TDWIN Thread Disk Software for Windows.





THREAD DISK FOR WINDOWS SOFTWARE STRAIGHT THREAD DIMENSIONS



The Thread Disk for Windows engineering software calculates critical dimensions for threads based on ANSI tables and formulas. Thread types supported by the program include: UN, UNJ and UNR Series, ACME, Stub ACME, Stub ACME Modified I and II, Metric M & MJ, 7 X 45 Buttress, and General Purpose Pipe Threads.

To generate critical dimensions instantly, enter basic thread information on the Thread Type Entry screen, such as: thread type, thread class, nominal diameter, and threads per inch. Once the results are computed, tabs at the bottom of the program allow selection of several types of calculated information, including dimensions and tolerances for product threads, ring gages, set plugs, plug gages or Gagemaker's Thread Diameter gages.

If measuring internal and external shallow taper diameters is a problem, the Ball Mic SET DIM Tool provides setting dimensions for ball micrometers or Gagemaker's BX-1000 groove gage. The program calculates ball mic settings for any tapered surface geometry.

Other features of the program include the ability to print thread dimension reports, providing a paper copy of any calculation. These reports provide the same critical dimensions that display in the program. A multiple calculation window capability is a feature that allows performing several different thread calculations at the same time. Also, online help is available to answer any questions about the program.

System Requirements

- Windows 95 or higher
- 64 MB RAM
- 3 MB of free hard disk space
- CD ROM drive

Features

- Uses ANSI tables, formulas, and tolerances
- Calculates standard and non-standard product thread diameters from 0.00" to 99.8"
- Calculates ANSI ring and plug gage dimensions
- Addresses pitches from 1 to 80
- Calculates Gagemaker style thread gage setting dimensions
- Provides immediate answers to program questions in online help

TDWIN Thread Disk for Windows Software

Model	Description
TDWIN	Thread Disk for Windows software
TDWIN-LIC5	Floating site license agreement, 5 users
TDWIN-LIC10	Floating site license agreement, 10 users
TDWIN-RP	Replacement Disk for TDWIN
TDWIN-UP	Upgrade to TDWIN from TD-100, version 4.2.2

THREAD DISK FOR WINDOWS SOFTWARE 2 TAPER TAPERED THREAD DIMENSIONS

TDWIN 2 TAPER

COMING 2009!

The **TDWIN 2 Taper** engineering software calculates critical dimensions for tapered oilfield threads based on API and Industry standards. Now, everything you need to machine, inspect, and document tapered oilfield threads is located in one convenient resource. The **TDWIN 2 Taper** program brings the same ease of use and valuable information to tapered threads that Gagemaker's **TDWIN** program provides for straight threads.

From the opening screen, simply select the subject you wish information for, Rotary Shouldered Connections, Tubing and Casing Connections, Crossover Connections, or String Data. From the Rotary Shouldered Connection screen you pick your connection type, connection size, and chose either a box or pin connection. The Crossover Connection screen lets you choose the connection type for each end. You can mix Rotary Shoulder and Tubing and Casing selections, and choose either box or pin for each end.

Taper oilfield connection types supported by the program include the following: 8-Round, 10-Round, 11½ Line Pipe, Acme, Acme Streamline, API Full Hole, API Regular, API Numbered Connections, Buttress, Double Streamline, External Flush, H-90, Internal Flush, P.A.C, Open Hole, Slim Hole, Slim Line H-90, USS Buttress, and X Hole.

System Requirements

- Windows 2000 with Service Pack 4 or higher, Windows XP with Service pack 1 (SP1) or higher, Windows Vista Home Premium, Business, or Ultimate (certified for 32 bit editions)
- 256 MB of RAM
- 600 MB of hard-disk space
- CD ROM drive
- 800 x 600 or higher resolution

Features

- Uses API and industry standard tables, formulas, and tolerances
- Print dimensional reports and inspection sheets
- Print product blueprints for manufacturing and inspection
- Provides gages configurations, setting standards, and contact point information

TDWIN 2 Taper Thread Disk for Windows Software

Model	Description
TDWIN-2-Taper	Thread Disk for Windows Software for Tapered Threads
TDWIN-2-Taper-LIC5	Floating site license agreement, 5 users
TDWIN-2-Taper-LIC10	Floating site license agreement, 10 users



VISIT GAGEMAKER.COM

Check out <http://www.gagemaker.com> for more information on our new thread disk product due for release in 2009. Come see why GAGEMAKER continues to be the industry leader.





CALIBRATION SOFTWARE

CERTIFI

CERTIFI is a gage calibration software program that integrates the MIC TRAC Calibration center with a calibration report writer, a certificate writer, and a recall database. It integrates with the TDWIN thread calculation software to automate calibration of your ring and plug gages. It provides full traceability and work as a standalone or enterprise-wide network version.

CERTIFI interfaces with your computer USB port to quickly import measurements taken from Gagemaker's calibration and measurement equipment (MT-4000 and MT-4000 w/ Force-Lok) directly into the CERTIFI calibration certificate. Also, CERTIFI receives other measurement equipment data via the RS-232 input. Direct numerical input eliminates mistakes from typing in the measured values via the numerical keypad.

CERTIFI eliminated the multi-page (next, next, next, next) user interface, thereby simplifying it down to a single-page calibration report. Pull down drop boxes allow information to be received from the Microsoft MSDE database. This allows new entries to be added to the base by simply typing in the field and clicking the enter button.

Features

- Calibration Reports
- Imports Calspex, Gagemaker information
- TDWIN Thread Disk Software
- CERTIFI Digital Readout Data
- Gage Tracking Usage/Part sent out to Customers
- MSDE Database Microsoft, Single user or Network users

Model	Description
CERTIFI	• A single-user version ships with a pre-defined set of "Gage Types." • A network version for multiple users is also available. • Gage Types provide necessary information to calibrate a specific kind of gage. • Existing calibration procedures and practices can be modified to each gage type.
MT-4-USB w/ Readout	• Digital readout software module with digital data acquisition card. Includes the MT-4-USB data card and the digital display readout software module. • Interfaces the MT-4000 measurement center with the CERTIFI calibration software. Directly imports data from the MIC TRAC to the calibration software via USB Interface or RS-232. • Computer with CERTIFI software and a MT-4000 MIC TRAC required

Calibration Equipment



The MIC TRAC's proven accuracy is the perfect choice for calibration of ring and plug gages.

The MIC TRAC is available in two different base models, the MT-3000 and the MT-4000. The MT-3000 is our original hand gage presetter. The MT-4000 is our premium high resolution calibration unit. For greater flexibility and cost savings, we also offer a variety of MIC TRAC packages. Also, training for use of the MIC TRAC is available.

Gagemaker also offers an extensive range of accessories and fixtures which expand the MIC TRAC's capabilities. These fixtures attach to the MIC TRAC to hold gages during calibration. CAL-PAK is a collection of several of our most popular precision fixtures.

Gagemaker's MIC TRAC calibration equipment and CERTIFI Software are used throughout the calibration industry. They are effortlessly linked together via a computer USB port, which allows the easy download of calibration measurements into the CERTIFI database.

Customers who have implemented an in-house calibration system with the MIC TRAC and CERTIFI not only realize a substantial savings, but achieve greater control over the inspection of their gauging equipment.





PRECISION GAGE CALIBRATION SYSTEM MIC TRAC PACKAGE

This package features the MIC TRAC/MT-4000 as a precision calibration system. The system accepts fixtures that inspect and calibrate a wide range of gage diameters and thread pitches. The package includes all the equipment necessary to calibrate precision handheld gages. Ring and plug inspection requires the purchase of additional accessories.

Package includes:

- MT-4012-10 MIC TRAC electronic adjustable measurement master, range 0" to 12". Base unit is segmentally linear error corrected to an accuracy of ± 0.00005 ", resolution $.00001$ ", travel 12.000"
- Ultra precision scale with 1.00" travel, accuracy ± 0.00002 ", and resolution $.00001$ ".
- Dell® desktop computer with CERTIFI Calibration Software. CERTIFI produces calibration reports, has a recall database, and a digital readout acquisition module. Network compatible. (MT-4-USB)
- CRC MT-4000 Calibration Reference card set- procedures documenting calibrations with the Gagemaker system
- TF-2R: Carbide anvil set, $\frac{3}{8}$ " diameter
- TF-XYT: Adjustable X, Y & tilt support table for use with the MIC TRAC
- CAL-PAK: Assortment of fixtures designed to hold gages for calibration
- TDWIN Thread Disk for Windows® software program: provides critical thread dimensions for manufacturing and inspection of UN, ACME, Stub ACME, Metric, Buttress, and NPT threads.
- Torque wrench, 50 in. lb.
- AWH-100 bench-top tool holder with wrenches
- Reusable shipping container

Model	Description	Range
PGC-12-W2	Precision Calibration Package	0" - 12"

ADDITIONAL PACKAGES & CALIBRATION ACCESSORIES

The following base units and accessories for larger requirements are available options to the standard MIC TRAC Package above.

Model	Description	Range
PGC-24-W2	Precision Calibration Package with MT-4024-10 MIC TRAC	0" - 24"
PGC-36-W2	Precision Calibration Package with MT-4036-10 MIC TRAC	0" - 36"
PGC-48-W2	Precision Calibration Package with MT-4048-10 MIC TRAC	0" - 48"

MIC TRAC PACKAGE TRAINING OPTIONS

We also offer expert-led training for our precision gage calibration systems at your location or at our facility. Please contact customer service for more information.

PGC-__-W2 Training Options:	Option A: Training at customer's facility (per day, plus airfare)
	Option B: Training at Gagemaker's facility (per day, per person)

MT-4000 BASE UNITS WITH EXTENDED SOFTWARE FUNCTIONS

A MIC TRAC 4000 base unit supplied only with digital readout software with extended functions, desktop computer, TF-2R setting blocks, and shipping carton.

Model	Description	Accuracy	Resolution	Range
MT-4012-10	MIC TRAC Base Unit	± 0.00002 "	$.00001$ "	0" - 12"
MT-4024-10	MIC TRAC Base Unit	± 0.00002 "	$.00001$ "	0" - 24"
MT-4036-10	MIC TRAC Base Unit	± 0.00002 "	$.00001$ "	0" - 36"
MT-4048-10	MIC TRAC Base Unit	± 0.00002 "	$.00001$ "	0" - 48"

PRECISION CALIBRATION SYSTEM ACCESSORIES

Gagemaker provides various accessories to expand the functionality of the MIC TRAC base unit. Some of the following are included in a MIC TRAC package, but they are also available individually.

Model	Description
AWH-100	Allen wrench holder with wrenches
CERTIFI	CERTIFI report writer, database and digital readout software.
CRC-MT4000	Complete procedural documentation for the calibration of handheld inspection equipment including: O.D. & I.D. micrometers, calipers, depth micrometers, ring and plug gages, and more.
MT-4-USB	Digital readout software
TDWIN	Thread Disk for Windows software for calculating critical setting dimensions for threads. Includes UN Series, ACME, Stub ACME, ISO Metric, and 7° X 45° Buttress thread forms.
TF-2R	3/8" diameter carbide anvil set
TF-SB	Adjustable height support table
TF-SB-1	Bearing rail support base
TF-XYT	Adjustable height support table, X-axis & Y-axis support base
TW-50	50 in-lb torque wrench with 5/32" hex wrench adapter

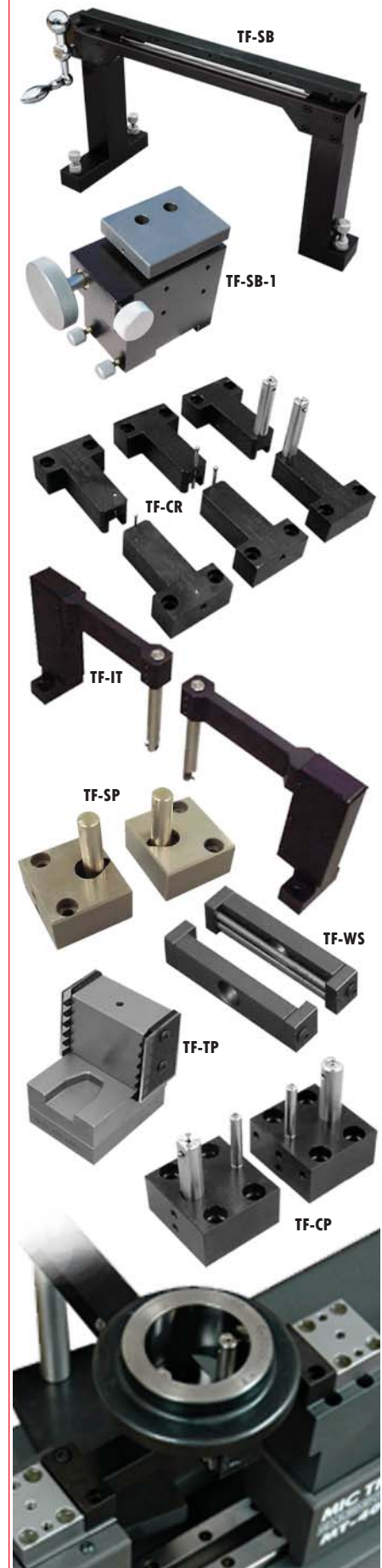
CYLINDRICAL RING & THREAD RING AND PLUG GAGE ACCESSORIES

TF-1F	Flat face setting blocks
TF-CP	Ball contact holders, .500 ID measurement
TF-CR	Set of 3 fixtures for measuring cylindrical ring gages and bores. CR-1 (.170"-.230"), CR-2 (.250"-.875"), CR-3 (.880"-Larger)
TF-IT	Internal threaded ring arm P.D. module (for solid threaded ring gages). Contains ball contacts and holders for 6, 8, 10, 12, 14, 16, 18, and 20 pitch 60° threads (Diameter range 1.500" & Larger).
TF-SP-5	For vertically holding gage pins .062 - .500
TF-SP-75	For vertically holding gage pins .062 - .750
TF-TP	Calibration fixture for NPT, NPTF and ANPT tapered plug gages (includes wire for 27, 18, 14, and 11 1/2 pitch threaded plugs). (Requires TF-2R blocks)

INDIVIDUAL THREAD WIRE HOLDER MODULES FOR UN, ACME AND METRIC THREADS

All are to be used on TF-2R Blocks. All are supplied with one set of wires. Please specify pitch required. "___" denotes pitch, ex. TF-WHV-12 = 60° thread wire holder module with wires 12 pitch.

TF-WHV-___	60° thread wire holder module with your choice of wires. Please select one pitch from the following range: 5 pitch to 48 pitch
TF-WHV-___	60° thread wire holder module with your choice of wires. Please select one pitch from the following range: 1 pitch to 4 pitch or 56 pitch to 72 pitch
TF-WHA-___	29° thread wire holder module with your choice of 2 pitch or 3 pitch wires
TF-WHA-___	29° thread wire holder module with your choice of wires. Please select one pitch from the following range: 4 pitch to 20 pitch
TF-WHM-___	Metric thread wire holder module with your choice of wires. Please select one pitch from the following range: 0.5 mm pitch to 0.8 mm pitch or 5 mm pitch to 6 mm pitch
TF-WHM-___	Metric thread wire holder module with your choice of wires. Please select one pitch from the following range: 1.0 mm pitch to 4.5 mm pitch
TF-WSV	Thread wire holder Set. Contains wires and holders for 6, 8, 10, 12, 14, 16, 18, 20, 24, 28 and 32 pitch 60° threads.
TF-WSA	Thread wire holder Set. Contains wires and holders for 4, 5, 6, 8, 10, 12, 14 and 16 pitch ACME 29° threads.
TF-WSM	Thread wire holder set. Contains wires and holders for .5, .6, .75, 1.0, 1.25, 1.5, 2.0, 3.0, 4.0 and 5.0 pitch metric 60° threads.
TF-WH-___	Wire holder only

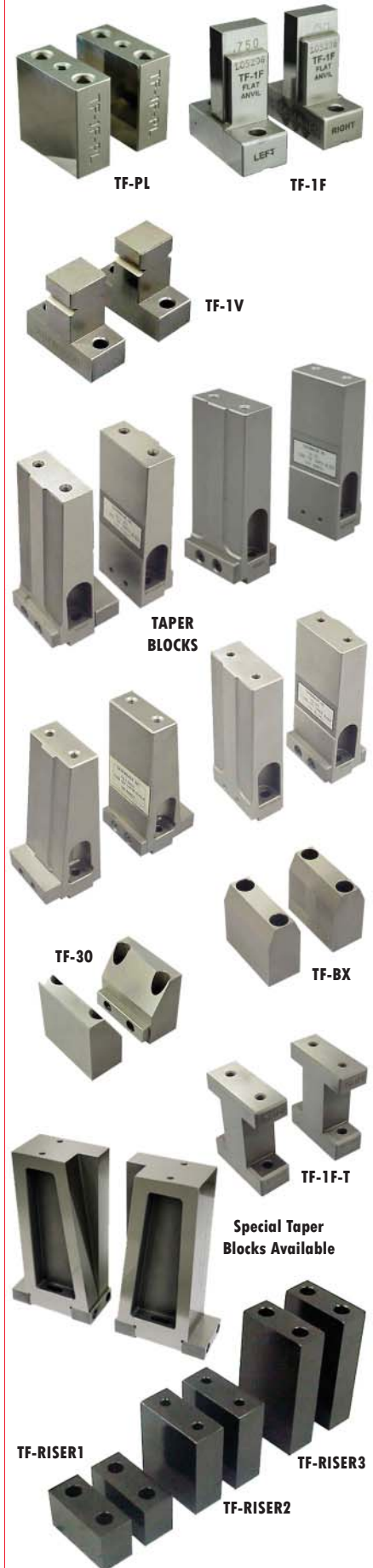




MIC TRAC SETTING BLOCKS

The MIC TRAC 3000 setting blocks are replaceable anvils that have an accurate taper ground into the gauging surfaces. The setting blocks are supplied in sets of 2 and mount on the MIC TRAC 3000 receiver blocks.

Model	Description
SHALLOW TAPERED CYLINDER SETTING BLOCKS (2 Block Sets) (BX-1000)	
TF-10	Tapered Setting Blocks 10° half angle
TF-15	Tapered Setting Blocks 15° half angle
TF-20	Tapered Setting Blocks 20° half angle
TF-30	Tapered Setting Blocks 30° half angle
TF-45	Tapered Setting Blocks 40° half angle
SPECIAL PURPOSE SETTING BLOCKS	
TF-.5F	Flat Face Setting Blocks (1.000" outside dim.)
TF-1F	Universal flat face setting / measuring blocks (1.500" outside dim.)
TF-PL	Flat Face Setting Blocks, No taper (supplied with MIC TRAC)
API 6A RING GROOVE SETTING BLOCKS	
TF-BX	23° angled face setting blocks (2 per set)
THREAD GAGE SETTING BLOCKS	
TF-1V	1-5 pitch 60° "V" thread setting blocks (2 per set)
TF-2V	6-20 pitch 60° "V" thread setting blocks (2 per set)
TUBING AND CASING TAPER SETTING BLOCKS	
TF-STR	Straight Blocks
TF-.75T	¾" Taper Blocks, 8 & 10 Round, ¾" TPF Buttress, Line Pipe
TF-1.0T	1" Taper Blocks, 1" TPF Buttress
TF-1.12T	1½" Taper Blocks, 1.125 TPF Connectors
TF-1.75T	1¾" Taper Blocks, 1.75 TPF Connectors
ROTARY SHOULDERED CONNECTOR SETTING BLOCKS	
TF-1.25RSC	1¼" Taper Blocks, 1.25 TPF Rotary Shouldered Connectors
TF-1.5RSC	1½" Taper Blocks, 1.5 TPF Rotary Shouldered Connectors
TF-2.0RSC	2" Taper Blocks, 2.0 TPF Rotary Shouldered Connectors
TF-3.0RSC	3" Taper Blocks, 3.0 TPF Rotary Shouldered Connectors
Special Taper Blocks Available	
SPECIAL FLANGE GROOVE SETTING BLOCKS	
TF-BX	23° BXR Ring Groove Diameter/Width Setting Blocks
MRP STRAIGHT FACE SETTING BLOCKS	
TF-1F-T	Flat face setting blocks to accept riser block (T-Shape)
RISER BLOCKS FOR THE TAPER BLOCKS	
TF-RISER1	1.00" Riser Block (Set of 2)
TF-RISER2	2.00" Riser Block (Set of 2)
TF-RISER3	3.00" Riser Block (Set of 2)



CAL-PAK**GAGE CALIBRATION SYSTEM OPTIONS**

The following base units and accessories are available for larger requirements for either the MIC TRAC 3000 or MIC TRAC 4000.

