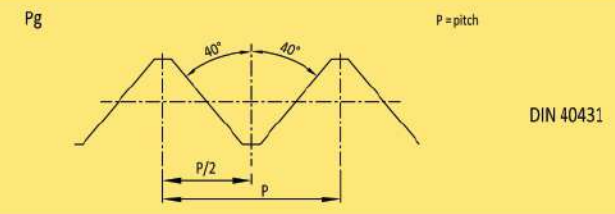
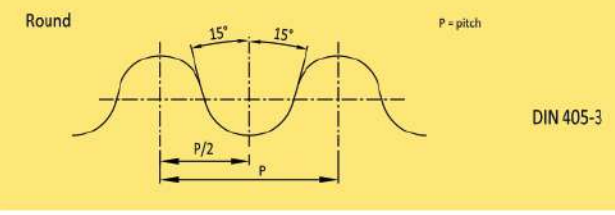
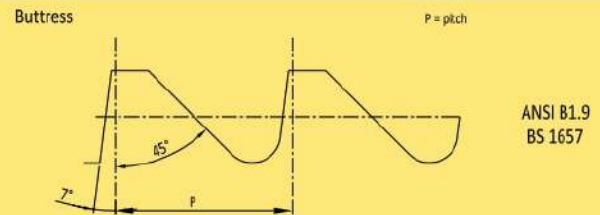
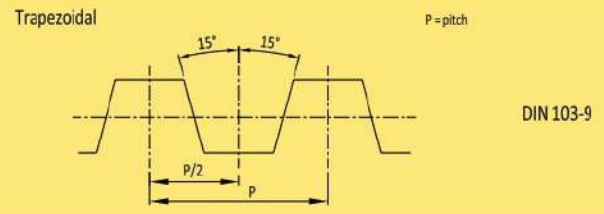
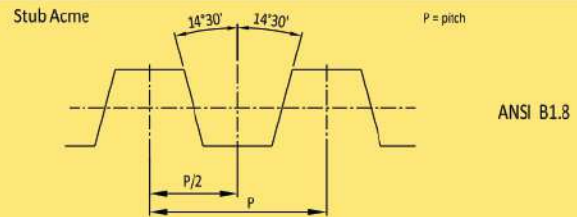
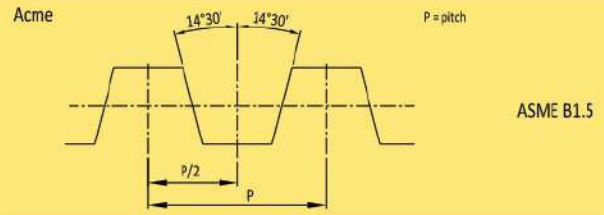
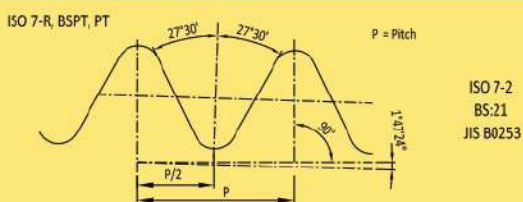
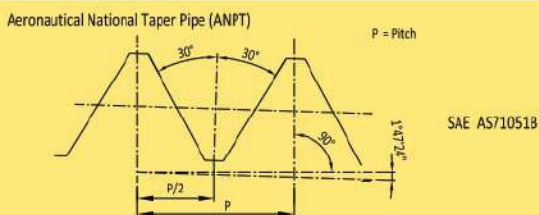
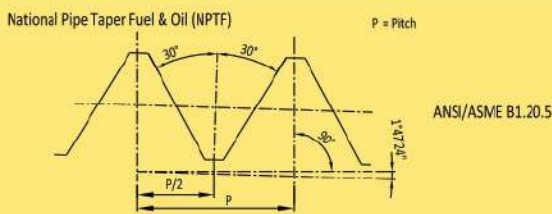
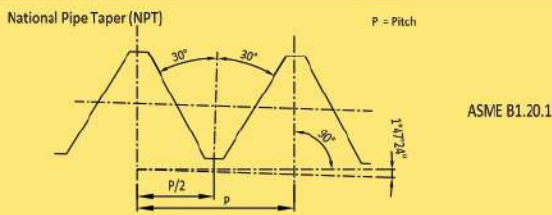
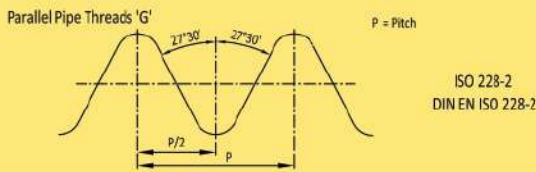
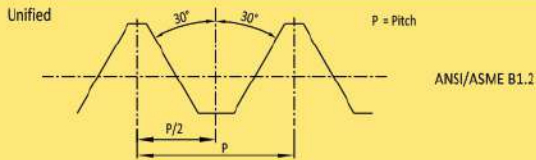
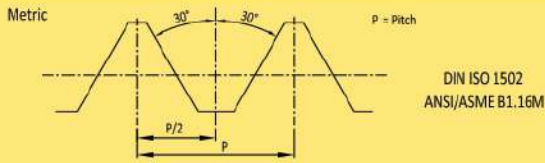




