

# PRODUCT CATALOGUE



## Q.M.I. Gauges & Tools



**Established in the year 2007, Q.M.I. Gauges And Tools is involved in manufacturing a huge compilation of Thread Plug Gauges, Thread Ring Gauges and much more. Our products are high in demand due to their premium quality, seamless finish, different patterns and affordable prices. Manufactured making use of supreme in class material and tools, these are in conformism with the norms defined by the market. Along with this, these are tested on a set of standards prior final delivery of the order. Furthermore, we ensure to timely deliver these products to our clients. Through this we have gained a huge client base in the market.**

## **Infrastructure**

**We have established state-of-the-art manufacturing unit that enables us to manufacture and supply a qualitative range of gauges. Our vast infrastructure is divided into a number of departments such as production, quality testing, sales & marketing, etc. In order to run the entire business operations in a hassle free manner as per the defined industry standards, these segmented departments are controlled by our experienced team mates to ensure a smooth and prompt production process. The machines installed at our manufacturing unit are handled by our competent technical workforce.**

## **Why Us?**

**In order to maintain the reputation we have developed over the years supreme grade products.**

**Following are the reasons behind the accomplishment of our organization:**

- **Supreme Quality Products**
- **On Time Delivery**
- **Huge Distribution Network**
- **Ethical Business Strategies**
- **Clarity In Deals**

# ISO Metric Thread Gauges



**ISO Metric Gauges are most commonly used Gauges in the Industry.**

## **Specification :**

**ISO standard :** Basic Dimensions : ISO 965 Part 1,2,3 - 1998, Gauging Practice: ISO 1502-1996.

**Indian standard :** Basic Dimensions: IS 14962 Part 1,2,3 - 2001, Gauging Practice: IS 2334 - 2001.

**ANSI standard :** Basic Dimensions: ANSI / ASME B 1.13 M, Gauging Practice: ANSI / ASME B 1.16 1984.

**DIN standard :** Basic Dimensions & Gauging Practice: DIN 13 - 1999.

**BS standard :** Basic Dimensions: B.S. 3643 Part I & II - 2007, Gauging Practice: B.S 919 Part III - 2007.

**JIS standard :** Basic Dimensions: JIS B 0209, Gauging Practice: JIS B 0251-2008.

## **Manufacturing Range :**

**Diameter 1.6 mm to 300mm & Pitches covered are 0.35mm to 8 mm.**

**We also offer Special gauges as per the customers drawings & requirements.**



Gauge Type	Diameter Range	Pitches in mm	Tolerance Class
Thread Plug Gauges.	1.6mm - 300 mm	0.35 to 6mm Pitches above 6mm up to 8mm can be supplied based on customer request.	6H or any other class as per customer requirement
Thread Ring Gauges.	2mm - 260mm	0.4 to 6mm Pitches above 6mm up to 8mm can be supplied based on customer request.	6g or any other class as per customer requirement
Check Plug Gauges	To check NEW Go & Nogo Thread Ring Gauges as per above sizes		
Wear Check Plug Gauges	To check / calibrate USED Go & Nogo Thread Ring Gauges as per above sizes		
Check Ring Gauges	To check NEW Go & Nogo Thread Plug Gauges as per above sizes		
Wear Check Ring Gauges	To check / calibrate USED Go & Nogo Thread Plug Gauges as per above sizes		

#### Recommended Tolerance classes for Internal Threads (Plug Gauges)

	Tolerance position 'G'			Tolerance position 'H'		
	S	N	L	S	N	L
	-	-	-	4H	5H	6H
	(5G)	6G	(7G)	5H	6H	7H
	-	(7G)	(8G)	-	7H	8H
Fine Medium Coarse						

\*S - Short length of Thread engagement

N - Normal length of Thread engagement

L- Long length of Thread engagement

#### Recommended Tolerance classes for External Threads (Ring Gauges)

	Tolerance position 'e'			Tolerance position 'f'			Tolerance position 'g'			Tolerance position 'h'		
	S	N	L	S	N	L	S	N	L	S	N	L
	-		-	-	-	-	-	(4g)	(5g4g)	(3h4h)	4h	(5h4h)
	-	6e	(7e6e)	-	6f	-	(5g6g)	6g	(7g6g)	(5h6h)	6h	(7h6h)
	-	(8e)	(9e8e)	-	-	-	-	8g	(9g8g)	-		
Fine Medium Coarse												

# Unified Thread Gauges



Unified Threads are used for general purpose fastening applications for Imperial system of units.