Model	Description
CAL-PAK	Complete Calibration Package Includes: TF-IND, TF-DG, TF-CA, TF-TI, TF-SV, TF-SS, TF-VN, TF-1F, TF-SA, and storage cases
TF-IND	AGD dial indicator. Calibration fixture (includes .375" and 8mm bushing and TF-2F block)
TF-DG	Calibration fixture for depth micrometer*
TF-CA	Caliper calibration accessory dial, digital and vernier calipers. Includes TF-SA support arm.
TF-TI	Test indicator calibration block*
TF-SA	Support arm for TF-CA.
TF-SS	Straight support accessory for support of extended probes*
TF-SV	"V" support accessory for calibrating micrometers and standards**
TF-VN	"V" blocks for calibration of axial travel probes and bore gages
TF-1F	Flat face setting block set (2 blocks) 1.5000" outside diameter
TF-BA	Base support block for setting dial bore gages**
TF-VB	"V" block fixture for calibration of Gagemaker's TH-3004 and MRP-2002 Upper arms*
TF-LG-2	Lead gage calibration fixture for either Allen or Gagemaker gages
TF-LG-3	Gagemaker lead gage calibration fixture*
TF-BI	Base support plate for setting dial bore gages**
TF-CG	Universal clamping fixture for calibration of indicators and gages*
CRC-MT3000	Complete procedural documentation for the calibration of handheld inspection equipment including: O.D. & I.D. micrometers, calipers, depth micrometers, and more. (MT-3000 ONLY)

*1 TF-1F block required with this accessory

**2 TF-1F blocks required with this accessory

CALIBRATOR GAGES

The Gagemaker calibrator gage, CG-1001/CG-1001E, calibrates gages and indicators per AGD specification.

The CG-1001 uses a non-rotating spindle screw type micrometer which reads directly to .0001" and can be estimated to the closest .00005". Disassembling the gage is not required for calibration. The vise assembly allows full vertical and horizontal adjustment of the gage or indicator clamped in the vise jaws. During calibration, an outboard arm and arm support allows for larger gage assemblies to be securely supported. Four supplied accessory fixtures will help speed up calibration while maintaining accuracy.*

The CG-1001E is our electronic version of the original and it includes an SPC output.

The CG-1000 gages are shipped in a durable custom shipping/storage case. Optional wooden storage cases available.

Model	Description	Range	Accuracy
CG-1001	Bench Calibrator Gage	.0001" Resolution, Mechanical	±.0001
CG-1001E	Electronic Bench Calibrator Gage w/ SPC Output	.00005"/.001 mm Resolution, Digital	±.00015

*Individual replacement fixtures are available for purchase but not listed above.
Please call for more information.

Thread Measurement



When meeting engineering specifications, the consistency and accuracy of threaded parts are the most important factors. Gagemaker products are second to none in helping you achieve the highest consistency and accuracy for your parts.

Gagemaker thread diameter gages inspect the effects of all thread element variations and measure the pitch diameter of both straight and tapered threads.

During inspection of parts, our functional thread roll gages use matched sets of precision ground thread rolls that seat in the flanks of the roots and crest to simulate a functional fit. Each roll set is designed to ANSI specification to measure unlimited diameters for a specific thread form.

Our unrivalled pitch diameter gages use matched precision contact point sets. During inspection, the contact points easily seat at the pitchline of the part and provide the highest quality readings possible. A variety of interchangeable contact points are available for measuring different thread pitches.





EXTERNAL FUNCTIONAL PD THREAD INSPECTION GAGES ($\frac{5}{8}$ " TO 24" DIAMETERS)

These functional thread inspection, or "GO" gages, measure external thread diameters. The gages are adjustable within a size range and use interchangeable thread rolls to measure different pitch threads. Setting dimensions for the functional pitch diameter gages are provided by the TDWIN Thread Disk for Windows software package. **The software and thread rolls are sold separately.** Reference the pages that follow for specific pitch thread rolls.

Model	Description	Range
RG-7000	External Thread Roll Gage	$\frac{5}{8}$ " - 4" (25.4 mm - 101.6 mm)
RG-7001	External Thread Roll Gage	4" - 8" (101.6 mm - 203.2 mm)
RG-7002	External Thread Roll Gage	8" - 12" (203.2 mm - 304.8 mm)
RG-7003	External Thread Roll Gage	12" - 16" (304.8 mm - 406.4 mm)
RG-7004	External Thread Roll Gage	16" - 20" (406.4 mm - 508 mm)
RG-7005	External Thread Roll Gage	20" - 24" (508 mm - 609.6 mm)

INTERNAL FUNCTIONAL PD THREAD INSPECTION GAGES ($1\frac{1}{2}$ " TO 24" DIAMETERS)

Gagemaker also manufactures functional thread inspection gages that inspect internal threads. The gages are adjustable within a size range and use interchangeable thread rolls to measure different pitch threads. **Thread roll sets not included.**

Model	Description	Range
PG-6000	Internal Thread Roll Gage, $2\frac{1}{2}$ " reach	$1\frac{1}{2}$ " - 9" (38 mm - 228.6 mm)
PG-6001	Internal Thread Roll Gage, $2\frac{1}{2}$ " reach	9" - 16" (228.6 mm - 406.4 mm)
PG-6002	Internal Thread Roll Gage, $2\frac{1}{2}$ " reach	16" - 24" (406.4 mm - 609.6 mm)
PG-6003	Internal Thread Roll Gage, $2\frac{1}{2}$ " reach	24" - 32" (609.6 mm - 812.8 mm)
PG-6000-SA	Replacement Arm Set	$2\frac{1}{2}$ " reach
PG-6000-XA	Extended Reach Arm Set	$4\frac{1}{2}$ " reach
PG-6000-17	Locking T-nut for Arms	-

DEEP BORE INTERNAL THREAD GAGE

The DPG-6000 gage inspects diameters of internal threads using thread rolls. This functional diameter gage inspects the effects of all thread element variations and reports any deviations. **All thread rolls are sold separately.**

Model	Description	Range
DPG-6000	Deep bore thread roll gage assembly for 4 pitch and finer threads only.	3" - 4.300" dia., 6" Reach
DPG-6R	Handle Extension Assemblies	6" Reach
DPG-8R	Handle Extension Assemblies	8" Reach
DPG-12R	Handle Extension Assemblies	12" Reach
DPG-1	Diameter Extension Arms	3" to 4.300" dia.
DPG-2	Diameter Extension Arms	4.300" to 5.100" dia.
DPG-3	Diameter Extension Arms	5.100" to 5.900" dia.
DPG-4	Diameter Extension Arms	5.900" to 6.700" dia.
DPG-5	Diameter Extension Arms	6.700" to 7.500" dia.
DPG-6	Diameter Extension Arms	7.500" to 8.300" dia.
DPG-7	Diameter Extension Arms	8.300" to 9.100" dia.

UN SERIES THREAD ROLLS (For gages on previous page)

"TRV" thread rolls inspect the functional fit of machine threaded parts with 60° "V" thread forms. These thread rolls are designed specifically for internal or external applications. Rolls are sold in matched sets (2 rolls). Specify the pitch of the thread when ordering.

INTERNAL THREAD DIAMETERS (1½" & Larger)		EXTERNAL THREAD DIAMETERS (1½" & Larger)	
Model	Description	Model	Description
TRVI-4P	4 pitch internal 60° "V"	TRVE-4P	4 pitch external 60° "V"
TRVI-5P	5 pitch internal 60° "V"	TRVE-5P	5 pitch external 60° "V"
TRVI-6P	6 pitch internal 60° "V"	TRVE-6P	6 pitch external 60° "V"
TRVI-8P	8 pitch internal 60° "V"	TRVE-8P	8 pitch external 60° "V"
TRVI-10P	10 pitch internal 60° "V"	TRVE-10P	10 pitch external 60° "V"
TRVI-12P	12 pitch internal 60° "V"	TRVE-12P	12 pitch external 60° "V"
TRVI-14P	14 pitch internal 60° "V"	TRVE-14P	14 pitch external 60° "V"
TRVI-16P	16 pitch internal 60° "V"	TRVE-16P	16 pitch external 60° "V"
TRVI-18P	18 pitch internal 60° "V"	TRVE-18P	18 pitch external 60° "V"
TRVI-20P	20 pitch internal 60° "V"	TRVE-20P	20 pitch external 60° "V"

ACME AND STUB ACME THREAD ROLLS (For gages on previous page)

"TRA" and "TRSA" thread rolls inspect the functional fit of parts with 29° ACME and Stub ACME thread forms. Sold in matched sets of 2 rolls. Specify the pitch of the thread when ordering.

ACME THREAD DIAMETERS (1½" & Larger)		STUB ACME THREAD DIAMETERS (1½" & Larger)	
Model	Description	Model	Description
TRA-2P	2 pitch 29° ACME	TRSA-2P	2 pitch 29° Stub ACME
TRA-3P	3 pitch 29° ACME	TRSA-3P	3 pitch 29° Stub ACME
TRA-4P	4 pitch 29° ACME	TRSA-4P	4 pitch 29° Stub ACME
TRA-5P	5 pitch 29° ACME	TRSA-5P	5 pitch 29° Stub ACME
TRA-6P	6 pitch 29° ACME	TRSA-6P	6 pitch 29° Stub ACME
TRA-8P	8 pitch 29° ACME	TRSA-8P	8 pitch 29° Stub ACME
TRA-10P	10 pitch 29° ACME	TRSA-10P	10 pitch 29° Stub ACME
TRA-12P	12 pitch 29° ACME	TRSA-12P	12 pitch 29° Stub ACME
TRA-14P	14 pitch 29° ACME	TRSA-14P	14 pitch 29° Stub ACME
TRA-16P	16 pitch 29° ACME	TRSA-16P	16 pitch 29° Stub ACME
TRA-18P	18 pitch 29° ACME	TRSA-18P	18 pitch 29° Stub ACME

ISO METRIC SERIES THREAD ROLLS (For gages on previous page)

"TRM" thread rolls inspect the functional fit of machine threaded parts with ISO Metric 60° "V" thread forms. Sold in matched sets of 2 rolls. Specify the pitch of the thread when ordering.

INTERNAL THREAD DIAMETERS (38.1mm & Larger)		EXTERNAL THREAD DIAMETERS (38.1mm & Larger)	
Model	Description	Model	Description
TRMI-4P	4 mm pitch internal 60° "V"	TRME-4P	4 mm pitch external 60° "V"
TRMI-3.5P	3.5 mm pitch internal 60° "V"	TRME-3.5P	3.5 mm pitch external 60° "V"
TRMI-3P	3 mm pitch internal 60° "V"	TRME-3P	3 mm pitch external 60° "V"
TRMI-2.5P	2.5 mm pitch internal 60° "V"	TRME-2.5P	2.5 mm pitch external 60° "V"
TRMI-2P	2 mm pitch internal 60° "V"	TRME-2P	2 mm pitch external 60° "V"
TRMI-1.75P	1.75 mm pitch internal 60° "V"	TRME-1.75P	1.75 mm pitch external 60° "V"
TRMI-1.5P	1.5 mm pitch internal 60° "V"	TRME-1.5P	1.5 mm pitch external 60° "V"

NATIONAL 7° X 45° BUTTRESS SERIES THREAD ROLLS (For gages on previous page)

"TRB" thread rolls inspect the functional fit of machine threaded parts with 7° X 45° Buttress thread forms. Sold in matched sets of 2 rolls. Specify the pitch of the thread when ordering.

THREAD DIAMETER (1½" & Larger)

Model	Description	Model	Description
TRB745-2P	2 pitch 7° X 45° Buttress	TRB745-8P	8 pitch 7° X 45° Buttress
TRB745-3.5P	3.5 pitch 7° X 45° Buttress	TRB745-10P	10 pitch 7° X 45° Buttress
TRB745-4P	4 pitch 7° X 45° Buttress	TRB745-12P	12 pitch 7° X 45° Buttress
TRB745-6P	6 pitch 7° X 45° Buttress	TRB745-16P	16 pitch 7° X 45° Buttress

TRAPEZOIDAL THREAD ROLLS (For gages on previous page)

"TRT" thread rolls inspect the functional fit of machine thread parts with trapezoidal thread forms. Sold in match sets of 2 rolls. Specify the pitch of the thread when ordering.

THREAD DIAMETER (38.1 mm & Larger)

Model	Description	Model	Description	Model	Description
TRT-2P	2 mm pitch Trapezoidal	TRT-5P	5 mm pitch Trapezoidal	TRT-9P	9 mm pitch Trapezoidal
TRT-3P	3 mm pitch Trapezoidal	TRT-6P	6 mm pitch Trapezoidal	TRT-10P	10 mm pitch Trapezoidal
TRT-4P	4 mm pitch Trapezoidal	TRT-8P	8 mm pitch Trapezoidal	TRT-12P	12 mm pitch Trapezoidal

Specials- All other thread forms

Prices Available Upon Request



Assorted Thread Rolls





SPG-6000 w/
Thread Rolls

Assorted Thread Rolls



SMALLER DIAMETER THREAD INSPECTION GAGES 5/8" (.625) TO 1 1/2" (1.500) DIAMETERS



The SPG-6000 line of thread inspection gages measures internal thread diameters smaller than 1.500". The SPG-6000 can be equipped with either thread rolls or contact points. **Software and thread rolls sold separately.**

Model	Description	Range
SPG-6000	Internal Pitch Diameter Gage, 1" reach	5/8" - 1 1/2" (15.9 mm - 38.1 mm)

UN SERIES THREAD ROLLS

"SRV" thread rolls inspect the functional fit of machine threaded parts with 60° "V" thread forms. These thread rolls are designed specifically for internal applications. Rolls are sold in matched sets (2 rolls). **Rolls sold separately from gages and software.** Please specify the pitch of thread when ordering.

INTERNAL THREAD DIAMETERS (.750 TO 1.500)

Model	Description
SRVI-6P	6 pitch internal 60° "V"
SRVI-7P	7 pitch internal 60° "V"
SRVI-8P	8 pitch internal 60° "V"
SRVI-9P	9 pitch internal 60° "V"
SRVI-10P	10 pitch internal 60° "V"
SRVI-11P	11 pitch internal 60° "V"
SRVI-12P	12 pitch internal 60° "V"
SRVI-13P	13 pitch internal 60° "V"
SRVI-14P	14 pitch internal 60° "V"
SRVI-16P	16 pitch internal 60° "V"
SRVI-18P	18 pitch internal 60° "V"
SRVI-20P	20 pitch internal 60° "V"
SRVI-24P	24 pitch internal 60° "V"
SRVI-28P	28 pitch internal 60° "V"
SRVI-32P	32 pitch internal 60° "V"

ISO METRIC THREAD ROLLS

"SRV" thread rolls inspect the functional fit of machine threaded parts with 60° "V" thread forms. These thread rolls are designed specifically for internal applications. Rolls are sold in matched sets (2 rolls). **Rolls sold separately from gages and software.** Please specify the pitch of thread when ordering.

INTERNAL THREAD DIAMETERS (.750 TO 1.500)

Model	Description
SRMI-4P	4 mm pitch
SRMI-35P	3.5 mm pitch
SRMI-3P	3 mm pitch
SRMI-25P	2.5 mm pitch
SRMI-2P	2 mm pitch
SRMI-175P	1.75 mm pitch

PITCH DIAMETER CONTACT POINT ARMS (For gage on page 16)

"SPA" contact point arms hold "SP" contact points for internal pitch diameter measurements.

Model	Description	Range
SPA-265	.265" Diameter	1" Long
SPA-375	.375" Diameter	1.25" Long
SPA-437	.437" Diameter	1.50" Long

PITCH DIAMETER CONTACT POINTS (For gage on page 16)

Gagemaker's standard ball contact points are manufactured with spherical carbide contact balls. Standard contact diameters are held to tolerances of $\pm .00005$. "SP" contact points fit "SPA" contact point arms only. Contact sizes are matched closely to thread inspection wire sizes. These contact sizes are used in the TDWIN Thread Disk for Windows software program.

UN

Model	Thread Pitch
SP-105	5 pitch
SP-096	6 - 7 pitch
SP-072	8 - 9 pitch
SP-057	10 pitch
SP-050	11.5 - 12 pitch
SP-041	13 - 16 pitch
SP-032	18 - 20 pitch

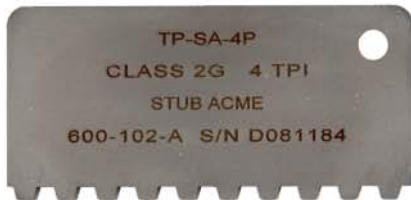
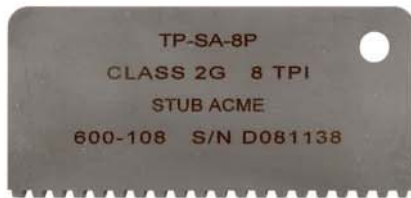
ACME/STUB ACME

Model	Thread Pitch
SP-105T	5 pitch
SP-090T	6 pitch
SP-062T	8 pitch
SP-050T	10 pitch
SP-041T	12 - 14 pitch
SP-032T	16 pitch

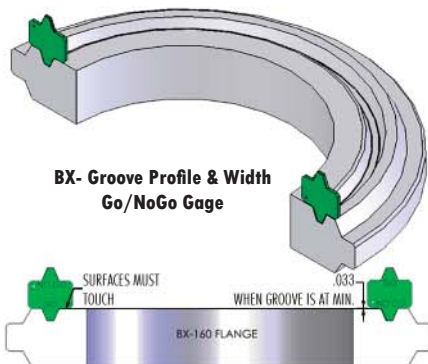
INTERNAL METRIC

Model	Thread Pitch
SP-105	4.5 - 4.75 mm
SP-096	4 - 4.25 mm
SP-072	3 - 3.5 mm
SP-057	2.5 mm
SP-041	1.5 - 2 mm
SP-032	1 - 1.25 mm

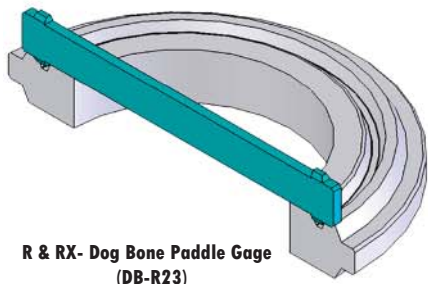




Assorted Thread Profile Gages



BX- Dog Bone Paddle Gage



THREAD PROFILE AND SPECIAL GROOVE PROFILE GAGES STRAIGHT THREAD PROFILE GAGES

Gagemaker manufactures precision straight thread profile gages for the quick identification of product thread forms. **Specify the pitch of the thread to be inspected when ordering.** Special form profiles are available and are quoted upon request.

Model	Description
TP-UNVI-__P	Internal UN series thread gage
TP-UNVE-__P	External UN series thread gage
TP-GPA-__P	Internal/external general purpose ACME thread profile gage
TP-SA-__P	Internal/external Stub ACME thread profile gage
TP-MI-__P	Internal ISO Metric series thread profile gage
TP-ME-__P	External ISO Metric series thread profile gage
Overlays for above profile gages available	

Order Example
TP-UNVI-2P,
TP-UNVE-4P,
TP-SA-8P, etc.