Thread Gauge profiles

We manufacture the following types of threads:



Please provide the following information to enable us to send a quote

- Type of gauge (Thread plug or Thread ring)
- Thread series (i.e. Metric, Unified, etc.) or thread angle
- Diameter & pitch/TPI of the thread
- Direction of thread (Right hand or Left hand) (Assumed Right hand if not specified)
- Tolerance class
- Lead or number of starts (Assumed single start if not specified)

Note

• PF, STI (Wire threads), NPSM, NPSC, NPTR, NPSH, NPSL, NPSF, NPSI, NGT, MJ, UNJF, UNJC, DIN 2999, DIN 158 are some of the other types of threads which we also manufacture.

Thread Gauge

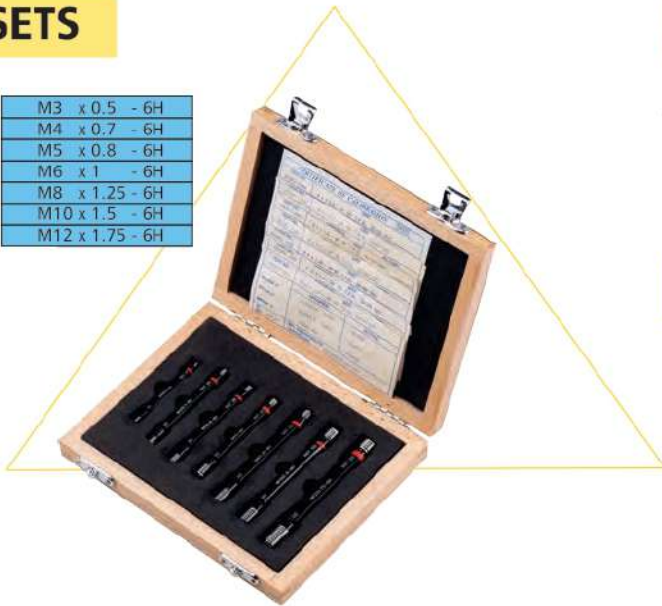


RANGE

Thread Plugs	0.8 mm to 450 mm
Thread Rings	1 mm to 450 mm
Taper Thread Plugs	1/16 inch to 16 inch (Taper 1:16)
Taper Thread Rings	1/16 inch to 16 inch (Taper 1:16)

SETS

M3 x 0.5 - 6H
M4 x 0.7 - 6H
M5 x 0.8 - 6H
M6 x 1 - 6H
M8 x 1.25 - 6H
M10 x 1.5 - 6H
M12 x 1.75 - 6H



Set of Double ended Metric Thread Plug gauges in an attractive box

M3 x 0.5 - 6g
M4 x 0.7 - 6g
M5 x 0.8 - 6g
M6 x 1 - 6g
M8 x 1.25 - 6g
M10 x 1.5 - 6g
M12 x 1.75 - 6g



Set of Metric Go Thread Ring Gauges in an attractive box

MINIATURE

Nominal diameter	Pitch	Tolerance class	
		Thread plug	Thread ring
METRIC			
M1	0.25 mm	5H	6h
M1.1		5H	6h
M1.2		5H	6h
M1.4		5H	6h
UNIFIED			
1.00 UNM	0.25 mm	-	-
1.20 UNM		-	-
No.0 (0.060")UNF	80 TPI	2B	2A

Note: Below 1 mm on request



MULTI START



HOLE LOCATION



CUSTOMIZED GAUGES AS PER REQUIREMENTS



Note

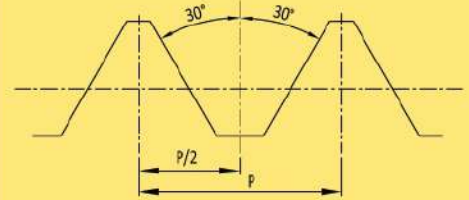
- Odd pitch and diameter combination, extra fine pitch gauges also manufactured.