## Specification :

We manufacture Unified Gauges as per American Standard : Basic Dimensions as per ANSI B 1.1:2003 & Gauging Practice as per ANSI/ASME B 1.2-1983. We also manufacture Unified Gauges as per British Standards (BS). Basic Dimensions as per BS 1580 Part 1 & 2 - 2007 & Gauging Practice as per BS 919 Part 1-2007.

## Manufacturing Range :

Thread Plug & Ring Gauges from No. 4 (0.112") to 12"

Gauge Type	Diameter Range (Inch)	TPI (Threads per Inch)	Tolerance Class
Thread Plug Gauges.	No.4 (0.112"-12")	48, 44, 40, 36, 32, 28, 24, 20, 18, 16, 14, 13, 12, 11.5, 11, 10, 9, 8, 7, 6, 5, 4.5, 4 TPI not covered here can be supplied based on customer request	As given in below Table
Thread Ring Gauges.	No.4 (0.112"-10.25")	48, 44, 40, 36, 32, 28, 24, 20, 18, 16, 14, 13, 12, 11.5, 11, 10, 9, 8, 7, 6, 5, 4.5, 4 TPI	As given in below Table

		not covered here can be supplied based on customer request.	
<b>Check Plug Gauges</b>	<b>To check NEW Go &amp; Nogo Ring Gauges as given above.</b>		
<b>Wear Check Plug Gauges</b>	<b>To check / calibrate USED Go &amp; Nogo Ring Gauges as given above.</b>		
<b>Check Ring Gauges</b>	<b>To check NEW Go &amp; Nogo Plug Gauges as given above.</b>		
<b>Wear Check Ring Gauges</b>	<b>To check / calibrate USED Go &amp; Nogo Plug Gauges as given above.</b>		

### **Tolerance Class**

<b>Tolerance Class for Plug gauges (Internal threads)</b>	<b>Tolerance Class for Ring gauges (External threads)</b>	<b>Application</b>
<b>1B</b>	<b>1A</b>	<b>Where quick assembly is needed, even when threads are dirty / damaged. Wide tolerances for male and female threads.</b>
<b>2B</b>	<b>2A</b>	<b>Corresponds to medium fit and used for general applications, which requires free assembly.</b>
<b>3B</b>	<b>3A</b>	<b>Where closer fit is required.</b>

# Pipe / G Thread Gauges ( BSP )



**Pipe / G Threads are used for general purpose pipe fittings where pressure tight joints are not required on Threads.**

## **Specification:**

**ISO Standard - Basic Dimensions: ISO 228 - 1 : 2000 & Gauging Practice: ISO 228 - 2 : 1987.**

**British Standard - BS 2779 : 1986.**

**Indian Standard - Basic Dimensions : IS 2643 : 2005 & Gauging Practice: IS 10216 : 1988.**

**Japanese Standard - JIS B 0202 : 1999.**

## **Manufacturing Range :**

**Pipe Diameter 1/16 to 6" Above 6" Diameter sizes (PF) are manufactured as per JIS B JIS B 0202-1999.**

Pipe Diameter.	TPI	Tolerance Class	
1/16, 1/8	28		<b>Thread Rings</b> • Class B • Class A <b>Tolerance for class 'A' rings are close / tighter than Class 'B'.</b>
1/4, 3/8	19		
1/2, 5/8, 3/4, 7/8	14		
1, (1.1/16), 1.1/8, 1.1/4, (1.3/8), (1.5/8) 1.3/4, (1.7/8), 2, (2.1/8), 2.1/4, (2.5/16), (2.3/8), 2.1/2, 2.3/4, (2.7/8), 3, (3.1/4), 3.1/2, 4, 4.1/2, 5, 5.1/2, 6	11	Thread Plugs. Only General Class	



# BS Cycle Thread Gauges

BS Cycle threads are used for Spokes, Nipples, Bolts, Nuts in Bicycle Industry.