BX - Dog Bone Paddle Gage

Model	Description	Model	Description
DBBX-150	Dog Bone Ring Groove Gage BX-150	DBBX-162	Dog Bone Ring Groove Gage BX-162
DBBX-151	Dog Bone Ring Groove Gage BX-151	DBBX-163	Dog Bone Ring Groove Gage BX-163
DBBX-152	Dog Bone Ring Groove Gage BX-152	DBBX-164	Dog Bone Ring Groove Gage BX-164
DBBX-153	Dog Bone Ring Groove Gage BX-153	DBBX-165	Dog Bone Ring Groove Gage BX-165
DBBX-154	Dog Bone Ring Groove Gage BX-154	DBBX-166	Dog Bone Ring Groove Gage BX-166
DBBX-155	Dog Bone Ring Groove Gage BX-155	DBBX-167	Dog Bone Ring Groove Gage BX-167
DBBX-156	Dog Bone Ring Groove Gage BX-156	DBBX-168	Dog Bone Ring Groove Gage BX-168
DBBX-157	Dog Bone Ring Groove Gage BX-157	DBBX-169	Dog Bone Ring Groove Gage BX-169
DBBX-158	Dog Bone Ring Groove Gage BX-158	DBBX-170	Dog Bone Ring Groove Gage BX-170
DBBX-159	Dog Bone Ring Groove Gage BX-159	DBBX-171	Dog Bone Ring Groove Gage BX-171
DBBX-160	Dog Bone Ring Groove Gage BX-160	DBBX-172	Dog Bone Ring Groove Gage BX-172
DBBX-161	Dog Bone Ring Groove Gage BX-161	DBBX-303	Dog Bone Ring Groove Gage BX-303

BX - Groove Profile & Width Go/NoGo Gage

Model	Description	Model	Description
BXP-150	Go / NoGo Profile Gage BX-150	BXP-162	Go / NoGo Profile Gage BX-162
BXP-151	Go / NoGo Profile Gage BX-151	BXP-163	Go / NoGo Profile Gage BX-163
BXP-152	Go / NoGo Profile Gage BX-152	BXP-164	Go / NoGo Profile Gage BX-164
BXP-153	Go / NoGo Profile Gage BX-153	BXP-165	Go / NoGo Profile Gage BX-165
BXP-154	Go / NoGo Profile Gage BX-154	BXP-166	Go / NoGo Profile Gage BX-166
BXP-155	Go / NoGo Profile Gage BX-155	BXP-167	Go / NoGo Profile Gage BX-167
BXP-156	Go / NoGo Profile Gage BX-156	BXP-168	Go / NoGo Profile Gage BX-168
BXP-157	Go / NoGo Profile Gage BX-157	BXP-169	Go / NoGo Profile Gage BX-169
BXP-158	Go / NoGo Profile Gage BX-158	BXP-170	Go / NoGo Profile Gage BX-170
BXP-159	Go / NoGo Profile Gage BX-159	BXP-171	Go / NoGo Profile Gage BX-171
BXP-160	Go / NoGo Profile Gage BX-160	BXP-172	Go / NoGo Profile Gage BX-172
BXP-161	Go / NoGo Profile Gage BX-161	BXP-303	Go / NoGo Profile Gage BX-303

R & RX - Dog Bone Paddle Gage

Model	Description	Model	Description
DB-R20	Dog Bone Ring Groove Gage R-RX20	DB-R57	Dog Bone Ring Groove Gage R-RX57
DB-R23	Dog Bone Ring Groove Gage R-RX23	DB-R63	Dog Bone Ring Groove Gage R-RX63
DB-R24	Dog Bone Ring Groove Gage R-RX24	DB-R65	Dog Bone Ring Groove Gage R-RX65
DB-R25	Dog Bone Ring Groove Gage R-RX25	DB-R66	Dog Bone Ring Groove Gage R-RX66
DB-R26	Dog Bone Ring Groove Gage R-RX26	DB-R69	Dog Bone Ring Groove Gage R-RX69
DB-R27	Dog Bone Ring Groove Gage R-RX27	DB-R70	Dog Bone Ring Groove Gage R-RX70
DB-R31	Dog Bone Ring Groove Gage R-RX31	DB-R73	Dog Bone Ring Groove Gage R-RX73
DB-R35	Dog Bone Ring Groove Gage R-RX35	DB-R74	Dog Bone Ring Groove Gage R-RX74
DB-R37	Dog Bone Ring Groove Gage R-RX37	DB-R82	Dog Bone Ring Groove Gage R-RX82
DB-R39	Dog Bone Ring Groove Gage R-RX39	DB-R84	Dog Bone Ring Groove Gage R-RX84
DB-R41	Dog Bone Ring Groove Gage R-RX41	DB-R85	Dog Bone Ring Groove Gage R-RX85
DB-R44	Dog Bone Ring Groove Gage R-RX44	DB-R86	Dog Bone Ring Groove Gage R-RX86
DB-R45	Dog Bone Ring Groove Gage R-RX45	DB-R87	Dog Bone Ring Groove Gage R-RX87
DB-R46	Dog Bone Ring Groove Gage R-RX46	DB-R88	Dog Bone Ring Groove Gage R-RX88
DB-R47	Dog Bone Ring Groove Gage R-RX47	DB-R89	Dog Bone Ring Groove Gage R-RX89
DB-R49	Dog Bone Ring Groove Gage R-RX49	DB-R90	Dog Bone Ring Groove Gage R-RX90
DB-R50	Dog Bone Ring Groove Gage R-RX50	DB-R91	Dog Bone Ring Groove Gage R-RX91
DB-R53	Dog Bone Ring Groove Gage R-RX53	DB-R99	Dog Bone Ring Groove Gage R-RX99
DB-R54	Dog Bone Ring Groove Gage R-RX54		

R-RX - Groove Profile & Width Go/NoGo Gage

Model (RP-Depth-Width)*	Corresponding R Groove Size
RP-250-344	R 20
RP-310-469	R 23 to R45, R49, R53, R57, R65, R69, R82, R84, & R99
RP-380-531	R46, R73, R85
RP-440-656	R50, R54, R66, R86, R87
RP-500-781	R47, R70, R74, R88
RP-560-906	R90
RP-620-1063	R63
RP-690-1313	R91

*ex. RP-250-344 = .250" (depth), .344" (width)

TAPERED INSERT IDENTIFIERS

New! Gagemaker's new tapered thread insert identifier easily determines which threading insert the machinist is using. When an optical comparator is unavailable, the insert identifier will show which thread form is on the insert.

Model	TPF	Thread Forms
TI-60	1.5", 2, & 3	V032, V038R, V040, V050, V055, V066, V076
TI-90	1.25", 2, 3, & 3.373"	A-0.094, 90-V-0.050, 90-V-0.084

TAPERED THREAD PROFILE GAGES

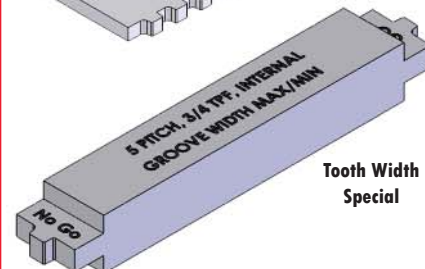
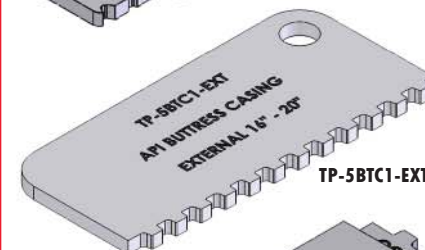
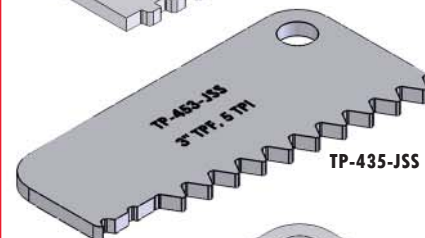
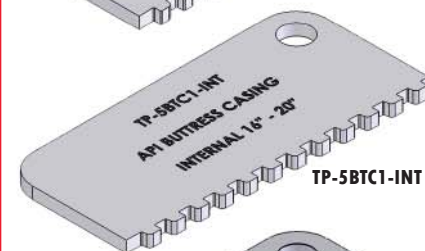
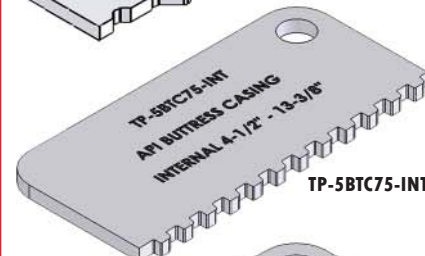
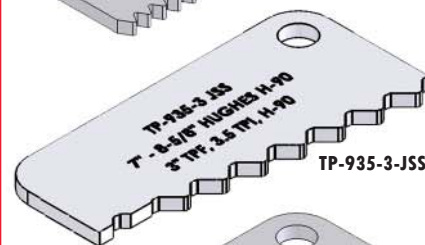
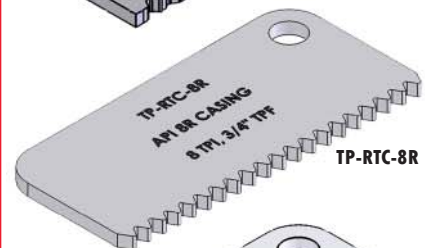
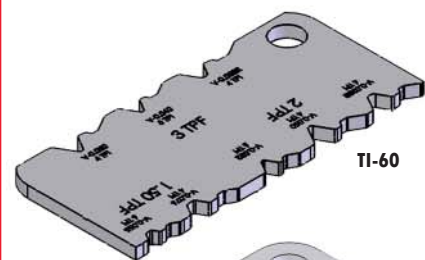
Gagemaker also manufactures precision tapered thread profile gages for the quick identification of product thread forms. Specify the connection which is to be inspected when ordering. Special profiles will be quoted upon request.

Model	Connector Type	TPF/TPI, Thread Form
TP-415076	2 $\frac{3}{8}$ " - 3 $\frac{1}{2}$ " P.A.C. Connections 2 $\frac{3}{8}$ " - 3 $\frac{1}{2}$ " American Open Hole	1.5" TPF, 4 TPI, V-0.076
TP-RTC-8R	API 8-Round Casing, Tubing & Drill Pipe	$\frac{3}{4}$ " TPF, 8 TPI, 8 Round
TP-RTC-10R	API 10-Round Tubing	$\frac{3}{4}$ " TPF, 10 TPI, 10 Round
TP-8V	8V API Line Pipe, American Std. NPR	$\frac{3}{4}$ " TPF, 8 TPI, 8 V Thread
TP-11-1/2V	11 $\frac{1}{2}$ V API Line Pipe, American Std. NPT	$\frac{3}{4}$ " TPF, 11 $\frac{1}{2}$ TPI, 11 $\frac{1}{2}$ V Thread
TP-5BTC75-INT	API Buttress Casing, Internal, 4 $\frac{1}{2}$ " - 13 $\frac{3}{8}$ "	$\frac{3}{4}$ " TPF, 5 TPI
TP-5BTC75-EXT	API Buttress Casing, External, 4 $\frac{1}{2}$ " - 13 $\frac{3}{8}$ "	$\frac{3}{4}$ " TPF, 5 TPI
TP-5BTC1-INT	API Buttress Casing, Internal, 16" - 20"	1" TPF, 5 TPI
TP-5BTC1-EXT	API Buttress Casing, External, 16" - 20"	1" TPF, 5 TPI
TP-453-JSS	2 $\frac{3}{8}$ " - 4 $\frac{1}{2}$ " API REG 3 $\frac{1}{2}$ ", 4 $\frac{1}{2}$ " API Full Hole	3" TPF, 5 TPI, V-0.040
TP-542-JSS	6 $\frac{5}{8}$ " API REG 5 $\frac{1}{2}$ " & 6 $\frac{5}{8}$ " API Full Hole	2" TPF, 4 TPI, V-0.050
TP-543-JSS	5 $\frac{1}{2}$ ", 7 $\frac{7}{8}$ ", & 8 $\frac{5}{8}$ " API REG	3" TPF, 4 TPI, V-0.050
TP-642-JSS	4" API Full Hole, 3 $\frac{1}{2}$ " - 5" Hughes Xtra Hole, 2 $\frac{7}{8}$ " - 4 $\frac{1}{2}$ " Hughes Slim Hole	2" TPF, 4 TPI, V-0.038R
TP-642-H-JSS New	2 $\frac{7}{8}$ " Hughes Xtra Hole 2 $\frac{3}{8}$ " Hughes Slim Hole	2" TPF, 4 TPI, V-0.038R
TP-23-50-JSS	2 $\frac{3}{8}$ " - 6 $\frac{5}{8}$ " API INT Flush API Numbered Connectors #23 - #50	2" TPF, 4 TPI, V-0.038R
TP-56-77-JSS	API Numbered Connectors #56 - #77	3" TPF, 4 TPI, V-0.038R
TP-10-16-JSS	API Numbered Connectors #10, #12, #13, #16 M.T. (Macaroni Tubing)	1.5" TPF, 6 TPI, V-0.055
TP-935-2-JSS	3 $\frac{1}{2}$ " - 6 $\frac{5}{8}$ " Hughes H-90	2" TPF, 3.5 TPI, H-90
TP-935-3-JSS	7" - 8 $\frac{5}{8}$ " Hughes H-90	3" TPF, 3.5 TPI, H-90
TP-931-1/4-JSS	2 $\frac{3}{8}$ " - 3 $\frac{1}{2}$ " Hughes Slim Line	1.25" TPF, 3TPI, H-90
TP-9060LS-JSS	90° & 60° Threads, Tool Grinding & Setting Gage	Tool Grinding & Setting Gage
TP-NPT-14	NPT Threads	$\frac{3}{4}$ " TPF, 14 TPI

Specials Available Upon Request

Overlay Charts are also available. For information on those available, please see price supplement. Specials are also available. For Special Overlays, please specify the following:

1. Screen Size
2. Magnification 20X/50X
3. Product Form or Profile Template



PD-3003



PD-3004



PD-3005



PD-3000BX



PD-3000BF-6



TH-3001R



TH-3001V



TH-3001S



PIT DEPTH GAGES

The PD-3000 series of gages inspect the depth of surface pitting on tubular goods. The gage also accepts other types and sizes of contact points for use in other applications, such as groove and thread depth inspection. Select the PD-3000 gage model based on the type of indicator required.

Model	Description	Range	Cross Ref.
PD-3003	Pit Depth Gage, AGD #1, 0-100	.90	4486-D
PD-3004	Pit Depth Gage, AGD #2, 0-100	.450	-
PD-3005	Pit Depth Gage w/ Flat Base, AGD #2, 0-100	.450	-
PD-3006	Pit Depth Gage w/ 6" Long Flat Base, AGD #2, 0-100	.450	-
PD-3007	Pit Depth Gage w/ 6" Long V Base, AGD #2, 0-100	.450	-
PD-3000BF	Pit Depth Flat Base Only	-	-
PD-3000BV	Pit Depth V Base Only	-	-
PD-3000BF-6	Pit Depth 6" Long Flat Base Only	-	-
PD-3000BV-6	Pit Depth 6" Long V Base Only	-	-
PD-3000BX	Setting BX/BXG Gage, 1/2" X 1/2" U-notch	-	-

EXTERNAL THREAD HEIGHT GAGES

Gagemaker manufactures many models of external thread height gages. Specify the type of thread when ordering.

Model	Description	Connection*	Travel	Min. Bore	Cross Ref.
TH-3002B	External Thread Height, 0-25-0	3/4" Buttress (T072)	.094"	2.930"	5886-C
TH-3003B	External Thread Height, 0-25-0, Step Base	1" Buttress (T072)	.094"	2.930"	5886B16
TH-3002BB	External Thread Height Base Only	3/4" TPF Buttress	-	-	-
TH-3003BB	External Thread Height Base Only	1" Buttress	-	-	-
TH-3001R	External Thread Height, 0-100	8-Round (T501)	.162"	3.400"	6709-L
TH-3002R	External Thread Height, 0-50-0	8-Round (T501)	.162"	3.400"	6709-M
TH-3002RB	External Thread Height Base Only	8-Round (T501)	-	-	-
TH-3000RSC	External Thread Height, 0-100	Tool Joint (T072)	.196"	3.230"	-
TH-3001PD	Now is the TH-3001V	Same as TH-3001V	-	-	-
TH-3001S	External Thread Height, 0-100	8-Round (T072)	.196"	3.230"	-
TH-3001V	External Thread Height, 0-100	Line Pipe (T500C), ACME, UN, Stub ACME	.196"	3.230"	5886
TH-3002V	External Thread Height, 0-50-0	Line Pipe/Tool Joint (T500C)	.196"	3.230"	5886-A
TH-3002VB	External Thread Height Base Only	Line Pipe/Tool Joint	-	-	-

*Contact point noted in parentheses.

Ex.: 1" Buttress (T072) shows that the T072 is the proper contact point for TH-3003B.

INTERNAL THREAD HEIGHT GAGES

Gagemaker also manufactures several models of internal thread height gages. Please specify the type of thread when ordering.

Model	Description	Connection*	Travel	Min. Bore	Cross Ref.
TH-3004	Internal Thread Height, 0-25-0	Line Pipe (T500C)	.105"	1.575"	5785-D
TH-3006	Internal Thread Height, 0-25-0	8-Round (T502/T503)	.105"	1.595"	7705-A
TH-3008	Internal Thread Height, 0-25-0	8-Round (T502/T503)	.094"	1.575"	-
TH-3009	Internal Thread Height, 0-25-0	¾" Buttress (T072), UN, ACME, Stub ACME	.250"	1.750"	-
TH-3009PD	Now is just the TH-3009	Same as TH-3009	-	-	-
TH-3010	Internal Thread Height, 0-25-0	1" Base Length (TPD, T500)	.250"	1.750"	-
TH-3012	Internal Thread Height, 0-25-0	¾" - 2" NPT	.090"	.750"	-
TH-3004DD	Doug Dunford Special Clip Gage	Ultra	.105"	1.575"	-

*Contact point noted in parentheses.

Ex.: ¾" Buttress (T072) shows that the T072 is the proper contact point for TH-3009

THREAD HEIGHT GAGE STANDARDS

Gagemaker manufactures mandated precision setting standards for presetting thread height gages. All of these are API mandated standards. Please specify the type of thread when ordering.

Model	Description	Cross Ref.
1014	8 & 10 Round Threads	6780-J
1014S	8 & 10 Round Threads (crest to Pitchline "Shave")	-
1015	8 & 11½ Pitch "V" Threads	6780-L
1017	13⅝" & Smaller Buttress, ¾" TPF	1233-A
1018	16" & Larger Buttress, 1" TPF	1233-SB16
10382-RS	V.038, 2 TPF Rotary Shouldered Connectors, 4 TPI to be used with T072 pt.	-
10383-RS	V.038, 3 TPF Rotary Shouldered Connectors, 4 TPI to be used with T072 pt.	-
10403-RS	V.040, 3 TPF Rotary Shouldered Connectors, 5 TPI to be used with T034 pt.	-
10502-RS	V.050, 2 TPF Rotary Shouldered Connectors, 4 TPI to be used with T044 pt.	-
10503-RS	V.050, 3 TPF Rotary Shouldered Connectors, 4 TPI to be used with T044 pt.	-
10551.5-RS	V-0.055, 1.5 TPF Rotary Shouldered Connectors, 6 TPI to be used with T072 pt.	-
10761.5-RS	V-0.076, 1.5 TPF Rotary Shouldered Connectors, 4 TPI to be used with T044 pt.	-
10H90-2	2" TPF H-90 Connection, 3.5 TPI to be used with T072 pt.	-
10H90-3	3" TPF H-90 Connection, 3.5 TPI to be used with T072 pt.	-
SL-H90	1¼" TPF, 3 TPI to be used with T072 pt.	-



TH-3008



TH-3009



TH-3010



TH-3004



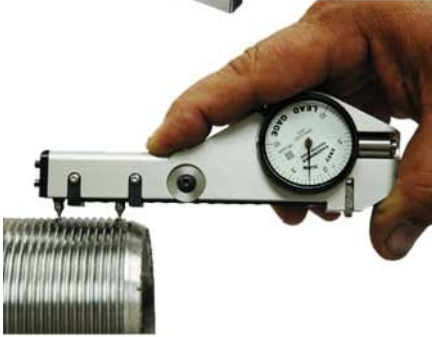
TH-3006

TH-3004DD
with MRP ShoesTH-3012
Macaroni Tube

Thread Height Standards



LG-5002



LG-5003



LG-5003-L



LEAD GAGES



The lead gage inspects both internal and external thread leads using contact points that seat in the threads of a part. Thread lead is the distance between threads, measured on a plane parallel to the centerline of the threaded part. The pitch of the thread determines the diameter of the contact points required for taking measurements.