Thread Gauge

METRIC

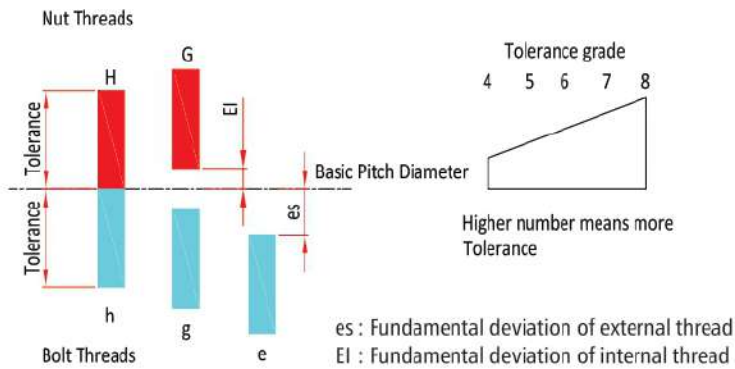


Thread gauge dimensions are as per DIN ISO 1502



P = Pitch

TOLERANCE DIAGRAM INTERNAL & EXTERNAL THREADS



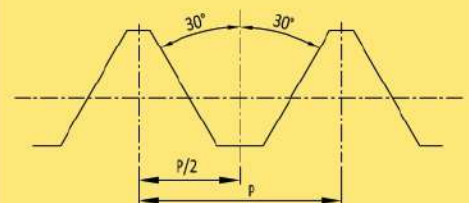
Acceptance criteria for components:

The GO gauge when screwed by hand without using excessive force, should enter and pass the whole length of the workpiece thread. The NOT GO gauge when screwed by hand without using excessive force, should not enter the component by more than two turns of the thread from both ends.

UNIFIED

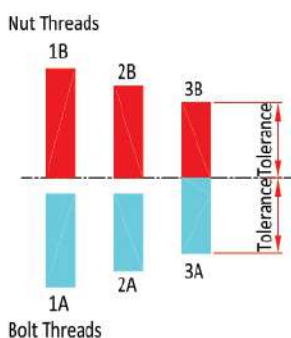


Thread gauge dimensions are as per ANSI/ASME B1.2



P = Pitch

TOLERANCE DIAGRAM INTERNAL & EXTERNAL THREADS



Acceptance criteria for components:

The GO gauge when screwed by hand without using excessive force, should enter and pass the whole length of the workpiece thread. The NOT GO gauge when screwed by hand without being forced, should not enter the component by more than three complete turns.

Thread Gauge

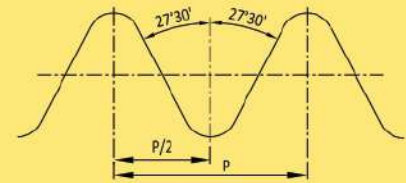
GO M1X0.25-5H

'G' PIPE



These are pipe threads where pressure-tight joints are not made on threads. Gauge dimensions are as per ISO 228-2.

	Tolerance class
Thread Ring gauge	'A' & 'B'
Thread Plug gauge	-

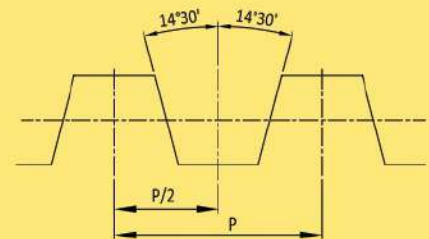


P = Pitch

Acceptance criteria for components:

The GO gauge when screwed by hand without using excessive force, should enter and pass the whole length of the workpiece thread. The NOT GO gauge when screwed by hand without using excessive force, should not enter the component by more than two turns of the thread from both ends.

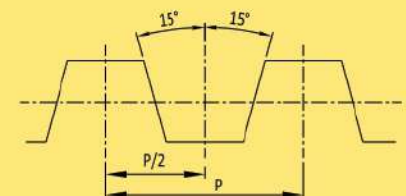
ACME & STUB ACME



P = Pitch

- Gauge dimensions for Acme threads are as per ASME B1.5 and Stub Acme as per ANSI B1.8
- Most commonly used class is 2G. If less backlash is desired in acme threads, 3G & 4G class are used
- The height of Acme threads is $0.5p$, whereas the height of Stub Acme threads is $0.3p$

TRAPEZOIDAL



P = Pitch

- Gauge dimensions are as per DIN 103-9
- Recommended Tolerance classes are 7H/7e for medium tolerance quality and 8H/8c for coarse tolerance quality.