**Specification:**

**Basic Dimensions:** BS 811 : 1950 & Gauging Practice: BS 919 Part II : 2007.

**Manufacturing Range :**

Sizes covered are SWG series for spokes & Nipples - SWG 8,9,10 & 11, Diameter 1/8 to 31/32 with various TPI as specified in specification.



DIAMETER/ SIZE	TPI	Thread Plug Gauges	Thread Ring Gauges	Check Plug Gauges to check NEW Rings.	Wear Check Plug Gauges to check/ calibrate used Rings.
For Spokes and Nipples					
SWG 11	44	Tolerance Class Medium (M)	Tolerance Class Medium (M)	Tolerance Class Medium (M)	Tolerance Class Medium (M)
SWG 10,SWG9	40				
SWG 8	32				
For Bolts and Nuts					
1/8	40	Tolerance Class Close (C) Medium (M) Free (F)	Tolerance Class Close (C) Medium (M) Free (F)	Tolerance Class Close(C) Medium (M) Free (F)	Tolerance Class Close (C ) Medium (M) Free (F)
5/32, 3/16	32				
7/32 ,1/4, 9/32, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8,11/16, 3/4,	26				
For Special Thread Applications					
7/8, 1, 1.290, 1.3701.9/16, 1.5/8	24	Tolerance Class Medium (M)	Tolerance Class Medium (M)	Tolerance Class Medium (M)	Tolerance Class Medium (M)
1.1/8, 1.45,17 / 64	26				
31/32	30				



# BSPT<sub>r</sub> Thread Gauges

BSPT<sub>r</sub> Threads can provide pressure tight seal on threads without use of a sealing compound. They are used in pipe assemblies where pressure tight joint is required on threads, without use of sealing compound.

Two Types of Gauges are recommended System A & System B.

Specification:

BS 21 - 1985 Indian Standard: Basic Dimensions:  
IS 554 : 1999 & Gauging Practice: IS 8999 : 2003.

Manufacturing Range :

Taper Thread Plugs & Rings for Pipe sizes 1/16" to 6" in both System A & System B Design.



Diameter (Inch)	TPI	Type of Gauges			
1/16, & 1/8	28	Thread Plug Gauges System A. & System B.	Thread Ring Gauges System A & System B	Check Plug to check NEW Rings System A & System B	Wear Check Plug Gauges to check/ calibrate used Rings. System A & System B
1/4 & 3/8	19				
1/2 & 3/4	14				
1,1.1/4,1.1/2,2, 2.1/2, 3	11				
4, 5, 6					

# BSF/BSW/Withword Thread Gauges



BSW / BSF / Whitworth threads are used where clearance between male & female threads is to be controlled.

This uses Imperial system of units.

**Specification :**

**Basic Dimensions-** BS 84-2007 & Gauging Practice: BS 919 Part II - 2007.

**Manufacturing Range :**

**Thread Plug & Ring Gauges from Diameter 1/8 to 6" , TPI 40 to 2.5**

Dia. Inch	BSW	BSF	BSB	Type of Thread Gauges used			
1/8	40	-	26	Thread Plug Gauges.	Thread Ring Gauges.	Check Plug Gauges to Check New Rings.	Wear Check Plug Gauges to Check / Calibrate used Rings.
3/16	24	32	26				
* 7/32	-	28	*				
1/4	20	26	26				
5/16	18	22	26				
3/8	16	20	26				

7/16	14	18	26				
1/2	12	16	26				
*9/16	12	16	26				
5/8	11	14	26				
*11/16	11	14	*				
3/4	10	12	26				
7/8	9	11	26				
1	8	10	26				
1.1/8	7	9	26				
1.1/4	7	9	26				
*1.3/8	-	8	26				
.1/2	(6)	(8)	26				
1.3/4	(5)	(7)	26				
2	(4.5)	(7)	26				
2.1/4	(4)	(6)	*				
2.1/2	(4)	(6)	*				
2.3/4	(3.5)	(6)	*				
3	(3.5)	(5)	*				
*3.1/4	(3.25)	(5)	*				
3.1/2	(3.25)	(4.5)	*				
*3.3/4	(3)	(4.5)	*				
4	(3)	(4.5)	*				
4.1/2	(2.875)	(4)	*				
5	(2.75)	-	*				
5.1/2	(2.625)	-	*				
6	(2.5)	-	*				