The LG-5002 uses a **two-point** system to inspect thread lead for ACME, Stub ACME, UN, or API threads. The two points allow for a sweeping action to obtain the measurement.

The LG-5003 uses the **three-point** system to inspect thread lead for ACME, Stub ACME, UN threads, or API threads. Two fixed contact points at the rear of the gage and one moveable contact point at the front of the gage provide complete stability when taking thread lead measurements. This unique design does not require sweeping to obtain measurements. Plus, contact points can be easily changed to allow the gage to be used on a variety of thread forms.

Before inspecting parts, the lead gage must be preset to a nominal predetermined dimension using a lead gage setting standard. These setting standards are manufactured according to ANSI and API specifications. Lead standards are available for ACME, Stub ACME, UN and API threads.

Features

- Uses a three-point system for greater stability when inspecting parts (LG-5003).
- Uses interchangeable contact points to allow inspection on a variety of thread forms.
- Requires presetting using Gagemaker's lead gage setting standards.

Model	Description	Minimum Bore	Range
LG-5002	Lead Gage 2-point, Contact point spacing .500"	1.200	½" - 4" Thread Length
LG-5002-1	Lead Gage 2-point, .0001" grad., Contact point spacing .500"	1.200	½" - 4" Thread Length
LG-5002-J	Lead Gage 2-point, Contact point spacing .193"	1.200	½" - 4" Thread Length
LG-5002-1J	Lead Gage 2-point, .0001" grad., Contact point spacing .193"	1.200	½" - 4" Thread Length
LG-5003	Lead Gage 3-point Contact point spacing .500"	1.340	½" - 4" Thread Length
LG-5003-1	Lead Gage 3-point, .0001" grad., Contact point spacing .500"	1.340	½" - 4" Thread Length
LG-5003-J	Lead Gage 3-point, Contact point spacing .193"	1.340	½" - 4" Thread Length
LG-5003-1J	Lead Gage 3-point, .0001" grad., Contact point spacing .193"	1.340	½" - 4" Thread Length
LG-5003-L	Special Load-to-Load pitch gage	1.500	½" - 4" Thread Length
LG-5003-S	Special Stab-to-Stab pitch gage	1.500	½" - 4" Thread Length

LEAD GAGE SETTING STANDARDS

Gagemaker's precision lead gage setting standards are manufactured in accordance with API Spec 5B. Lead gage standards are used to preset the lead gages contact point location prior to the inspection of the threaded connector.

Model	Connection Type/Description	TPF*	TPI*	Cross Ref.
LS-1001	API 8-Round Casing, Tubing & Drill Pipe, All 10-Round Tubing	¾"	8 & 10	5691-A
LS-1002	Straight Threads, 6 - 18 Pitch, 4" Length	Straight	8 & 10	5691-C
LS-1003	11½" "V" API Line Pipe, American Std, NPT	¾"	11½	5691-D
LS-1004	Straight threads, Line pipe	Straight	11½	5691-F
LS-1005	API Buttress Casing, Internal/External 4½" - 13¾"	¾"	5	5691-K
LS-1006	API Buttress Casing, Internal/External 16" - Larger	1"	5	5691-K16
LS-1007	6⅝" API Reg 4", 5½", & 6⅝" API Full Hole 2⅞", 3½" - 5" Hughes Xtra Hole 2⅞", 2⅞" - 4½" Hughes Slim Hole 2⅞" - 5½" API INT Flush API Numbered Connectors #23-#50	2"	4	5691-L
LS-1008	5½", 7⅞" - 8⅞" API Reg API Numbered Connectors #56 - #77	3"	4	5691-M
LS-1009	2⅞" - 4" API Reg 3½", 4½" API Full Hole	3"	5	5691-N
LS-1010	API Numbered Connectors #10, #12, #13, #16 M.T. (Macaroni Tubing) 2⅞" - 3½" PAC 2⅞" - 4" American Open Hole	1½"	4	5691-T3
LS-1011	3½" - 6⅝" Hughes H-90	2"	3½	5691-P4A
LS-1012	7" - 8⅞" Hughes H-90	3"	3½	5691-P4B
LS-1013	2 ⅞" - 3 ½" Slim Line H-90	1¼"	3	5691-P4C
LS-1027	-	1⅞"	5	-
LS-1032	-	1⅞"	6	-
LS-5001	Straight Threads, 1-5 pitch, 4" length	-	-	STD-5001
LS-5002	Straight Threads, 6-18 pitch, 4" length	-	-	STD-5002

*TPF = Taper Per Foot, TPI = Threads Per Inch



**LG-5002 in
Last and First Position**



Cumulative

Lead is measured in one inch intervals. As shown above, the cumulative lead interval is the total measured distance from the first to the last thread.



**LS-1005
Lead Gage Standard**



LS-1005



**STD-5001/LS-5001
Lead Gage Standard**



INTERNAL PITCH DIAMETER INSPECTION GAGES (1½" TO 24" DIAMETERS)

The ball pitch diameter gages or "NO GO" gages indicate the pitch diameter size of the product's internal balls to measure different pitch straight threads. All of the PD-6000 series are sold *without* contact points.

Model	Description	Range
PD-6000	Internal Pitch Diameter Gage ("V" & ACME)	1½" - 9"
PD-6000-02	Replacement Arm Set	2½" length
PD-6000-07	Replacement Arm Set	4½" length
PD-6001	Internal Pitch Diameter Gage	6" - 24"

PD-6001 Replacement Parts (Extensions have #10-32 threads)

Model	Description	Length
PD-6001-PD4C	Cap- CDI Indicator	-
PD-6001-PD4M	Cap- Mitutoyo Indicator	-
PD-6001-PD3	Adjustment Cap Lock Nut	-
PD-6001-PD2	Adjustment Cap	-
PD-6001-PD1	Contact Point Adapter	-
PD-6001-PDA	Extension Rod	.430"
PD-6001-PDB	Extension Rod	.860"
PD-6001-PDC	Extension Rod	1.290"
PD-6001-PDD	Extension Rod	1.720"
PD-6001-PDE	Extension Rod	3.440"
PD-6001-PDF	Extension Rod	5.590"
PD-6001-PDG	Extension Rod	7.740"
PD-6001-PDH	Extension Rod	10.320"
PD-6001-24E	PD-6001 Internal Pitch Diameter Extension Rod	24"
PD-6001-36E	PD-6001 Internal Pitch Diameter Extension Rod	36"

INTERNAL TAPER GAGES

Gagemaker's internal taper gages measure variation in connection taper. Taper gages are shipped with our standard set of .072" diameter contact points, unless specified otherwise. Refer to the contact point on pages 25 and 27 for the proper contact point for your particular connection.

Model	Description	Cross Ref.	Range
IT-6000	Internal Taper Gage	8191	4¼" Depth, 1½" - 9" Diameter
IT-6001	Internal Taper Gage	5554	Any Depth, 5" - 13¾" API Sizes
IT-6001-VM	Internal Taper Gage	-	Any Depth, 3½" Diameter

IT-6000 Replacement Parts

Model	Description	Length
IT-6000-07	Replacement Arm Set	4¼"

IT-6001 Replacement Parts (Extensions have #10-40 threads)*

Model	Description	Extension Length
IT-6001-01M	Cap- Mitutoyo Indicator	-
IT-6001-01C	Cap- CDI Indicator	-
IT-6001-04	Point Adapter	.062"
IT-6001-06	Extension rod for 5" Connection	.200"
IT-6001-07	Extension rod for 5½" Connection	.523"
IT-6001-09	Extension rod for 6⅝" Connection	1.643"
IT-6001-10	Extension rod for 7" Connection	2.023"
IT-6001-11	Extension rod for 7⅞" Connection	2.643"
IT-6001-12	Extension rod for 8⅝" Connection	3.643"
IT-6001-13	Extension rod for 9⅝" Connection	4.643"
IT-6001-14	Extension rod for 10¾" Connection	5.768"
IT-6001-15	Extension rod for 11¾" Connection	6.768"
IT-6001-16	Extension rod for 13¾" Connection	8.393"

* Extensions for 16", 18⅝", and 20" connections are available upon special request.

IT-6001-VM Replacement Parts

Model	Description	Minimum Bore
IT-6001-01-VM	Short Cap	3.4275"

INTERNAL DIAMETER/GROOVE GAGES

Gagemaker's internal diameter and groove gages measure variation in internal bore diameters. Diameter/groove gages are shipped with .072" diameter contact points as standard. Refer to the contact point chart for the proper contact point for your particular application.

Model	Description	Range
IT-5104	Internal Diameter/Groove Gage	4" Depth, 1½" - 10" Dia.
IT-5106	Internal Diameter/Groove Gage	6" Depth, 1½" - 10" Dia.
IT-5106-30	Internal Diameter/Groove Gage points at 30° angle	6" Depth, 1½" - 10" Dia.
IT-5106-45	Internal Diameter/Groove Gage, points at 45° angle	6" Depth, 1½" - 10" Dia.
IT-5108	Internal Diameter/Groove Gage	8" Depth, 1½" - 10" Dia.
IT-5112	Internal Diameter/Groove Gage	12" Depth, 1½" - 10" Dia.
IT-5104-04	Replacement Lower Arm	4¼" Length
IT-5106-06	Replacement Lower Arm	6" Length
IT-5108-08	Replacement Lower Arm	8" Length
IT-5112-12	Replacement Lower Arm	12" Length

INTERNAL DEEP REACH BORE GAGES

The DB series of gages are internal deep reach bore gages. Internal deep reach bore gages allow the difficult measuring of pitch diameter deep inside a small diameter product.

Model	Description	Range
DB-1800	Internal Deep Reach Bore Gage	18" reach min., bore travel 1.700"
DB-2400	Internal Deep Reach Bore Gage	24" reach min., bore travel 1.700"

EXTERNAL PITCH DIAMETER INSPECTION GAGES (0" TO 72" DIAMETERS)

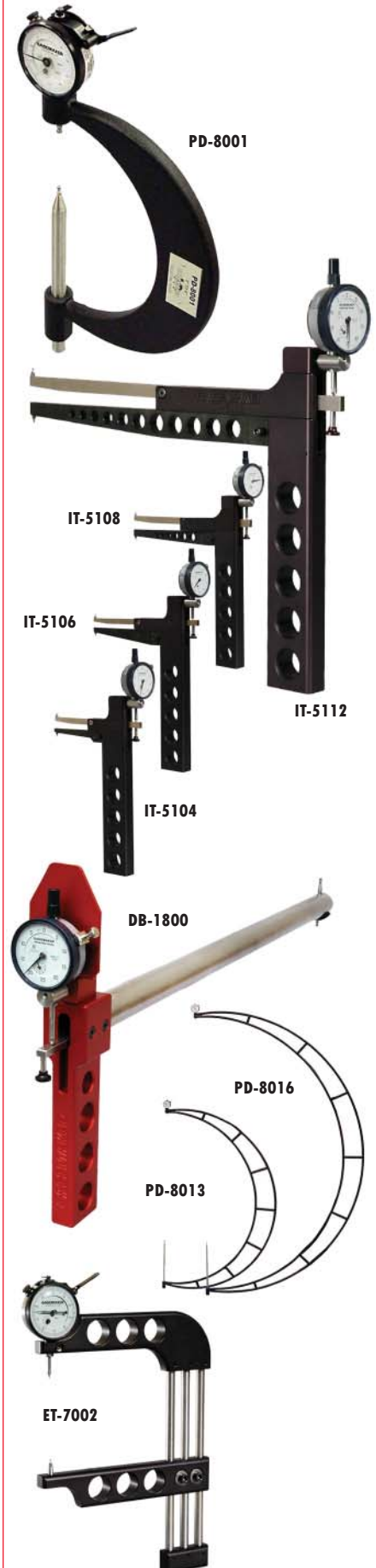
The ball pitch diameter gages or "NO GO" gages indicate the pitch diameter size of the product's external thread. The gages are adjustable within a size range and use interchangeable contact points to measure different pitch threads. Setting dimensions for the pitch diameter gages are provided by the TDWIN Thread Disk for Windows software package. **The software is sold separately.** Reference pages 26-27 for specific pitch contact points. **Contact points are sold separately.** Models PD-8004 through PD-8016 includes a custom wood case.

Model	Description	Range
PD-8001	External Ball Pitch Diameter Gage	0" - 6" (0 mm - 152.4 mm)
PD-8002	External Ball Pitch Diameter Gage	6" - 12" (152.4 mm - 304.8 mm)
PD-8004	External Ball Pitch Diameter Gage	12" - 16" (304.8 mm - 406.4 mm)
PD-8006	External Ball Pitch Diameter Gage	16" - 20" (406.4 mm - 508 mm)
PD-8008	External Ball Pitch Diameter Gage	20" - 24" (508 mm - 609.6 mm)
PD-8010	External Ball Pitch Diameter Gage	24" - 28" (609.6 mm - 711.2 mm)
PD-8012	External Ball Pitch Diameter Gage	28" - 36" (711.2 mm - 914.4 mm)
PD-8013	External Ball Pitch Diameter Gage	36" - 44" (914.4 mm - 1117.6 mm)
PD-8014	External Ball Pitch Diameter Gage	44" - 52" (1117.6 mm - 1320.8 mm)
PD-8015	External Ball Pitch Diameter Gage	52" - 60" (1320.8 mm - 1524.0 mm)
PD-8016	External Ball Pitch Diameter Gage	60" - 72" (1524.0 mm - 1828.8 mm)

EXTERNAL TAPER GAGES

Gagemaker's external taper gages inspect variation in connection taper. External taper gages are shipped with .072" diameter contact points as standard. Refer to the contact point chart for the proper contact point for your particular connection.

Model	Description	Cross Ref	Range
ET-7001	External Taper, ½" travel	5637-J	0" - 6"
ET-7002	External Taper, ½" travel	5637-D	0" - 10"
ET-7003	External Taper, 1" travel	5637-S	0" - 10"
ET-7004	External Taper, ½" travel	5538-J	0" - 16"
ET-7005	External Taper, 1" travel	5538-G	0" - 16"
ET-7006	External Taper, ½" travel	5538-U	16" - 24"
ET-7007	External Taper, 1" travel	5538-U	16" - 24"





Contact Point Extensions

CONTACT POINTS

API CONTACT POINTS FOR LEAD AND TAPER GAGES

Gagemaker's standard ball contact points are manufactured with spherical carbide contact balls. Both threaded and straight (non-threaded) shanks are available. All Gagemaker's inspection gages use threaded shank contact points. Threaded shanks are #4-48 UNF. Metric threads are available upon request. **Most gages require 2 contact points.**

Model

Straight Shank	Threaded Shank	Point Diameter	Threads Per Inch	Connection Type
S235	T235	0.235"	3	Hughes Slim Line H-90
S200	T200	0.200"	3½	All Hughes H-90
S144	T144	0.144"	4	API Rotary Shouldered Connections
S128	T128	0.128"	4½	API Rotary Shouldered Connections
S115	T115	0.115"	5	API Rotary Shouldered Connections
S105T	T105T	0.105"	5½	Truncated for Extreme Line
S096	T096	0.096"	6	API Rotary Shouldered Connections
S090	T090	0.090"	5	Buttress Casing – Taper
S072	T072	0.072"	8	API Rotary Shouldered Connections
S062	T062	0.062"	5	Buttress Casing – Lead
S057	T057	0.057"	10	API Tubing and Line Pipe
S050	T050	0.050"	11½	API Line Pipe
-	T044	0.044"	4	Rotary Shouldered Connection Thd. Depth Only
S041	T041	0.041"	14	API Line Pipe
-	T034	0.034"	5	Rotary Shouldered Connection Thd. Depth Only
S03125	T03125	0.03125"	18	API Line Pipe
S021	T021	0.021"	27	API Line Pipe

CONTACT POINTS AND SPECIAL APPLICATION ACCESSORIES

Gagemaker continually develops new application contacts and indicator accessories. The following items are in stock for immediate delivery. These contact points have #4-48 UNF threaded shank. All contact points are carbide. Special and metric diameters are available, please call for quotation.

Model	Ball Dia.	Model	Ball Dia.	Model	Ball Dia.	Model	Ball Dia.
T028	.028"	T100	.100"	T176	.176"	T375	.375"
T043	.043"	T116	.116"	T188	.188"	T430	.430"
T045	.045"	T118	.118"	T219	.219"	T4375	.4375"
T059	.059"	T125	.125"	T250	.250"	T475	.475"
T060*	.060"	T1335	.1335"	T266	.266"	T500	.500"
T068	.068"	T150	.150"	T295	.295"	T531	.531"
T071	.071"	T155	.155"	T300	.300"	T625	.625"
T086	.086"	T156*	.156"	T325	.325"	T750	.750"
T087	.087"	T157	.157"	T344	.344"		
T092	.092"	T160	.160"	T350	.350"		
T098*	.098"	T165	.165"	T360	.360"		

*Straight Shanks available for T060, T098, T156

GENERAL PURPOSE POINTS AND ACCESSORIES

Model	Description
T500C	50° Cone Contact Point, "V" Threads for TH-3001V, TH-3002V, TH-3004 Gages
T501	50° Cone Contact Point, Self-Centering for TH-3001R, TH-3002R Gages
T502	Self-Centering Sleeve for T501 & T503 Contact Points
T503	50° Cone Contact Point, "V" Threads for TH-3006
E-Line	.063" R Extreme Line Contact Point for TH-3003E Gage
TPD	.020" R Contact Point for PD-3003 & PD-3004 Gages
PE-___	Point Extensions available in .300", .500", .750" & 1.00" (Ex. PE-300)
PA-45	45° Point Adapter
RC-375	.375" Diameter Roller Contact
P-500	TH-3001R Gage, Flat Face Contact
Blade-25	.008" thickness, .170" Diameter, .250" Depth Blade Point
Blade-50	.008" thickness, .170" Diameter, .500" Depth Blade Point

CONTACT POINTS (Continued)**UN SERIES (60° "V") THREADS**

These contacts points are used to inspect the pitch diameter of machined parts with 60° "V" thread forms. Two are required per gage.

Model	Thread Pitch	Model	Thread Pitch	Model	Thread Pitch
T5625	1	T115	5	T050	11½ & 12
T288	2	T105	5½	T041	14 & 16
T1875	3 & 3½	T096	6	T03125	18
T144	4	T072	8		
T128	4.5	T057	10		

ACME OR STUB ACME THREADS

These truncated contact points are used to inspect the pitch diameter of machined parts with 29 ACME and Stub ACME thread forms. Two are required per gage.

Model	Thread Pitch	Model	Thread Pitch	Model	Thread Pitch
T531T	1	T144T	3½	T0625T	8
T344T	1½	T128T	4	T050T	10
T266T	2	T105T	5	T041T	12 & 14
T219T	2½	T090T	6 & 7	T03125T	16
T1875T	3	T072T	8		

7° x 45° BUTTRESS SERIES CONTACT POINTS

These contact points are used to inspect the pitch diameter of machined parts with 7° x 45° Buttress thread forms. Two are required per gage.

Model	Thread Pitch	Model	Thread Pitch	Model	Thread Pitch
T5625	1	T188	3	T072	8
T437	1¼	T156	3½	T057	10
T375	1½	T144	4	T050	12
T281	2	T115	5	T03125	16 & 18
T219	2½	T096	6		

TRAPEZOIDAL THREAD CONTACT POINTS

These contact points are used to inspect the millimeter pitch diameter of machined parts with Trapezoidal thread forms. Two are required per gage.

Model	mm Pitch	Model	mm Pitch
T144	7	T062	3
T125	6	T050	2½
T096	5	T041	2
T082	4	T03125	1½
T072	3½		

ISO METRIC SERIES CONTACT POINTS

These contact points are used to inspect the pitch diameter of machined parts with ISO Metric 60° "V" thread forms. Two are required per gage.