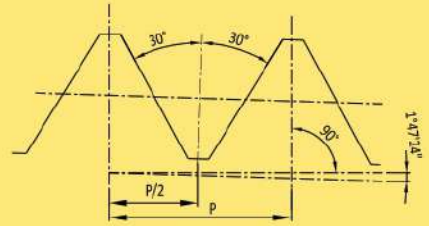
Thread Gauge



NPT



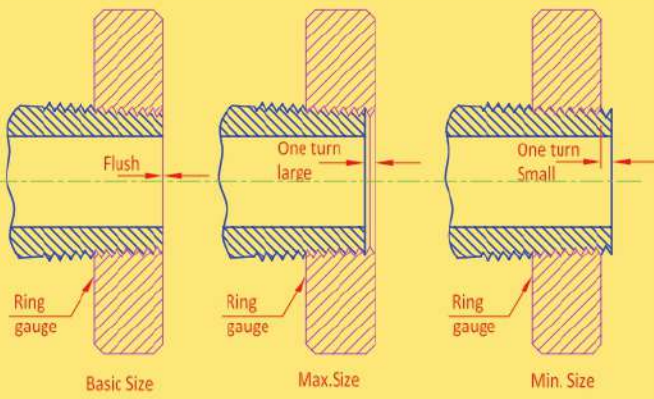
Gauge dimensions are as per ASME B1.20.1.
Gauges are supplied as Basic Step & Min/Max Step.



P = Pitch

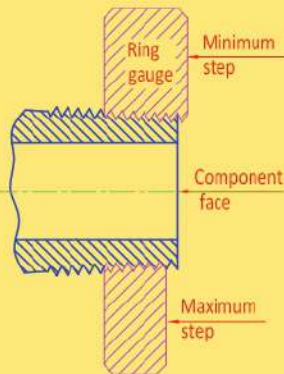
GAUGING EXTERNAL TAPER THREADS

With Basic Step Taper Threads Ring Gauge



The Basic Step gauge when screwed onto the threads of the component by hand, should be flush with the end of the component face within 1 turn, as shown above

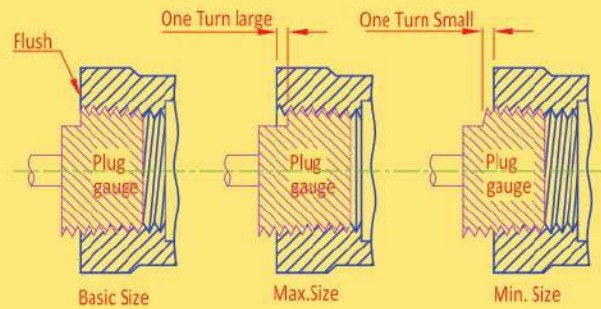
With Min / Max Step Taper Threads Ring Gauge



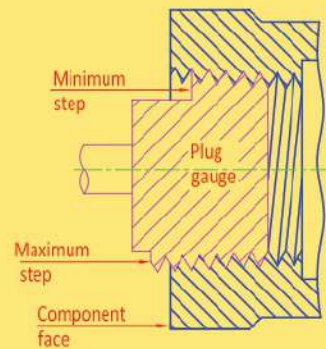
When using a Min/Max Step type gauge, the end of the component face should be flush between the Minimum and Maximum steps.