# NPTF / PTF Thread Gauges



**NPTF THREADS** can provide pressure tight seal on threads without use of a sealing compound (Dry Seal Type). They are used in pipe assemblies where without using sealing compound pressure tight joint is required on threads. The gauges are intended to be used to test unused pipe threads.

The types of thread designated are NPTF, PTF-SAE SHORT, NPSF and NPSI.  
The thread form and taper are the same as for NPT threads.  
The pipe fittings range in size from 1/16 inch to 3.0 inch.

PTF Threads are similar to NPTF but short in length. PTF threads are used in applications similar to NPTF.

**Specification:**

**ANSI/ ASME B1.20.3 : 1976 & ANSI B1.20.5 : 1996 & American Handbook H-28 Part II : 1957.**

**Manufacturing Range :**

**Taper Thread Plugs L1 & L3 in both Basic & Step Limit Design, Plain Taper Plugs to check crest of Threads**



# Trapezoidal Thread Gauges

Trapezoidal Threads are used for translation motion in machine tools like lead screws, where rapid movement is required or in screw jacks, where load to be shared is more.

**Specification:**

**ISO Specifications: Basic Dimensions: ISO 2901, DIN 103 & Gauging Practice: DIN 103 (9) : 1985.**

**IS Specifications: Basic Dimensions: IS 7008 :**

**1988, IS 7008 (4) : 1999 & Gauging Practice: DIN 103 (9) : 1985.**

**Manufacturing Range :**

**Thread Plugs, Thread Rings, Check Plugs &**

**Wear Check Plugs of Diameter from 8 mm to 355 mm and pitches from 1.5 mm to 12 mm.**



Gauge Type	Diameter Range(MM)	Pitches in mm	Tolerance Class
Thread Plug Gauges.	8 - 300	1.5, 2, 3, 4, 5, 6, 7, 8, 10, 12 Pitches not covered here can be supplied if customer requests	As given in below Table
Thread Ring Gauges.	8 - 260	1.5, 2, 3, 4, 5, 6, 7, 8, 10, 12 Pitches not covered here can be supplied if customer requests	As given in below Table
Check Plug Gauges	To check NEW Go & Nogo Ring Gauges as given above.		
Wear Check Plug Gauges	To check / calibrate USED Go & Nogo Ring Gauges as given above.		
Check Ring Gauges	To check NEW Go & Nogo Plug Gauges as given above.		
Wear Check Ring Gauges	To check / calibrate USED Go & Nogo Plug Gauges as given above.		

## TOLERANCE CLASS

	Tolerance classes for Internal Threads (Plug Gauges)		Tolerance classes for External Threads (Ring Gauges)			
	Tolerance position 'H'		Tolerance position 'e'		Tolerance position 'c'	
	N	L	N	L	N	L
Medium	7H	8H	7e	8e	-	-
Coarse	8H	9H			8c	9c

# ACME Thread Gauges

ACME Threads are used for translation motion in machine tools like lead screws, where rapid movement is required or in screw jacks, where load to be shared is more.

**Specification:**

**American Specifications: ANSI / ASME B1.5 : 1997**

**Manufacturing Range :**

**Thread Plugs , Thread Rings, Check Plugs & Wear Check Plugs of Diameter from 1/4" to 12" and TPI from 3 to 16**



Gauge Type	Diameter Range (Inch)	TPI	Tolerance Class
Thread Plug Gauges.	1/4 - 5 Above 5 up to 12 Diameter can be supplied based on customer request.	16, 14, 12, 10, 8, 6, 5, 4, 3 TPI not covered here can be supplied based on customer request.	2G, 3G & 4G 2C, 3C & 4C
Thread Ring Gauges.	1/4 - 5 Above 5 up to 10.2 Diameter can be supplied based on customer request.	16, 14, 12, 10, 8, 6, 5, 4, 3 TPI not covered here can be supplied based on customer request.	2G, 3G & 4G 2C, 3C & 4C
Check Plug Gauges	To check NEW Go & Nogo Ring Gauges as given above.		
Wear Check Plug Gauges	To check / calibrate USED Go & Nogo Ring Gauges as given above.		