Model	mm Pitch	Model	mm Pitch
T096	4	T057	2½
T072	3 & 3½	T041	1½, 1¾, & 2



Truncated
Contact Point



Various
Contact
Points

MRP-1000



MRP PITCH DIAMETER AND OVALITY GAGES



This MRP series of pitch diameter gages detects variations in pitch diameter by the use of a gage shoe that rests on the crest of the threads. Variation in diameter is detected by the indicator readout. These gages must be set to nominal size with one of a variety of setting options offered. Refer to the setting option section that follows. Gage accuracy is $\pm .001$ " throughout the range of measurement. All of these gages are API approved for use on casing and tubing.*

Model	Description	Range
MRP-202	Internal $\frac{3}{4}$ TPF Thread Gage	Internal 1" - 2 $\frac{1}{2}$ "
MRP-1000	Internal Pitch Diameter Gage	Internal 1 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ " External 1 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ "
MRP-1001	External Pitch Diameter Gage, 4 $\frac{1}{4}$ " reach	External 1 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ "
MRP-1000-45	Internal Seal Diameter Gage. Contacts on a 45° angle. $\frac{3}{8}$ " upper arms, $\frac{3}{8}$ " lower arms	Internal 1" - 4 $\frac{1}{2}$ "
MRP-1007	Internal Seal Diameter Gage. Contacts on a 45° angle. Arms- .740" upper, $\frac{1}{2}$ " lower	Internal 1 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ "
MRP-1008	Internal Seal Diameter Gage. Contacts on a 45° angle. Arms- .740" upper, .740" lower	Internal 1 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ "
MRP-1009	Internal Seal Diameter Gage. Contacts on a 45° angle. Arms- .740" upper, .500" lower	Internal 1 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ "
MRP-1012-TSS	Internal/External Pitch Diameter Gage for Two Step Seal. Upper and lower arms are .740" diameter. Upper arm has standard travel of .150". Shipped with T105 pts.	Internal 2 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ " External 1 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ "
MRP-1012-TST	Internal/External Pitch Diameter Gage, Two Step Thread, w/ 1.030" Horseshoe snadoff for front and rear measurements. Upper and lower arms have .740" diameter. Upper arm has extended travel of .350"	Internal 1 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ " External 1 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ "
MRP-1500	Internal/External Pitch Diameter Gage, Solid Body	Internal 1 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ " External 1 $\frac{1}{2}$ " - 4 $\frac{1}{2}$ "
MRP-2001	External Pitch Diameter Gage, 4 $\frac{1}{2}$ " reach	External 2 $\frac{3}{8}$ " - 20"
MRP-2001-S	External Pitch Diameter Gage, 4 $\frac{1}{2}$ " reach, Straight Arms	
MRP-2001-7	External Pitch Diameter Gage, 7" reach	
MRP-2001-10	External Pitch Diameter Gage, 10" reach	
MRP-2002	Internal Pitch Diameter Gage, 4 $\frac{1}{4}$ " reach	Internal 2 $\frac{3}{8}$ " - 20"
MRP-2002-S	Internal Pitch Diameter Gage, 4 $\frac{1}{4}$ " reach, Straight Arms	
MRP-2002-7	Internal Pitch Diameter Gage, 7" reach	
MRP-2002-10	Internal Pitch Diameter Gage, 10" reach	
MRP-2003	Internal/External Pitch Diameter Gage, 4 $\frac{1}{4}$ " reach	Internal 2 $\frac{3}{8}$ " - 20" External 2 $\frac{3}{8}$ " - 20"
MRP-2003-S	Internal/External Pitch Diameter Gage, 4 $\frac{1}{4}$ " reach, Straight Arms	
MRP-2003-7	Internal/External Pitch Diameter Gage, 7" reach	
MRP-2003-10	Internal/External Pitch Diameter Gage, 10" reach	
MRP-2511	External Pitch Diameter Gage, 4" reach	External 4 $\frac{1}{2}$ " - 9 $\frac{5}{8}$ "
MRP-2511-7	External Pitch Diameter Gage, 7" reach	
MRP-2521	External Pitch Diameter Gage, 4" reach	External 4 $\frac{1}{2}$ " - 13 $\frac{3}{8}$ "
MRP-2512	Internal Pitch Diameter Gage, 3 $\frac{3}{8}$ " reach	
MRP-2512-7	Internal Pitch Diameter Gage, 7" reach	Internal 4 $\frac{1}{2}$ " - 9 $\frac{5}{8}$ "
MRP-2512-10	Internal Pitch Diameter Gage, 10" reach	
MRP-2522	Internal Pitch Diameter Gage, 3 $\frac{3}{8}$ " reach	Internal 4 $\frac{1}{2}$ " - 13 $\frac{3}{8}$ "
MRP-2513	Internal/External PD Gage, 3 $\frac{3}{8}$ " reach	4 $\frac{1}{2}$ " - 9 $\frac{5}{8}$ "
MRP-2523	Internal/External PD Gage, 3 $\frac{3}{8}$ " reach	4 $\frac{1}{2}$ " - 13 $\frac{3}{8}$ "
MRP-3001	External Pitch Diameter Gage, 3 $\frac{3}{8}$ " reach	External 8 $\frac{5}{8}$ " - 24"
MRP-3002	Internal Pitch Diameter Gage, 3 $\frac{3}{8}$ " reach	Internal 8 $\frac{5}{8}$ " - 24"
MRP-3003	Internal/External Pitch Diameter Gage, 3 $\frac{3}{8}$ " reach	Internal 8 $\frac{5}{8}$ " - 24" External 8 $\frac{5}{8}$ " - 24"
MRP-3004	Internal/External Pitch Diameter Gage, 3 $\frac{3}{8}$ " reach	Internal 20" - 36" External 20" - 36"
MRP-3501	External Pitch Diameter Gage, w/ 6 $\frac{1}{4}$ " reach	External 8 $\frac{5}{8}$ " - 24"
MRP-3502	Internal Pitch Diameter Gage, w/ 6 $\frac{1}{4}$ " reach	Internal 8 $\frac{5}{8}$ " - 24"
MRP-3503	Internal/External PD Gage, w/ 6 $\frac{1}{4}$ " reach	Internal 8 $\frac{5}{8}$ " - 24" External 8 $\frac{5}{8}$ " - 24"

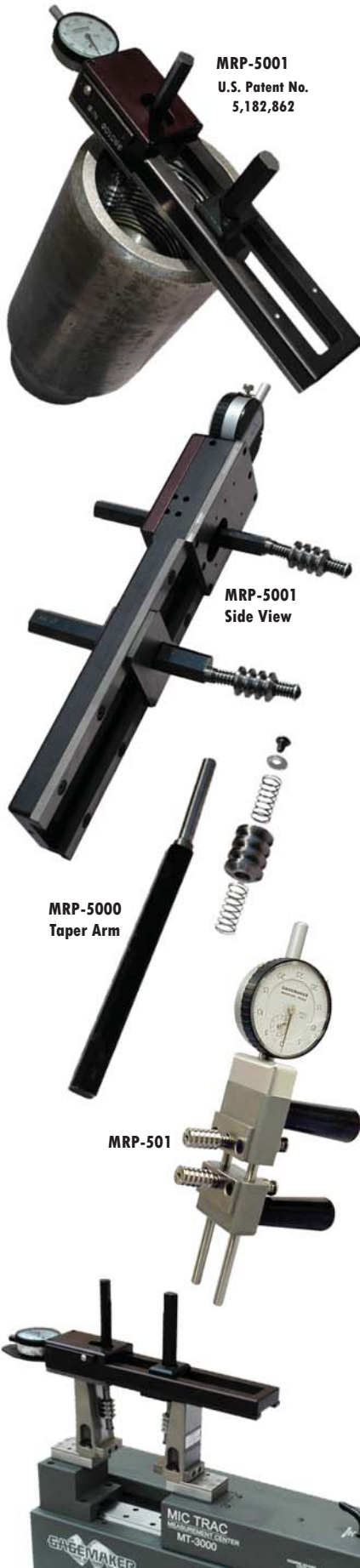
*Voted in by API in 2008

MRP REPLACEMENT PARTS

These are some of the most commonly requested replacement parts for the MRP gages. Contact Gagemaker for parts not listed.

Model	Description
MRP-10BL	MRP-1000 Block Set
MRP-10UA	MRP-1000 Upper Arm
MRP-10LA	MRP-1000 Lower Arm
MRP-10SLA	MRP-1000 Special Arm 1" longer
MRP-20BL	MRP-2000 Block Set
MRP-20LB-1	MRP-2000 Lower Block w/ 1" hole
MRP-21UA	MRP-2001 Upper Arm
MRP-21LA	MRP-2001 Lower Arm
MRP-21UA-7	MRP-2001 7" Upper Arm
MRP-21LA-7	MRP-2001 7" Lower Arm
MRP-21UA-10	MRP-2001 10" Upper Arm
MRP-21LA-10	MRP-2001 10" Lower Arm
MRP-.625I	Int. Thread Shoe, 5/8" long, .125 Pivot Dimension
MRP-.625E	Ext. Thread Shoe, 5/8" long, .250 Pivot Dimension
MRP-10WP	MRP-1000 Wear Pad Set
MRP-10SP	MRP-1000 Spring Plunger
MRP-20SP	MRP-2000 Spring Plunger
MRP-22UA	MRP-2002 Upper Arm
MRP-22LA	MRP-2002 Lower Arm
MRP-22UA-7	MRP-2002 7" Upper Arm
MRP-22LA-7	MRP-2002 7" Lower Arm
MRP-22UA-10	MRP-2002 10" Upper Arm
MRP-22LA-10	MRP-2002 10" Lower Arm
MRP-20WP	MRP-2000 Wear Pad Set
MRP-20WPEX	MRP-2000 Extended Wear Pad Set
MRP-20WP-7	MRP-2000 Wear Pad Set, 7" reach
MRP-20WP-10	MRP-2000 Wear Pad Set, 10" reach
MRP-RAIL-12	MRP-2000 12" Cross Rail
MRP-RAIL-18	MRP-2000 18" Cross Rail
MRP-RAIL-24	MRP-2000 24" Cross Rail
MRP-10KB-S	MRP-1000 Knob-Short
MRP-10KB-L	MRP-1000 Knob-Long
MRP-20KB	MRP-2000 Knob
MRP-.875	Thread Shoe, 7/8" long, .250 Pivot Dimension
MRP-1.00	Thread Shoe, 1" long, .250 Pivot Dimension
MRP-30WP	MRP-3000 Wear Pad Set
MRP-30WPEX	MRP-3000 Extended Wear Pad Set
MRP-30RS-18	MRP-3000 Rail Set, 18" Max
MRP-30RS-24	MRP-3000 Rail Set, 24" Max
MRP-GSS	MRP Gage Setting Stand





MRP-5001
U.S. Patent No.
5,182,862

MRP-5001
Side View

MRP-5000
Taper Arm

MRP-501

MRP-5000 FUNCTIONAL ROLL GAGES FOR TAPERED THREADS

The MRP-5000 series of thread pitch diameter gages use hardened and ground thread rolls to inspect functional size of tapered threaded connectors. The MRP-5000 gages are adjustable within a size range and have interchangeable thread rolls for inspection of all API thread forms. The gages must be preset to size using one of a variety of setting methods available. Refer to the setting options that follow. *Please specify preferred taper arms when ordering. Thread rolls are sold separately.*

Model	Description	Resolution	Range
MRP-501*	External Sizes by Taper, Single Taper Gage*	.0001"	1" - 2¼"
MRP-502*	Internal Sizes by Taper, Single Taper Gage*	.0001"	1" - 2¼"
MRP-5001	Internal/External Tubing and Casing Connectors	.0005"	2⅝" - 5½"
MRP-5002	Internal/External Tubing and Casing Connectors	.0005"	2⅝" - 13⅝"
MRP-5003	Internal/External Tubing and Casing Connectors	.0005"	13⅝" - 20"
MRP-5004	Internal/External Tubing and Casing Connectors and Internal Tool Joints	.0001"	2⅝" - 9⅝"

*Please specify taper when ordering. Built to one specific taper. One taper per gage. Set of thread rolls included.

REPLACEMENT PARTS

Model	Description*
MRP5-10	Positioning Springs (Set of 2)
MRP5-11	Retainer Washers (Set of 2)
MRP5-12	Lock Screws (Set of 2)
MRP5-75T	¾" TPF Taper Arms (Set of 2)
MRP5-10T	1" TPF Taper Arms (Set of 2)
MRP5-125T	1¼" TPF Taper Arms (Set of 2)
MRP5-15T	1½" TPF Taper Arms (Set of 2)
MRP5-20T	2" TPF Taper Arms (Set of 2)
MRP5-30T	3" TPF Taper Arms (Set of 2)

*Taper arm price does not include thread rolls. To determine the thread rolls required, refer to thread roll chart below.

MRP-5000 THREAD ROLLS

The product thread form determines the thread roll set that will be used. Thread roll sets consist of 2 rolls supplied in a labeled storage tube.

Model	Description
TR-8R	All API 8 Round Tubing
TR-10R	All API 10 Round Tubing
TR-8LP	8V API Line Pipe, American Standard NPT
TR-11LP	11½" V API Line Pipe, American Standard NPT
TR-B10I	API Buttress Casing, Internal, 16" - 20"
TR-B10E	API Buttress Casing, External, 16" - 20"
TR-B75I	API Buttress Casing, Internal, 4½" - 13⅝"
TR-B75E	API Buttress Casing, External, 4½" - 13⅝"
TR-41576	P.A.C. Connections, 2⅝" - 3½", 2⅝" - 4" American Open Hole
TR-4238	4", 5½", & 6⅝" API Full Hole 2⅝" - 5" Hughes Xtra Hole 2⅝" - 4½" Hughes Slim Hole 3½" & 4½" API EXT Flush 2⅝" - 6⅝" API INT Flush API Numbered Connections #23 - #50 3½" - 5½" Double Streamline 6⅝" API REG
TR-4338	5½", 7⅝", 8⅝" API REG, API Numbered Connections #56 - #77
TR-5340	2⅝" - 4½" API REG, 3½", 4½" API Full Hole
TR-6232	2⅝" & 2⅞" External Flush
TR-61555	API Numbered Connections #10, #12, #13, #16 M.T. (Macaroni Tubing)
TR-352H9	3 ½" - 6⅝" Hughes H-90
TR-353H9	7" - 8⅝" Hughes H-90
TR-312SLH9	2⅝" - 3½" Hughes Slim Line
TR-BL	Blank thread roll set

MRP-5500 FUNCTIONAL ROLL GAGES FOR TAPERED THREADS

The MRP-5500 gage is for rotary shouldered connections. The MRP-5000 series of thread pitch diameter gages use hardened and ground thread rolls to inspect functional size of tapered threaded connectors. The MRP-5000 gages are adjustable within a size range and have interchangeable thread rolls for inspection of all API thread forms. The gages must be preset to size using one of a variety of setting methods available. Refer to the setting options that follow. *Please specify preferred taper arms when ordering. Thread rolls are sold separately.*

Model	Description	Resolution	Range
MRP-5501	External Tool Joints	.0001"	2 $\frac{3}{8}$ " - 5 $\frac{1}{2}$ "
MRP-5502	External Tool Joints	.0001"	5 $\frac{1}{2}$ " - 7 $\frac{5}{8}$ "
MRP-5503	External Tool Joints	.0001"	8 $\frac{5}{8}$ "
MRP-5012	Internal Tunneling Drill Pipe	.0001"	$\frac{3}{4}$ " - 2"
MRP-5512	External Tunneling Drill Pipe (Please specify taper when ordering. Built to one specific taper. One taper per gage.)	.0001"	$\frac{3}{4}$ " - 2"

REPLACEMENT PARTS

Model	Description*
MRP55-125T	1 $\frac{1}{4}$ " TPF Taper Arms (Set of 2)
MRP55-15T	1 $\frac{1}{2}$ " TPF Taper Arms (Set of 2)
MRP55-20T	2" TPF Taper Arms (Set of 2)
MRP55-30T	3" TPF Taper Arms (Set of 2)

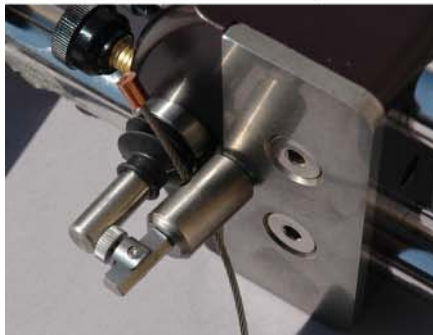
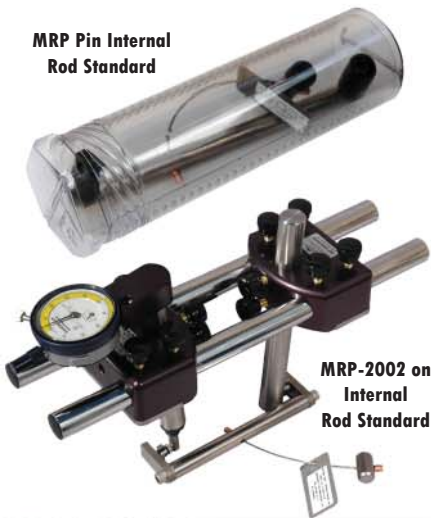
*Taper arm price does not include thread rolls. To determine the thread rolls required, refer to thread roll chart below.

MRP-5500 THREAD ROLLS

The product thread form determines the thread roll set that will be used. Thread roll sets consist of 2 rolls supplied in a labeled storage tube.

Model	Description
TR-41576	P.A.C. Connections, 2 $\frac{3}{8}$ " - 3 $\frac{1}{2}$ ", 2 $\frac{3}{8}$ " - 4 $\frac{1}{2}$ " American Open Hole
TR-4238	4", 5 $\frac{1}{2}$ ", & 6 $\frac{1}{2}$ " API Full Hole 2 $\frac{3}{8}$ " - 5" Hughes Xtra Hole 2 $\frac{3}{8}$ " - 4 $\frac{1}{2}$ " Hughes Slim Hole 3 $\frac{1}{2}$ " & 4 $\frac{1}{2}$ " API EXT Flush 2 $\frac{3}{8}$ " - 6 $\frac{1}{2}$ " API INT Flush API Numbered Connections #23 - #50 3 $\frac{1}{2}$ " - 5 $\frac{1}{2}$ " Double Streamline 6 $\frac{1}{2}$ " API REG
TR-4338	5 $\frac{1}{2}$ ", 7 $\frac{5}{8}$ ", 8 $\frac{5}{8}$ " API REG, API Numbered Connections #56 - #77
TR-5340	2 $\frac{3}{8}$ " - 4 $\frac{1}{2}$ " API REG, 3 $\frac{1}{2}$ " & 4 $\frac{1}{2}$ " API Full Hole
TR-6232	2 $\frac{3}{8}$ " & 2 $\frac{1}{2}$ " External Flush
TR-61555	API Numbered Connections #10, #12, #13, #16 M.T. (Macaroni Tubing)
TR-352H9	3 $\frac{1}{2}$ " - 6 $\frac{1}{2}$ " Hughes H-90
TR-353H9	7" - 8 $\frac{5}{8}$ " Hughes H-90
TR-312SLH9	2 $\frac{3}{8}$ " - 3 $\frac{1}{2}$ " Hughes Slim Line
TR-BL	Blank thread roll set



MRP Pin External
Rod StandardMRP Pin Internal
Rod Standard

GAGE SETTING MASTERS

ROD STYLE SETTING STANDARDS FOR MRP-1000, 1500, 2000, 2500, 3000, & 3500 ONLY

Rod style setting standards are designed to preset all models of the MRP Series gages for accurate inspection of API threaded connections. Each set of standards consists of two precision ground rods that are ground to lengths in accordance with API Spec 5B. The rod sets are securely attached together and labeled with the connection size and serial number. The rods set the axial location of the thread shoe and the distance between shoes for accurate inspection of threaded connectors.

Thread Type	Connection	Pin Standard Model	Box Standard Model
NUE	2 $\frac{3}{8}$ " NUE	MRP-238NUE-P	MRP-238NUE-B
	2 $\frac{7}{8}$ " NUE	MRP-278NUE-P	MRP-278NUE-B
	3 $\frac{1}{2}$ " NUE	MRP-312NUE-P	MRP-312NUE-B
	4" NUE	MRP-4NUE-P	MRP-4NUE-B
	4 $\frac{1}{2}$ " NUE	MRP-412NUE-P	MRP-412NUE-B
EUE	2 $\frac{3}{8}$ " EUE	MRP-238EUE-P	MRP-238EUE-B
	2 $\frac{7}{8}$ " EUE	MRP-278EUE-P	MRP-278EUE-B
	3 $\frac{1}{2}$ " EUE	MRP-312EUE-P	MRP-312EUE-B
	4" EUE	MRP-4EUE-P	MRP-4EUE-B
	4 $\frac{1}{2}$ " EUE	MRP-412EUE-P	MRP-412EUE-B
Buttress	4 $\frac{1}{2}$ " Buttress	MRP-412B-P	MRP-412B-B
	5" Buttress	MRP-5B-P	MRP-5B-B
	5 $\frac{1}{2}$ " Buttress	MRP-512B-P	MRP-512B-B
	6 $\frac{5}{8}$ " Buttress	MRP-658B-P	MRP-658B-B
	7" Buttress	MRP-7B-P	MRP-7B-B
	7 $\frac{5}{8}$ " Buttress	MRP-758B-P	MRP-758B-B
	8 $\frac{5}{8}$ " Buttress	MRP-858B-P	MRP-858B-B
	9 $\frac{5}{8}$ " Buttress	MRP-958B-P	MRP-958B-B
	10 $\frac{3}{4}$ " Buttress	MRP-1034B-P	MRP-1034B-B
	11 $\frac{3}{4}$ " Buttress	MRP-1134B-P	MRP-1134B-B
	13 $\frac{3}{8}$ " Buttress	MRP-1338B-P	MRP-1338B-B
	16" Buttress	MRP-16B-P	MRP-16B-B
	18 $\frac{5}{8}$ " Buttress	MRP-1858B-P	MRP-1858B-B
LTC	20" Buttress	MRP-20B-P	MRP-20B-B
	4 $\frac{1}{2}$ " 8R LTC	MRP-412L-P	MRP-412L-B
	5" 8R LTC	MRP-5L-P	MRP-5L-B
	5 $\frac{1}{2}$ " 8R LTC	MRP-512L-P	MRP-512L-B
	6 $\frac{5}{8}$ " 8R LTC	MRP-658L-P	MRP-658L-B
	7" 8R LTC	MRP-7L-P	MRP-7L-B
	7 $\frac{5}{8}$ " 8R LTC	MRP-758L-P	MRP-758L-B
	8 $\frac{5}{8}$ " 8R LTC	MRP-858L-P	MRP-858L-B
	9 $\frac{5}{8}$ " 8R LTC	MRP-958L-P	MRP-958L-B
STC	20" 8R LTC	MRP-20L-P	MRP-20L-B
	4 $\frac{1}{2}$ " - 9.50# 8R STC	MRP-412S-9-P	MRP-412S-9-B
	4 $\frac{1}{2}$ " - Other 8R STC	MRP-412S-O-P	MRP-412S-O-B
	5" - 11.50# 8R STC	MRP-5S-11-P	MRP-5S-11-B
	5" - Other 8R STC	MRP-5S-O-P	MRP-5S-O-B
	5 $\frac{1}{2}$ " 8R STC	MRP-512S-P	MRP-512S-B
	6 $\frac{5}{8}$ " 8R STC	MRP-658S-P	MRP-658S-B
	7" - 17.00# 8R STC	MRP-7S-17-P	MRP-7S-17-B
	7" - Other 8R STC	MRP-7S-O-P	MRP-7S-O-B
	7 $\frac{5}{8}$ " 8R STC	MRP-758S-P	MRP-758S-B
	8 $\frac{5}{8}$ " - 24.00# 8R STC	MRP-858S-24-P	MRP-858S-24-B
	8 $\frac{5}{8}$ " - Other 8R STC	MRP-858S-O-P	MRP-858S-O-B
	9 $\frac{5}{8}$ " 8R STC	MRP-958S-P	MRP-958S-B
	10 $\frac{3}{4}$ " - 32.75# 8R STC	MRP-1034S-32-P	MRP-1034S-32-B
	10 $\frac{3}{4}$ " - Other 8R STC	MRP-1034S-O-P	MRP-1034S-O-B
	11 $\frac{3}{4}$ " 8R STC	MRP-1134S-P	MRP-1134S-B
	13 $\frac{3}{8}$ " 8R STC	MRP-1338S-P	MRP-1338S-B
	16" 8R STC	MRP-16S-P	MRP-16S-B
	18 $\frac{5}{8}$ " 8R STC	MRP-1858S-P	MRP-1858S-B
	20" 8R STC	MRP-20S-P	MRP-20S-B

All Special Orders, Non-Standard API or Premium Connection Setting Standards are Extra

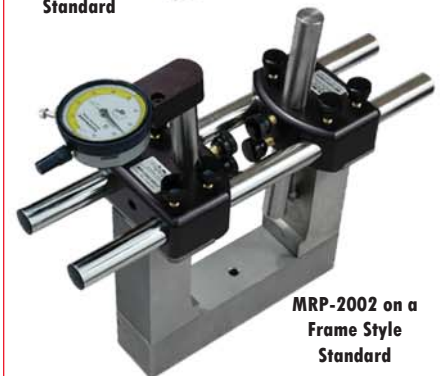
FRAME STYLE SETTING STANDARDS FOR MRP-1000, 1500, 2000, 2500, 3000, & 3500 SERIES

The frame style setting standards are designed to preset all models of the MRP Series gages for accurate inspection of API threaded connections. These standards consist of a rigid, non-adjustable steel block precision machined to proper size to tolerances of ± 0.0003 ". Round style standards, smaller than 2 $\frac{3}{8}$ ", are available as specials (contact directly for more information).

FRAME STYLE SETTING STANDARDS*

Thread Type	Connection	Pin Standard Model	Box Standard Model
NUE	2 $\frac{3}{8}$ " NUE	FSTD-238N-P	FSTD-238N-B
	2 $\frac{7}{8}$ " NUE	FSTD-278N-P	FSTD-278N-B
	3 $\frac{1}{2}$ " NUE	FSTD-312N-P	FSTD-312N-B
	4 $\frac{1}{2}$ " NUE	FSTD-412N-P	FSTD-412N-B
EUE	2 $\frac{3}{8}$ " EUE	FSTD-238E-P	FSTD-238E-B
	2 $\frac{7}{8}$ " EUE	FSTD-278E-P	FSTD-278E-B
	3 $\frac{1}{2}$ " EUE	FSTD-312E-P	FSTD-312E-B
	4 $\frac{1}{2}$ " EUE	FSTD-412E-P	FSTD-412E-B
Buttress	4 $\frac{1}{2}$ " Buttress	FSTD-412B-P	FSTD-412B-B
	5" Buttress	FSTD-5B-P	FSTD-5B-B
	5 $\frac{1}{2}$ " Buttress	FSTD-512B-P	FSTD-512B-B
	6 $\frac{5}{8}$ " Buttress	FSTD-658B-P	FSTD-658B-B
	7" Buttress	FSTD-7B-P	FSTD-7B-B
	7 $\frac{5}{8}$ " Buttress	FSTD-758B-P	FSTD-758B-B
	8 $\frac{5}{8}$ " Buttress	FSTD-858B-P	FSTD-858B-B
	9 $\frac{5}{8}$ " Buttress	FSTD-958B-P	FSTD-958B-B
	10 $\frac{3}{4}$ " Buttress	FSTD-1034B-P	FSTD-1034B-B
	11 $\frac{3}{4}$ " Buttress	FSTD-1134B-P	FSTD-1134B-B
	13 $\frac{3}{8}$ " Buttress	FSTD-1338B-P	FSTD-1338B-B
	16" Buttress	FSTD-16B-P	FSTD-16B-B
LTC	18 $\frac{5}{8}$ " Buttress	FSTD-1858B-P	FSTD-1858B-B
	20" Buttress	FSTD-20B-P	FSTD-20B-B
	4 $\frac{1}{2}$ " 8R LTC	FSTD-412L-P	FSTD-412L-B
	5" 8R LTC	FSTD-5L-P	FSTD-5L-B
	5 $\frac{1}{2}$ " 8R LTC	FSTD-512L-P	FSTD-512L-B
	6 $\frac{5}{8}$ " 8R LTC	FSTD-658L-P	FSTD-658L-B
	7" 8R LTC	FSTD-7L-P	FSTD-7L-B
	7 $\frac{5}{8}$ " 8R LTC	FSTD-758L-P	FSTD-758L-B
	8 $\frac{5}{8}$ " 8R LTC	FSTD-858L-P	FSTD-858L-B
	9 $\frac{5}{8}$ " 8R LTC	FSTD-958L-P	FSTD-958L-B
	20" 8R LTC	FSTD-20L-P	FSTD-20L-B
STC	4 $\frac{1}{2}$ " - 9.50# 8R STC	FSTD-412S-9-P	FSTD-412S-9-B
	4 $\frac{1}{2}$ " - Other 8R STC	FSTD-412S-O-P	FSTD-412SS-O-B
	5" - 11.50# 8R STC	FSTD-5S-11-P	FSTD-5S-O-B
	5" - Other 8R STC	FSTD-5S-O-P	FSTD-5S-O-B
	5 $\frac{1}{2}$ " 8R STC	FSTD-512S-P	FSTD-512S-B
	6 $\frac{5}{8}$ " 8R STC	FSTD-658S-P	FSTD-658S-B
	7" - 17.00# 8R STC	FSTD-7S-17-P	FSTD-7S-17-B
	7" - Other 8R STC	FSTD-7S-O-P	FSTD-7S-O-B
	7 $\frac{5}{8}$ " 8R STC	FSTD-758S-P	FSTD-758S-B
	8 $\frac{5}{8}$ " - 24.00# 8R STC	FSTD-858S-24-P	FSTD-858S-24-B
	8 $\frac{5}{8}$ " - Other 8R STC	FSTD-858S-O-P	FSTD-858S-O-B
	9 $\frac{5}{8}$ " 8R STC	FSTD-958S-P	FSTD-958S-B
	10 $\frac{3}{4}$ " - 32.75# 8R STC	FSTD-1034-32-P	FSTD-1034-32-B
	10 $\frac{3}{4}$ " - Other 8R STC	FSTD-1034S-O-P	FSTD-1034S-O-B
	11 $\frac{3}{4}$ " 8R STC	FSTD-1134S-P	FSTD-1134S-B
	13 $\frac{3}{8}$ " 8R STC	FSTD-1338S-P	FSTD-1338S-B
	16" 8R STC	FSTD-16S-P	FSTD-16S-B
	18 $\frac{5}{8}$ " 8R STC	FSTD-1858S-P	FSTD-1858S-B
	20" 8R STC	FSTD-20S-P	FSTD-20S-B

*Special Orders, Non Standard API, Round or Premium Connection Setting Standards are Available



Round Style Standards
(Smaller than
2 $\frac{3}{8}$ ")





FRAME STYLE SETTING STANDARDS FOR ROTARY SHOULDERED CONNECTIONS

SETTING STANDARDS FOR MRP-5000 AND MRP-5500 SERIES

Thread Type	Connection	Pin Standard Model	Box Standard Model
P.A.C. Connections	2 $\frac{3}{8}$ "	FSTD-238PAC-P	FSTD-238PAC-B
	2 $\frac{7}{8}$ "	FSTD-278PAC-P	FSTD-278PAC-B
API Full Hole	3 $\frac{1}{2}$ "	FSTD-312FH-P	FSTD-312FH-B
	4"	FSTD-4FH-P	FSTD-4FH-B
	4 $\frac{1}{2}$ "	FSTD-412FH-P	FSTD-412FH-B
	5 $\frac{1}{2}$ "	FSTD-512FH-P	FSTD-512FH-B
	6 $\frac{5}{8}$ "	FSTD-658FH-P	FSTD-658FH-B
Hughes Extra Hole	3 $\frac{1}{2}$ "	FSTD-312EH-P	FSTD-312EH-B
	4 $\frac{1}{2}$ "	FSTD-412EH-P	FSTD-412EH-B
	5"	FSTD-5EH-P	FSTD-5EH-B
Hughes Slim Hole	2 $\frac{3}{8}$ "	FSTD-238SH-P	FSTD-238SH-B
	2 $\frac{7}{8}$ "	FSTD-278SH-P	FSTD-278SH-B
	3 $\frac{1}{2}$ "	FSTD-312SH-P	FSTD-312SH-B
	4"	FSTD-4SH-P	FSTD-4SH-B
	4 $\frac{1}{2}$ "	FSTD-412SH-P	FSTD-412SH-B
API Internal Flush	2 $\frac{3}{8}$ "	FSTD-238IF-P	FSTD-238IF-B
	2 $\frac{7}{8}$ "	FSTD-278IF-P	FSTD-278IF-B
	3 $\frac{1}{2}$ "	FSTD-312IF-P	FSTD-312IF-B
	4"	FSTD-4IF-P	FSTD-4IF-B
	4 $\frac{1}{2}$ "	FSTD-412IF-P	FSTD-412IF-B
	5 $\frac{1}{2}$ "	FSTD-512IF-P	FSTD-512IF-B
	6 $\frac{5}{8}$ "	FSTD-658IF-P	FSTD-658IF-B
API Regular	2 $\frac{3}{8}$ "	FSTD-238REG-P	FSTD-238REG-B
	2 $\frac{7}{8}$ "	FSTD-278REG-P	FSTD-278REG-B
	3 $\frac{1}{2}$ "	FSTD-312REG-P	FSTD-312REG-B
	4 $\frac{1}{2}$ "	FSTD-412REG-P	FSTD-412REG-B
	5 $\frac{1}{2}$ "	FSTD-512REG-P	FSTD-512REG-B
	6 $\frac{5}{8}$ "	FSTD-658REG-P	FSTD-658REG-B
	7 $\frac{5}{8}$ "	FSTD-758REG-P	FSTD-758REG-B
API No. Connections	8 $\frac{5}{8}$ "	FSTD-858REG-P	FSTD-858REG-B
	#23	FSTD-23NC-P	FSTD-23NC-B
	#26	FSTD-26 NC-P	FSTD-26 NC-B
	#31	FSTD-31NC-P	FSTD-31NC-B
	#35	FSTD-35NC-P	FSTD-35NC-B
	#38	FSTD-38NC-P	FSTD-38NC-B
	#40	FSTD-40NC-P	FSTD-40NC-B
	#44	FSTD-44NC-P	FSTD-44NC-B
	#46	FSTD-46NC-P	FSTD-46NC-B
	#50	FSTD-50NC-P	FSTD-50NC-B
	#56	FSTD-56NC-P	FSTD-56NC-B
	#61	FSTD-61C-P	FSTD-61C-B
	#70	FSTD-70NC-P	FSTD-70NC-B
	#77	FSTD-77NC-P	FSTD-77NC-B
Hughes Slim Line H-90	2 $\frac{3}{8}$ "	FSTD-238SL-P	FSTD-238SL-B
	2 $\frac{7}{8}$ "	FSTD-278SL-P	FSTD-278SL-B
	3 $\frac{1}{2}$ "	FSTD-312SL-P	FSTD-312SL-B
Hughes H-90	3 $\frac{1}{2}$ "	FSTD-312H90-P	FSTD-312H90-B
	4"	FSTD-4H90-P	FSTD-4H90-B
	4 $\frac{1}{2}$ "	FSTD-412H90-P	FSTD-412H90-B
	5"	FSTD-5H90-P	FSTD-5H90-B
	5 $\frac{1}{2}$ "	FSTD-512H90-P	FSTD-512H90-B
	6 $\frac{5}{8}$ "	FSTD-658H90-P	FSTD-658H90-B
	7"	FSTD-7H90-P	FSTD-7H90-B
	7 $\frac{5}{8}$ "	FSTD-758H90-P	FSTD-758H90-B
	8 $\frac{5}{8}$ "	FSTD-858H90-P	FSTD-858H90-B

Premium Tubing and Casing Gages



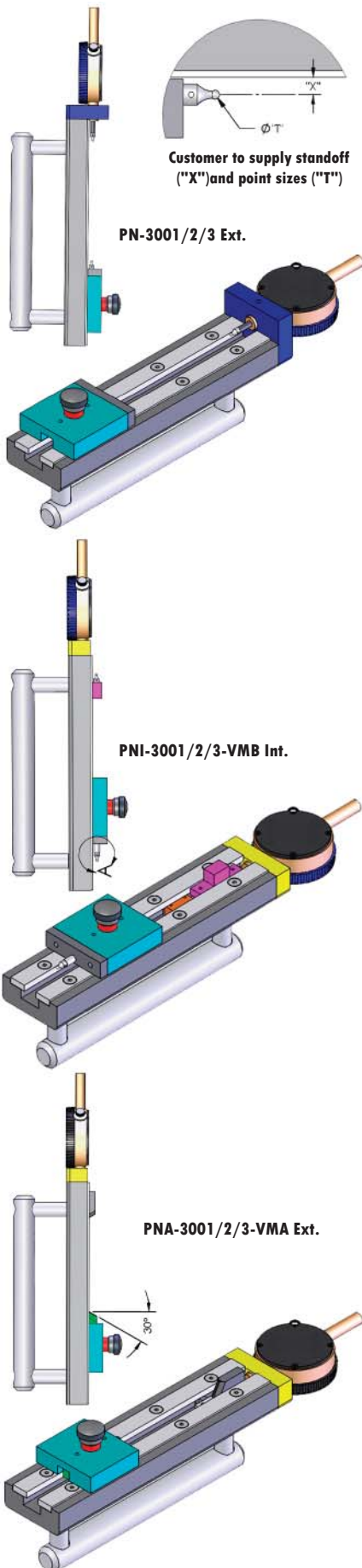
Gagemaker's line of API products includes gages required by API for inspection of threaded tubular goods. Our products include: pitch diameter gages, lead gages, taper gages, thread height gages, flange groove gages, and setting standards.

We offer API industry related products that include additional element gages designed for specific customer requirements. Since 1980, the OCTG industry has used these special gages. They are seen in most facilities that manufacture or inspect oilfield products.

Our premium gages are used to inspect non-industry standard connections, which are designed by proprietary threaders. These threaders have adopted many of our premium connection gages as their industry standard.

The MRP gage is approved for API's new SR22 connection. The SR22 requires pitch diameter measuring gages to replicate specific pitch diameter values. The MRP-2000 series has effectively accomplished this for over a decade, along with EUE, NUE, STC, LTC, and Buttress connections.





PN-3000 SERIES PIN SEAL DIAMETERS GAGES



The PN-3000 Series of gages inspect critical pin seal diameters on premium connectors ranging from 2 $\frac{3}{8}$ " - 13 $\frac{3}{8}$ ". The gage also inspects seal tapers with the addition of stand-off plates. Each model covers a specific range of connection sizes, making the PN-3000 gages exceedingly versatile and economical.

The PN-3000 gages use precision contact points that position on the seal at a fixed distance from the connector face during inspection. Contact point diameters are manufactured to tolerances of $\pm .0002$ ". Each set of contact points is interchangeable to allow measuring different thread forms. The type of connector and distance from the face of the connector to the measuring plane, determine the diameter of the contact points required.

Before inspecting parts, these gages must be preset to a nominal predetermined dimension using gage blocks, Gagemaker's Pin Seal Diameter Gauge Setting Master, or Frame Standards. Once the gage is preset, it is properly positioned on the part by sweeping to obtain the largest indicator reading. The gage's indicator reports actual measurement readings. The PN-3000 gage is supplied with a .0005" resolution indicator.

Features

- Inspects pin seal diameters on premium connectors ranging from 2 $\frac{3}{8}$ " - 13 $\frac{3}{8}$ ".
- Inspects seal tapers on premium connectors ranging from 2 $\frac{3}{8}$ " - 13 $\frac{3}{8}$ ".
- Provides accurate measurements on the gage's indicator at the critical sealing point of the pin.
- Uses interchangeable contact points to allow inspection on a variety of thread forms.
- Supplied with a .0005" resolution indicator.
- Requires presetting using gage blocks, Gagemaker's Pin Seal Diameter Gauge Setting Master, or Frame Standards.
- Allows use in a manufacturing or field environment due to durable construction.

PN-3000 SERIES PIN NOSE DIAMETER GAGES*

The PN series measure pin nose diameter using contact points. Specify the distance from the face of the connector to the measuring plane and desired contact point diameter when ordering.