## Tolerance Class

'G' is the most commonly used Tolerance Class. Many times class 'C' is also used as per designer's requirement. '3G' class is used for general purpose assemblies while classes above 3 are progressively closer tolerance classes like 4G, 5G etc. and are suitable for loose fit. Example - '2G' class.

# STUB ACME Thread Gauges

STUB ACME Threads are similar to ACME threads except that the thread depth/ height is less than ACME. These are used for thin walled applications, where coarse pitch is needed like tubes used oil fields equipment's , where standard ACME threads cannot be used due to thin wall.



**Specification:**

**American Specifications: ANSI/ ASME B1.8 : 1988.**

**Manufacturing Range :**

**Thread Plugs, Thread Rings, Check Plugs & Wear Check Plugs of Diameter from 1/4" to 12" and TPI from 16 to 3.**

Gauge Type	Diameter Range (Inch)	TPI	Tolerance Class
Thread Plug Gauges.	1/4 - 5 Above 5 up to 12 Diameter can be supplied based on customer request.	16, 14, 12, 10, 8, 6, 5, 4, 3 TPI not covered here can be supplied based on customer request.	2G, 3G & 4G 2C, 3C & 4C
Thread Ring Gauges.	1/4 - 5 Above 5 up to 10.2 Diameter can be supplied based on customer request.	16, 14, 12, 10, 8, 6, 5, 4, 3 TPI not covered here can be supplied based on customer request.	2G, 3G & 4G 2C, 3C & 4C
Check Plug Gauges	To check NEW Go & Nogo Ring Gauges as given above.		
Wear Check Plug Gauges	To check / calibrate USED Go & Nogo Ring Gauges as given above.		



# BA Thread Gauges

BA (British Association) Threads are used for fine fastening purpose especially in instruments.

**Specification :**

**Basic Dimensions - BS 93 : 1951 & Gauging Practice - BS 919 Part II : 2007.**



**Manufacturing Range :**

**Thread Plug Gauges, Thread Ring Gauges, Check Plug & Wear Check Plug Gauges for sizes 2, 3, 4, 5, 6, 7**

B.A. No.	Pitch in mm	Type of Thread Gauges used			
2	0.81	Thread Plug Gauges Tolerance class :	Thread Ring Gauges Tolerance class :	Check Plug Gauges to check NEW Ring Gauges. Tolerance class :	Wear Check Plug Gauges to check / calibrate used Ring Gauges. Tolerance class :
3	0.73				
4	0.66				
5	0.59				
6	0.53				
		Normal (N)	Normal (N)	Normal (N)	Normal (N)
		Close (C)	Close (C)	Close (C)	Close (C)
7	0.48				

# Helicoil Thread Gauges



**Gauges to check Tapped Hole to receive Wire Thread Inserts / Helicoil thread Inserts \*.**

**These gauges are used for checking oversize tapping, done for fitting wire thread inserts. The threads before fitting wire thread inserts are checked with these gauges.**

**Specification:**

**BS 4377, DIN 1840, SAE MA 1567 & Gauging Practice ISO 1502 : 1996, IS 2334 : 2001**

**Manufacturing Range :**

**We manufacture Wire Thread Inserts for ISO Metric, Unified, BSW / BSF / Whitworth, BSP / G Thread Profiles.**

**These gauges are used for checking oversize tapping which is done for fitting wire thread inserts. Wire thread inserts are having external threads which are oversize than the standard size and internal threads which are of standard dimensions. When tapped internal threads become oversize and standard screw cannot be fitted then wire thread inserts are used. Oversize tapping is done using wire thread taps, and wire thread inserts are fitted in this.**

**These are also known as Heli-coil thread inserts.**