Model	Description	Range
PN-3001	Pin Nose Diameter Gauge	2 $\frac{3}{8}$ " - 5 $\frac{1}{2}$ " (0" - 5.750")
PN-3002	Pin Nose Diameter Gauge	6" - 9 $\frac{5}{8}$ " (0" - 9.750")
PN-3003	Pin Nose Diameter Gauge	10" - 13 $\frac{3}{8}$ " (0" - 13.750")

*There is a separate cost to reposition the point standoff of PN-3000 Gages. Quotation available upon request.

PN-3000 SERIES INTERNAL "BALL CONTACT" SEAL DIAMETER GAGES

The PNI series measure the internal ball contact seal diameter using contact points. Specify the distance from the face of the connector to the measuring plane and desired contact point diameter when ordering.

Model	Description	Range
PNI-3001-VMB	Internal "Ball Contact" Seal Diameter Gauge	2 $\frac{3}{8}$ " - 5 $\frac{1}{2}$ "
PNI-3002-VMB	Internal "Ball Contact" Seal Diameter Gauge	6" - 9 $\frac{5}{8}$ "
PNI-3003-VMB	Internal "Ball Contact" Seal Diameter Gauge	10" - 13 $\frac{3}{8}$ "

PN-3000 SERIES 30° EXTERNAL APEX DIAMETER GAGES

The PNA model gages measure only the external apex diameter of the connector.

Model	Description	Range
PNA-3001-VMA	30° External Apex Diameter Gauge, Anvils	2 $\frac{3}{8}$ " - 5 $\frac{1}{2}$ "
PNA-3002-VMA	30° External Apex Diameter Gauge, Anvils	6" - 9 $\frac{5}{8}$ "
PNA-3003-VMA	30° External Apex Diameter Gauge, Anvils	2 $\frac{3}{8}$ " - 13 $\frac{3}{8}$ "

PN-3000 SERIES 30° INTERNAL/EXTERNAL APEX SEAL DIAMETER GAGES

The PN-3000 Series 30° Internal/External Apex Seal Diameter gages measure both the internal and external diameters of the apex seal for the connector.

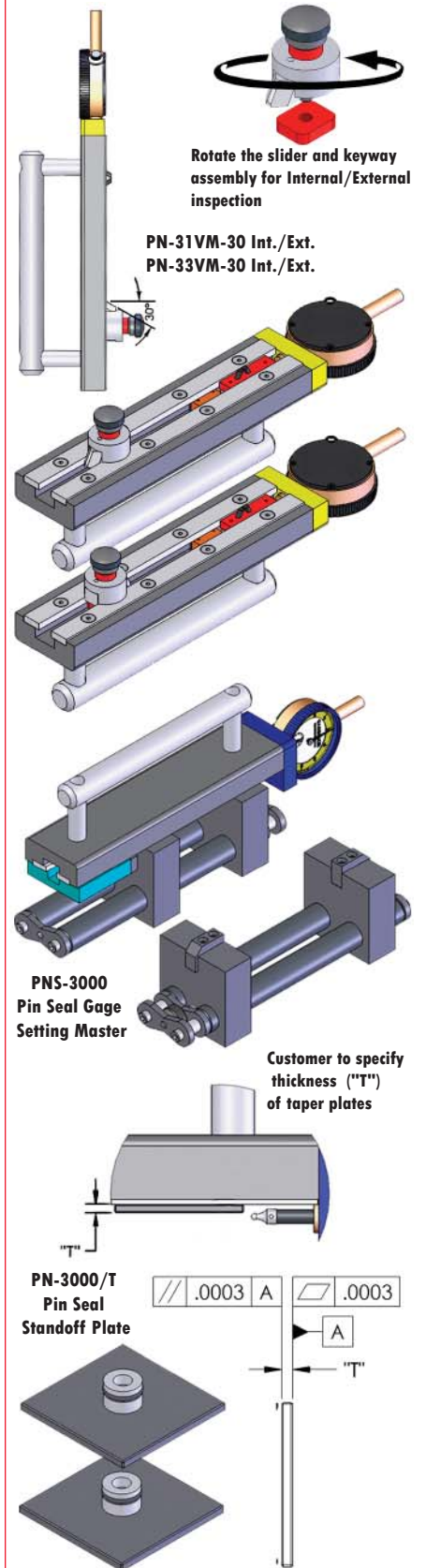
Model	Description	Range
PN-31VM-30	30° Internal/External Apex Seal Diameter "V"	Internal 2 $\frac{3}{8}$ " - 6 $\frac{5}{8}$ " External 4" - 6 $\frac{5}{8}$ "
PN-33VM-30	30° Internal/External Apex Seal Diameter "V"	Internal 2 $\frac{3}{8}$ " - 14" External 4" - 14"

PN-3000 PIN SEAL DIAMETER GAGE OPTIONAL EQUIPMENT

The PNS-3000 pin seal diameter gage setting standard is an adjustable standard used to preset the PN-3000 series pin seal gages. The PN-3000 gages use a dial indicator to compare a known diameter to the diameter of the machined piece. The pin seal standoff plates are available in various sizes. Additional custom sizes are available upon request. Pin seal standoff plates are sold as a set of two.

Model	Description	Range
PNS-3000	Pin Seal Gage Setting Master	2 $\frac{3}{8}$ " - 13 $\frac{1}{2}$ "
PN-3000/T.04087	Pin Seal Standoff Plate*	0.04087" (1.038 mm) thick
PN-3000/T.044	Pin Seal Standoff Plate*	0.0440" (1.12 mm) thick
PN-3000/T.0472	Pin Seal Standoff Plate*	0.0472" (1.20 mm) thick
PN-3000/T.0591	Pin Seal Standoff Plate*	0.0591" (1.50 mm) thick
PN-3000/T.064	Pin Seal Standoff Plate*	0.0640" (1.62 mm) thick
PN-3000/T.072	Pin Seal Standoff Plate*	0.0720" (1.83 mm) thick
PN-3000/T.0748	Pin Seal Standoff Plate*	0.0748" (1.90 mm) thick
PN-3000/T.078	Pin Seal Standoff Plate*	0.0780" (1.9812 mm) thick
PN-3000/T.0787	Pin Seal Standoff Plate*	0.0787" (2.00 mm) thick
PN-3000/T.0811	Pin Seal Standoff Plate*	0.0811" (2.06 mm) thick
PN-3000/T.0815	Pin Seal Standoff Plate*	0.0815" (2.07 mm) thick
PN-3000/T.094	Pin Seal Standoff Plate*	0.0940" (2.39" mm) thick
PN-3000/T.100	Pin Seal Standoff Plate*	0.1000" (2.54 mm) thick
PN-3000/T.114	Pin Seal Standoff Plate*	0.1140" (2.90 mm) thick
PN-3000/T.1181	Pin Seal Standoff Plate*	0.1181" (3.00 mm) thick
PN-3000/T.121	Pin Seal Standoff Plate*	0.1210" (3.07 mm) thick
PN-3000/T.122	Pin Seal Standoff Plate*	0.1220" (3.10 mm) thick
PN-3000/T.1221	Pin Seal Standoff Plate*	0.1221" (3.10 mm) thick
PN-3000/T.1378	Pin Seal Standoff Plate*	0.1378" (3.50 mm) thick
PN-3000/T.171	Pin Seal Standoff Plate*	0.1710" (4.34 mm) thick
PN-3000/T.1969	Pin Seal Standoff Plate*	0.1969" (5.00 mm) thick
PN-3000/T.200	Pin Seal Standoff Plate*	0.2000" (5.08 mm) thick
PN-3000/T.3149	Pin Seal Standoff Plate*	0.3149" (8.00 mm) thick
PN-3000/T.350	Pin Seal Standoff Plate*	0.3500" (8.89 mm) thick

*Additional plate thickness sizes available. All plates are 2 per set.



The round and frame style standards are designed to preset all models of the PN-3000 series gages for accurate inspection of API pin end seal taper diameters of premium connectors. These standards consist of a rigid, non-adjustable steel block machined to precise, proper size tolerances.



DEPTH GAGES



The DG-1000 series of gages inspects the location of internal and external shoulders and grooves from the face of the pin and box connectors or other datum surfaces. The DG-1000 Series is available with the standard base, a 12" base, and a 20" base. These gages are available in ranges: 0" - 8", 0" - 12", 0" - 18", and 0 - 24".

The standard gage is supplied with a 7" extension arm and a 0° and 45° contact point holder for use with any #4-48 threaded contact point. Longer extension arms and other contact point configurations and adapters are available upon request.

The DG-1000 gages do not require a setting standard. The gage is preset to zero on any flat surface and then applied to the product. Actual length measurements display on the gage's digital readout

Features

- Inspects internal and external shoulder and groove locations.
- Uses an interchangeable contact point that can service many different applications.
- Contains a contact point holder that adapts to 0° and 45° angles.
- SPC output
- Inch/metric conversion
- .0005"/.01 mm resolution

Model	Description	Range
DEPTH GAGE WITH DIGITAL DISPLAY (in/mm)		
DG-1008	Depth Gage w/ digital display (in/mm), .0005"/.01 mm resolution	0" - 8"
DG-1012	Depth Gage w/ digital display (in/mm), .0005"/.01 mm resolution	0" - 12"
DG-1018	Depth Gage w/ digital display (in/mm), .0005"/.01 mm resolution	0" - 18"
DEPTH GAGE WITH DIGITAL DISPLAY AND 12" BASE (in/mm)		
DG-1208	Depth Gage w/ digital display (in/mm), .0005"/.01 mm resolution, 12" base	0" - 8"
DG-1212	Depth Gage w/ digital display (in/mm), .0005"/.01 mm resolution, 12" base	0" - 12"
DG-1218	Depth Gage w/ digital display (in/mm), .0005"/.01 mm resolution, 12" base	0" - 18"
DG-1224	Depth Gage w/ digital display (in/mm), .0005"/.01 mm resolution, 12" base	0" - 24"
DEPTH GAGE WITH DIGITAL DISPLAY AND 20" BASE (in/mm)		
DG-2012	Depth Gage w/ digital display (in/mm), .0005"/.01 mm resolution, 20" base	0" - 12"
DG-2018	Depth Gage w/ digital display (in/mm), .0005"/.01 mm resolution, 20" base	0" - 18"
DG-2024	Depth Gage w/ digital display (in/mm), .0005"/.01 mm resolution, 20" base	0" - 24"
DEPTH GAGE ACCESSORIES		
DG-1000-R7	7" Extension Arm	-
DG-1000-R16	16" Extension Arm	-
DG-1000-R20	20" Extension Arm	-
DG-1000-R36	Stabilizer for larger diameters	36" & Larger
DG-1000-B	Blade Contact	-
DG-1000-GV	Groove Locator, .100" thick	-

TORQUE SHOULDER GAGES AND STANDARDS

Model	Description	Range
TS-1000	Shoulder Depth Gage, Base length 6"	1" - 6"
TS-4000	Shoulder Depth Gage (Specify Taper)	2 3/8" & Larger
TSS-1000	TS-1000 Setting Standard	-
TSS-4000	TS-4000 Setting Standard	-

PREMIUM CONNECTION GAGES

Model	Description	Range
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The ST-7001 measures variation in ring and plug gage standoff on rotary shouldered connectors. The gage is supplied complete with setting standard.

ST-7001	Indicator Standoff Gage w/ Setting Standard	.615" - .635"
STS-7001	Setting Standard Replacement, .625" width	.6250"

The CamLock micrometers measure API weld flange thickness. Supplied with verification standard. (Replacement standards are available separately, please call for quotation.)

CL-1001	CamLock Micrometer- 25°	0" - 1"
CL-1002	CamLock Micrometer- 25°	1" - 2"
CL-1003	CamLock Micrometer- 25°	2" - 3"
CL-1004	CamLock Micrometer- 25°	3" - 4"

POWER SECTION GAGES**NEW!**

Today in the oil field industry, unique high-performance power sections require increasingly accurate measurement tools for rotors and stators. Gagemaker has designed several **new** gages to measure a rotor's major and minor diameters and a stator's minor diameters.

ROTOR MAJOR DIAMETER T-MIC

Due to high spirals on the lobes, conventional measurement gages cannot be used for measuring rotor major diameters. Gagemaker developed the T-Micrometer (T-Mic) to measure a rotor's major diameter. The T-Mic spans across two lobes on one side of the centerline and uses a Mitutoyo micrometer thimble on the other to make the diameter measurements. Instead of modifying an existing micrometer, Gagemaker custom builds each T-Mic. Gagemaker's rugged design far exceeds all others on the market today. Four 10-32 SHCS and industrial high shear strength epoxies ensure a long life, as well as, maintain accurate perpendicular-measuring surfaces.

Model	Description	Diameter Range
TM12-0-1	T-Mic for Stator with ½" wide x 12" long base	0" - 1"
TM12-1-2	T-Mic for Stator with ½" wide x 12" long base	1" - 2"
TM12-2-3	T-Mic for Stator with ½" wide x 12" long base	2" - 3"
TM12-3-4	T-Mic for Stator with ½" wide x 12" long base	3" - 4"
TM12-4-5	T-Mic for Stator with ½" wide x 12" long base	4" - 5"
TM12-5-6	T-Mic for Stator with ½" wide x 12" long base	5" - 6"
TM12-6-7	T-Mic for Stator with ½" wide x 12" long base	6" - 7"
TM18-0-1	T-Mic for Stator with ½" wide x 18" long base	0" - 1"
TM18-1-2	T-Mic for Stator with ½" wide x 18" long base	1" - 2"
TM18-2-3	T-Mic for Stator with ½" wide x 18" long base	2" - 3"
TM18-3-4	T-Mic for Stator with ½" wide x 18" long base	3" - 4"
TM18-4-5	T-Mic for Stator with ½" wide x 18" long base	4" - 5"
TM18-5-6	T-Mic for Stator with ½" wide x 18" long base	5" - 6"
TM18-6-7	T-Mic for Stator with ½" wide x 18" long base	6" - 7"

ROTOR MINOR DIAMETER MIC

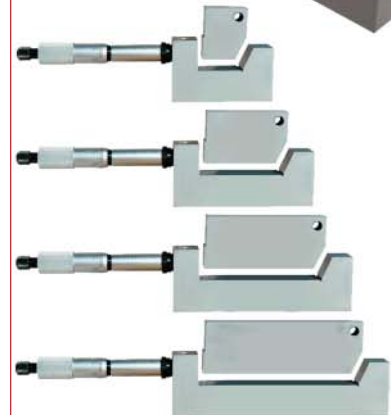
Gagemaker's minor diameter mic gage was designed to measure a rotor's minor diameter. The spiral lobes on the rotor produce a valley, or minor diameter. The depth of the minor diameter from the major diameter requires a 1" travel indicator stem. The extend range, 0" - 6", allows the measurement of all size rotors with only one gage. Ensuring the gage's durability and long life, Gagemaker's design uses a heavy duty indicator stem and bearing housing to withstand side loads.

Model	Description	Diameter Range
MM-0-6	Minor diameter micrometer	0" - 6"

ST-7001



ST-7001 Setting Standard

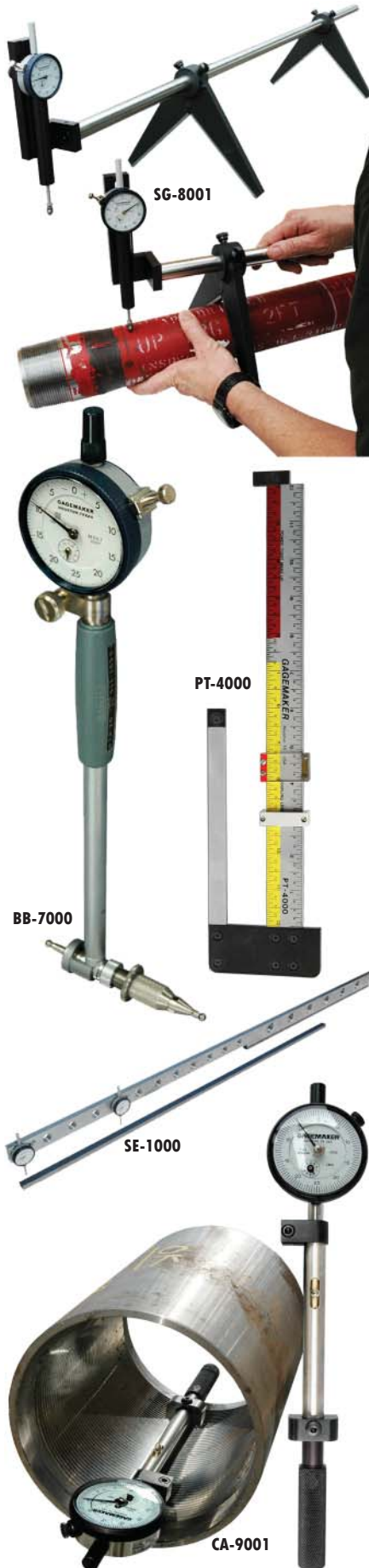
CL-1002 w/
Verification
Standard

TM12-0-1



TM18-0-1

MM-0-6



PREMIUM CONNECTION GAGES



The Saddle Gauge measures the amount of hook or bend at the end of a joint of pipe. The SG-8001 only uses the RC-375 roller contact. For replacement or additional points, please see page 26.

Model	Description	Cross Ref.	Range
SG-8001	Saddle Gauge	5336-C	All Sizes

Back-of-Box gage measures coupling and box seal diameters. Gage must be preset with a standard. For standards, please call for a quotation.

Model	Description	Range
BB-7000	Back-of-Box Seal Diameter Gauge	Premium

The PT-4000 adjusts to determine the proper make-up location of API couplings.

Model	Description	Range
PT-4000	Power Tight Make-up Gauge	All Sizes

The SE-1000 Straight Edge gage measures the straightness of well tubing and casing. The gage price includes one SES-1000 Standard. Additional or replacement standards are available.

Model	Description	Range
SE-1000	Straight Edge	36" - 64"
SES-1000	Replacement Straight Edge Standard	-

The Coupling Alignment gage ensures that the threads on both ends of the coupling are properly aligned with each other.

Model	Description	Cross Ref.	Range
CA-9001	Coupling Alignment Gauge	7964-B	All Sizes

PREMIUM CONNECTION GAGES**FACE GROOVE AND HOLE LOCATION GAGES**

Gagemaker's face groove gages inspect groove diameters and groove widths. Excellent for inspecting hole locations.

Model	Description	Range
BX-900	Ball Mic Gage w/ T188 Points (no indicator)	BX, R, RX Grooves, Diameters 2.6" - 13"
BX-1000	6B Groove Width Gage w/ T188 Points	BX, R, RX Grooves, Diameters 2.6" - 13"
BXG-1000	6B Groove Width Gage w/ T072 Points	BX, R, RX Grooves, Widths .375" - 1.5"
BXG-1002	Special Groove Width Gage w/ T072 Points	Special Groove, Widths 2.0"
BX-R13	Optional Extension rod for BX-1000, 13"	Groove Diameters to 13"
BX-R24	Optional Extension rod for BX-1000, 24"	Groove Diameters to 25"
BX-R30	Optional Extension rod for BX-1000, 30"	Groove Diameters to 31"
BX-R36	Optional Extension rod for BX-1000, 36"	Groove Diameters to 37"
Extensions with various lengths available		

FACE GROOVE AND HOLE LOCATION GAGE SETTING MASTERS
NEW!

Model	Description	Model	Description
FSBX-150	Setting Master for BX-150	FSBX-162	Setting Master for BX-162
FSBX-151	Setting Master for BX-151	FSBX-163	Setting Master for BX-163
FSBX-152	Setting Master for BX-152	FSBX-164	Setting Master for BX-164
FSBX-153	Setting Master for BX-153	FSBX-165	Setting Master for BX-165
FSBX-154	Setting Master for BX-154	FSBX-166	Setting Master for BX-166
FSBX-155	Setting Master for BX-155	FSBX-167	Setting Master for BX-167
FSBX-156	Setting Master for BX-156	FSBX-168	Setting Master for BX-168
FSBX-157	Setting Master for BX-157	FSBX-169	Setting Master for BX-169
FSBX-158	Setting Master for BX-158	FSBX-170	Setting Master for BX-170
FSBX-159	Setting Master for BX-159	FSBX-171	Setting Master for BX-171
FSBX-160	Setting Master for BX-160	FSBX-172	Setting Master for BX-172
FSBX-161	Setting Master for BX-161	FSBX-303	Setting Master for BX-303

API AND PREMIUM GAGES

Gagemaker has developed many gages for the inspection of premium threaded connections. Many of these special gages have direct application to API connections as well.

Model	Description	Cross Ref.	Range
Buttress runout gage ensures proper thread pullout on runout type threads. Standard 1" and 2" point spacing.			
BR-2001	Buttress Runout Gage	1211	All Sizes
BRB-2001	Buttress Runout Base Only	-	-
BRS-2001	Replacement Shoes (2)	-	-

The WT-9000 series of gages measures wall thickness at specific distances from the end of the pipe. Specify the distance from the end of the pipe to the measuring plane when ordering.

WT-9001	Wall Thickness Gage	8245-C	2 $\frac{3}{8}$ " - 4 $\frac{1}{2}$ "
WT-9002	Wall Thickness Gage	-	4 $\frac{1}{2}$ " - 9 $\frac{5}{8}$ "
WT-9003	Wall Thickness Gage	-	4 $\frac{1}{2}$ " - 13 $\frac{3}{8}$ "

The Gagemaker API Thread Data Chart provides critical thread data per API Spec. 5B.

Thread Data Chart	API Tubing and Casing Thread Dimension Slide Chart	-	2 $\frac{1}{8}$ " - 20" 8-Round, LTC, STC 4 $\frac{1}{2}$ " - 20" Buttress
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DIAL INDICATORS

Gagemaker's mechanical indicators are manufactured per ANSI AGD specifications. Standard indicators used in Gagemaker products are made in the U.S.A.

Accuracy
Per AMSI B89.1.10M-1987

Model	Correlating Gage Model	Travel/Resolution	First 2 1/3 Rev	After 2 1/3 Rev
801 (BAL)	BR-2001	.250"/.001"	±.001"	±.002"
8011 (BAL)	TH-3002R, TH-3002V	.250"/.001"	±.001"	±.002"
802 (CONT)	WT-9000 Series	.250"/.001"	±.001"	±.002"
8021 (CONT)	TH-3001R, TH-3001V, PD-3003	.250"/.001"	±.001"	±.002"
803 (BAL)	PN-3000 Series, BX-1000, BXG-1000	.125"/.0005"	±.0005"	±.001"
8031 (BAL)	TH-3002B, TH-3003B, TS-4000	.125"/.0005"	±.0005"	±.001"
862L (CONT)	ET-7000 Series with Lever	.500"/.001"	±.001"	±.002"
8621 (CONT)	IT-6001, PD-3004	.500"/.001"	±.001"	±.002"
863	RG-7000 Series, TH-3004, TH-3006, TH-3008, TH-3009, TH-3010, SRG-7000, CA-9001, MRP-5000 Series, SPG-6000	.500"/.0005"	±.0005"	±.001"
863L (BAL)	PD-8000 Series w/ Lever	.500"/.0005"	±.0005"	±.001"
8631 (BAL)	PD-6000, PD-6001, PG-6000 Series, TS-1000, IT-5100, MRP-5500, SPG-6000	.500"/.0005"	±.0005"	±.001"
882L (CONT)	ET-7003, ET-7005, ET-7007	1.00"/.001"	±.001"	±.002"
8821 (CONT)	IT-6000	1.00"/.001"	±.001"	±.002"
80-0403	LG-5002, LG-5003	.100"/.0005"	±.0005"	±.001"
80-0400	LG-5002, LG-5003	.025"/.0001"	±.0001"	±.0003"
83-0584	MRP-2000, MRP-2500, MRP-3000	.500"/.001"	±.001"	±.002"
83-0582	MRP-2000, MRP-2500, MRP-3000	.500"/.0005"	±.0005"	±.001"
87-070	MRP-1000, MRP-1500	.125"/.0005"	±.0005"	±.001"

Note: *I* after the model number indicates counter clockwise rotation.

L after model number indicates a lifting lever.

DIAL INDICATORS*

Model	Description	Travel/Res.	First 2 1/3 Rev	After 2 1/3 Rev
805 (BAL)	General Application Mechanical	.100"/.0005"	±.0005"	±.001"
2358B-MRP	All MRP Gages	.500"/.0001"	±.0001"	±.0003"
2358SGA	General Application Mechanical	.500"/.0001"	±.0001"	±.0003"
2358SGRA	General Application Mechanical	.500"/.0001"	±.0001"	±.0003"
2776FB	General Application Mechanical	1.00"/.0005"	±.0005"	±.002"

METRIC DIAL INDICATORS*

Model	Description	Travel/Res.	First 2 1/3 Rev	After 2 1/3 Rev
1044SRGA (CONT)	Metric Mechanical	5 mm/.01 mm	±.01 mm	±.02 mm
1045SGA (BAL)	Metric Mechanical	5 mm/.01 mm	±.01 mm	±.02 mm
2047SGA (BAL)	Metric Mechanical	10 mm/.01 mm	±.01 mm	±.02 mm
2902SRGA (CONT)	Metric Mechanical	10 mm/.01 mm	±.01 mm	±.02 mm

DIGITAL INDICATORS*

Model	Description	Travel/Res.	First 2 1/3 Rev	After 2 1/3 Rev
543-683B	Electronic/Digital	.500"/.0005"	±.0005"	±.001"

*Indicators for special applications require calling for a quotation.

INDICATOR REPLACEMENT PARTS (For indicators on page 42)**Mitutoyo Parts***

SMALL DIALS		LARGE DIALS	
Model	Description	Model	Description
21AZB353	Bezel Assembly (Blue "S" Type)	21AZB161	Bezel Assembly (Blue "S" Type)
21BAA147A	Bezel Assembly (Black "F" Type)	192683	Bezel Assembly (Black "F" Type)
21AAB364	Bezel Clamp Washer	21RZA065	Bezel Clamp Assembly (Blue "S" Type)
21AAB162	Bezel Clamp Screw	21BA083	Bezel Clamp Washer (Black "F" Type)
193592	Bezel Clamp Washer	101214	Bezel Clamp Screw (Black "F" Type)
193690	Bezel Clamp Screw	21AZB151	Mitutoyo Lifting Lever
900527	Mitutoyo Lifting Lever		

Chicago Dial Parts*

SMALL DIALS		LARGE DIALS	
Model	Description	Model	Description
A12517	Bezel Assembly	A22573	Bezel Assembly
A225601	Bezel Clamp Washer	A225601	Bezel Clamp Washer
A22561	Bezel Clamp Screw	A22561	Bezel Clamp Screw
		CD-177-16	Lifting lever Left Hand
		CD-177-R	Lifting lever Right Hand

*Dial rings are available for all indicators. Please call for more information.

GAGE STORAGE CASES

Gagemaker promotes three types of gage storage cases in various sizes— heavy-duty, standard, and wooden. The two plastic types are constructed of durable ABS molded plastic material.

The PEL Series of heavy-duty plastic cases, manufactured by Pelican, are extremely sturdy and can be used to ship gages as well as for storing gages. These cases not only provide extra protection for gages, but they are watertight, airtight, dustproof, and crushproof.

The CASE Series are the standard plastic cases offered. The lids are double-walled for strength. These cases are low impact resistant and lightweight.

The WOOD Series of cases is our line of rugged, handcrafted wooden cases. If necessary, wooden cases can be customized to your specifications.

All storage cases are available with foam inserts at additional cost. Also, foam inserts can be custom cut for any of our products or any of your valuables. Custom cutting of foam for cases is priced on an hourly basis. Please call for a quotation.

Features

- Durable ABS molded plastic construction for PEL and CASE Series
- Lasting protection for sensitive gage equipment
- Foam inserts available and custom fitting

Model	Inside Measurements	Model	Inside Measurements
PEL-1400	12¼" X 9¼" X 5¼"	WOOD-C	44" X 8" X 3.5"
PEL-1450	15" X 10¾" X 6"	WOOD-D	42" X 24" X 3.5"
PEL-1500	17⅞" X 11¼" X 6⅞"	WOOD-E	42" X 10" X 3.5"
PEL-1550	19⅞" X 13¼" X 7¾"	WOOD-F	35" X 12" X 3.5"
PEL-1600	22" X 17" X 8"	WOOD-G	34" X 10" X 3.5"
PEL-1700	36" X 13½" X 5"	WOOD-H	34" X 8" X 3.5"
PEL-1750	50¾" X 13½" X 5"	WOOD-I	33" X 21" X 3.5"
CASE-1	16" X 11" X 3"	WOOD-J	27" X 10" X 3.5"
CASE-2	14" X 10" X 3"	WOOD-J-1	27" X 9" X 3.5"
CASE-3	9" X 12½" X 2¾"	WOOD-K	26" X 15" X 3.5"
CASE-4	7" X 4" X 2"	WOOD-L	25" X 10" X 3.5"
CASE-5	21½" X 14½" X 6⅞"	WOOD-M	22" X 12" X 3.5"
CASE-6	8⅝" X 5⅝" X 3⅞"	WOOD-N	22" X 8" X 3.5"
CASE-7	21" X 14" X 6"	WOOD-O	21" X 8" X 3.5"
WOOD-A	54" X 17" X 3.5"	WOOD-P	17" X 10" X 3.5"
WOOD-B	48" X 10" X 3.5"	WOOD-Q	15" X 15" X 3.5"
WOOD-B-1	46" X 26" X 3.5"		





CALIBRATION & REPAIR SERVICES

MIC TRAC CALIBRATION AND REPAIR

Gagemaker provides full service calibration and repair on all MIC TRACS sold. At no extra charge, a standard long form certificate is provided with all calibrations of MIC TRAC units. Calibration maintenance often necessitates repair work. All repairs are quoted and require customer authorization prior to work being done. An evaluation charge of \$100.00 is required to quote repairs. If repair work is to be undertaken, the evaluation charge will be credited to the final balance of the completed repair work.

MIC TRAC Calibration (All models)

MIC TRAC Model	MIC TRAC Model Options				Repair Rate (\$/hr)
	MIC TRAC Non Force-Lok Unit	MIC TRAC Force-Lok Unit	MIC TRAC with Probe and Digital Readout	MIC TRAC with SLEC File	
TRAC-2012, MT-3012	319.00	389.00	-	533.00	100.00
TRAC-2024, MT-3024	389.00	457.00	-	617.00	
TRAC-2036, MT-3036	457.00	527.00	-	687.00	
TRAC-2048, MT-3048	527.00	595.00	-	899.00	
TRAC-2060, MT-3060	595.00	735.00	-	-	
MT-4012			-	533.00	
MT-4024			-	617.00	
MT-4036			-	687.00	
MT-4048			-	899.00	

All figures are in US Dollars.

Note: Gagemaker cannot guarantee the accuracy of this unit, *unless* it is correctly packaged and shipped in a proper container. Prior to shipping, please request a Return Authorization Number and instructions. Current cost for a standard MIC TRAC 3000 Series replacement shipping container is \$525.00. For all other containers, please call for a quotation. At no additional charge, all MIC TRAC units are supplied with a calibration certificate and inch-by-inch error report.



CALIBRATION & REPAIR SERVICES

GAGES, STANDARDS, AND INSPECTION EQUIPMENT

Gagemaker offers calibration and repair services for many of its products. Non-Gagemaker manufactured gages are quoted on an individual basis. Please consult the table below for basic information on our services. Any further inquiries about products serviced, general repair services, or any other question should be made to our Customer Service department. An evaluation charge of \$100.00 is required to quote repairs. If repair work is to be undertaken, the evaluation charge will be credited to the final balance of the completed repair work. All figures are in US Dollars (\$).

Model	Services Available	Calibration Price (\$)	Repair Rate (\$/hr)
Gage Calibration Equipment			
TF-1F, TF-2R Setting Blocks	Inspect flatness, parallelism, and size	59.00	75.00
TF-__T Taper Blocks	Inspect taper and size	59.00	75.00
TF-__RSC Taper Block Set	Inspect taper and size	89.00	75.00
TF-BX Setting Blocks	Inspect angle and size	59.00	75.00
TF-TP Calibration Fixture	Inspect and calculate new constant	79.00	75.00
CG-1001 Bench Calibrator Gage	Verify micrometer travel	89.00	75.00
Thread Diameter Measurement Gage			
RG-7000, PG-6000 Diameter Gages	Verify function and check parallelism	89.00	75.00
Large Diameter Measurement Gages			
MIC 360 Gage	Verify wheel diameter and gage function	289.00	75.00
API Gages/Standards			
Lead Gages	Calibrate indicator and verify function	39.00	75.00
Lead Standards	Inspect step/step per specification	43.00	75.00
MRP Gages	Inspect complete assembly	47.00	75.00
MRP Standard Set	Inspect rod lengths per specifications	43.00	75.00
Thread Height Standards	Inspect groove depths per specifications	34.00	75.00
Profile Gages	Verify profile with optical comparator	34.00	-
Miscellaneous Equipment			
Indicators	Calibrate per specification	39.00	75.00
Thread Rolls	Calibrate per specification	59.00	-
CMM Contract Inspection	Per customer specification	175.00	-

*****ALL indicators or gages requiring repair will be quoted prior to any work being commenced. A purchase order or written approval for the repair work must be submitted and received before any repairs will be undertaken.*****

CALIBRATION CERTIFICATES

Certificate Type	Price
Standard Long Form Conformance Certificates – provided with all calibrations. Includes model number, serial number, required and actual measurements, traceability to NIST or other governing body, inspector's signature, calibration and recalibration date. Profile gages are issued certificates of compliance only.	-
Special Long Form Certificates – includes any documentation other than that listed under the Standard Long Form Certificate	35.00

Gagemaker Calibration Report

Company: 710 E. Southside, Pasadena, TX 77602
 Date: 05/15/1991
 Contact: [Redacted]
 Dept: [Redacted]
 Gage: Thread Roll Set
 Wgt: [Redacted]
 Location: Final Inspection
 Operator: [Redacted]
 Model: UCPA-80-BET 3
 Serial #: [Redacted]
 Page: 1

Parameters:
 Roll #1 Form Inspection: CONCENTRICITY OUT OF TOL
 Roll #2 Form Inspection: CONCENTRICITY OUT OF TOL
 Form Stress Check
 Roll Major Diameter: 0.7400
 Roll Minor
 Roll #1 & Roll #2 Mesh Dimension

Roll #1 Major Diameter
 Tolerance: +0.00020 / -0.00030
 Graph Scale: [Graph showing data points for Roll #1 Major Diameter]

Roll #2 Major Diameter Values
 Tolerance: +0.00020 / -0.00030
 Graph Scale: [Graph showing data points for Roll #2 Major Diameter Values]

Comments:
 Clean and oil or dip test threaded ends
 ROLL 1A HAS A 0.0002 OUT OF TOLERANCE I.D.
 GROOVE 1: THE CONCENTRICITY OF THE ROOT OF THE THREAD IS 0.0007
 GROOVE 4: THE CONCENTRICITY OF THE ROOT OF THE THREAD IS 0.0005
 ROLL 2B HAS A 0.0004 OUT OF TOLERANCE I.D.
 GROOVE 1: THE CONCENTRICITY OF THE ROOT OF THE THREAD IS 0.0008
 GROOVE 4: THE CONCENTRICITY OF THE ROOT OF THE THREAD IS 0.0005
 We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
 NIST: 88-143-1
 Traceable to NIST via NISTMS certificate no. 0584710000 Last / Next Cal Date: 11/01/99 / 11/01/00

Thread Diameter at 0.7550
 Tolerance: +0.00000 / -0.00000
 Graph Scale: [Graph showing data points for Thread Diameter at 0.7550]

Thread Diameter at 1.2550
 Tolerance: +0.00000 / -0.00000
 Graph Scale: [Graph showing data points for Thread Diameter at 1.2550]

Thread Diameter at 1.7550
 Tolerance: +0.00000 / -0.00000
 Graph Scale: [Graph showing data points for Thread Diameter at 1.7550]

Comments:
 We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
 NIST: 88-143-1
 Traceable to NIST via NISTMS certificate no. 0584710000 Last / Next Cal Date: 11/01/99 / 11/01/00

Gage Status: PASS Next Calibration Due: 10/17/2002
 Certified by: JESSICA GUERRERO Signature: [Signature]
 The signature is not valid unless it is signed and dated.

Gage: 710 E. Southside
Passes: [Redacted]
Comp: [Redacted]
Addr: [Redacted]
Cont: [Redacted]
Dept: [Redacted]
Gage: [Redacted]
Wgt: [Redacted]
Location: [Redacted]

Groove 1 to 2
 Tolerance: +0.00100 / -0.00100
 Graph Scale: [Graph showing data points for Groove 1 to 2]

Grooves 2 to 5
 Tolerance: +0.00100 / -0.00100
 Graph Scale: [Graph showing data points for Grooves 2 to 5]

Comments:
 We certify the equipment used for this calibration is traceable to NIST through one or more of the following numbers:
 NIST: 88-143-1
 Traceable to NIST via NISTMS certificate no. 0584710000 Last / Next Cal Date: 11/01/99 / 11/01/00

Gage Status: PASS Next Calibration Due: 04/20/03
 Certified by: MATTHEW DEWEES Signature: [Signature]
 The signature is not valid unless it is signed and dated.
 We certify that the form inspection gage has been calibrated in accordance with requirements outlined in ANSI/ASME B89.1.1
 This calibration is confirmed by electronic and graphical records to the National Institute of Standards and Technology and other national standards. This report may not be reproduced except in full without permission. Measurement uncertainty values available upon request.

CUSTOMER SERVICE

For any questions, quotations, requests, technical support or any other information, please contact one of our representatives at any of the following:

Address: Gagemaker LP
712 East Southmore Ave.
Pasadena, TX 77502
Fax: 713-472-7241 (24/7)
Phone: 713-472-7360
Monday - Friday : 7am - 5pm CST/CDT
Saturday : 7am - 12pm CST/CDT
Website: <http://www.gagemaker.com>
E-mail: gagemaker@gagemaker.com

TECHNICAL SUPPORT

Gagemaker technical support is available through contacting our friendly Customer Service department at any of the above options.

QUOTATIONS

Quotations are valid for no more than **30 days** after the date originally provided. Please refer to the Customer Service section for contact information for quotations.

PICK UP/WALK-IN/COLLECTION

Our products are available for pick up directly from our Pasadena facility. However, please notify us of your intentions to pick up products a **minimum of 2 hours** in advance of your arrival.

OUT-OF-STOCK GOODS

Ordered goods which are out-of-stock will be automatically back-ordered. If you do not wish to place items on back-order, please mark your order as Ex-stock or contact our Customer Service.

HANDLING CHARGE

Gagemaker will charge a \$10 handling fee for *ALL* orders on products invoiced for *LESS* than \$50. No fee will be applied to orders invoicing for over \$50.

RETURN POLICY

Gagemaker requires a 15% restocking fee on all non-defective returns, except for MIC TRACs (either the MT-3000 or MT-4000) which will be charged a 20% restocking fee. Items not listed in our catalog are not returnable. *Returns* will be accepted up to **30 days** after the date of the invoice. Please return products to the address listed in our Customer Service section. Please contact Gagemaker for a Return Goods Authorization (RGA). Contact our Customer Service for any questions regarding your return.

Defective products must be returned **90 days** from the invoice date in order to be eligible for a full refund. Defective products are not subject to any restocking fee. For defective product information, please see our Product Warranty section.

PRODUCT WARRANTY

GAGEMAKER warrants its products to be free from defects in material and workmanship for one year from the date of shipment. After 90 days, at our option, we will repair or replace any defective product upon postage prepaid return of a properly packed product to our factory in Pasadena, Texas. During the first 90 days, a defective product will be eligible for a full refund. This warranty applies to all products when used in a normal industrial environment. Any unauthorized tampering, misuse or neglect will make this warranty null and void. Under no circumstances will GAGEMAKER or any affiliate have any liabilities for loss or for any indirect or consequential damages. The foregoing warranties are in lieu of all other warranties expressed or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Return products for repair or calibration to:

Gagemaker LP
712 East Southmore Ave.
Pasadena, TX 77502

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