GAUGING INTERNAL TAPER THREADS

With Basic Step Taper Threads Plug Gauge



With Min / Max Step Taper Threads Plug Gauge



Thread Gauge

M 7 x 0.75 CO

NPTF, ANPT



L1 Ring



L2 Ring



6 Step Crest Check Ring



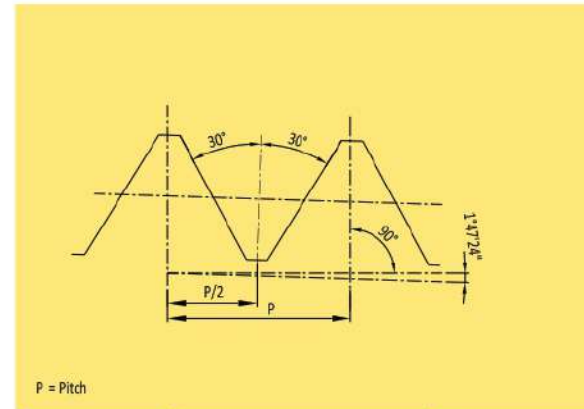
L1 Plug



L3 Plug



6 Step Crest Check Plug

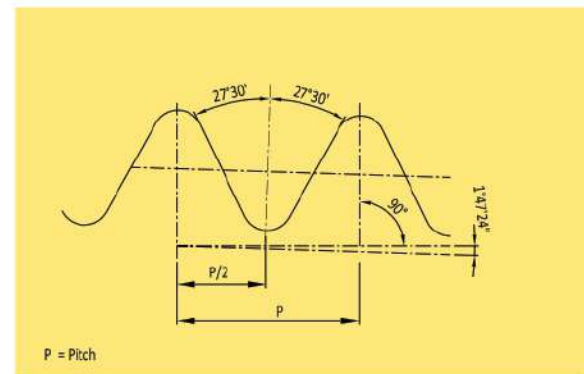


NPTF threads are also known as Dryseal threads as they do not require a sealant to form a leak-proof joint.

Type	Standard	Plug gauges	Ring gauges
NPTF	ANSI/ASME B 1.20.5	Thread plug gauges L1 & L3 (Basic Step or Min/Max Step)	Thread ring gauges L1 & L2 (Basic Step or Min/Max Step)
ANPT	SAE AS71051B	6 Step Crest Check Plug	6 Step Crest Check Ring

- NPTF & ANPT threads require additional gauging as the truncation of these threads should be maintained within specified limits.
- L1 & L3 plug gauges and L1 & L2 Ring gauges are used in combination to verify the size and taper of the component threads along the thread length.
- 6 Step Crest check plug and ring gauges are used to verify the crest diameter and truncation of the component threads along the thread length.

TAPER PIPE THREADS ISO 7-R, BSPT, PT



- These are taper pipe threads where pressure tight joints are made on threads. The thread angle is 55°
- Gauges are manufactured as per ISO 7-2, EN 10226, BS 21, JIS B0253

Thread Gauge

ADJUSTABLE THREAD RING GAUGES AND SET PLUGS



Adjustable Thread Ring Gauge



Set Plug

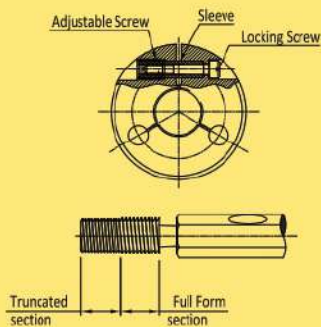


Adjustable Thread Ring Gauge



Set Plug

CONSTRUCTION



Note

- These gauges are ring shaped, but they have a split and an adjusting and locking screw facility to finely adjust their correct gauging size. For setting these gauges, "Setting plugs" are needed.
- Truncated thread set plugs have threads with both truncated and full form threads for both the Go and the Not Go member.
- The truncated section controls the pitch diameter.
- Use thread setting plug to adjust & set adjustable thread ring gauges.
- A thread ring gauge should be set on the full form portion of the set plug (back portion). The ring is then turned onto the truncated portion and should have the same drag and fit as when turned through the full form.
- The setting of Adjustable Ring using a set plug involves high skill which is done by Adjusting screw followed by locking screw.
- It is strongly recommended that once the thread ring gauge has passed all the above processes, the locking screw and adjustment screw holes are sealed with sealing wax to prevent any tampering.

	From	Up to & including
Metric	M3	M28
Inches	0-80	1

TUNGSTEN CARBIDE THREAD GAUGES

FEATURES

- Tungsten carbide only for frequently used go-side gauges. NOT GO side in the conventional OHNS Steel material.
- Gauge life 5 to 10 times more than that for similar gauges made from steel.
- Life will vary greatly depending upon the work piece material.



Size	Pitch	ISO (Class)
M1.6	0.35	6H
M2	0.4	6H
M2.5	0.45	6H
M3	0.5	6H
M4	0.7	6H
M5	0.8	6H
M6	1.0	6H
M8	1.25	6H
M8	1.0	6H
M10	1.5	6H
M10	1.25	6H
M10	1.0	6H
M12	1.75	6H
M12	1.5	6H
M12	1.25	6H

API (Oil) Thread Gauge



BAKER
KURODA

API

BAKER has collaborated with KURODA PRECISION INDUSTRIES, a leading Japanese thread gauge manufacturer, to distribute their high quality API thread gauges in India. KURODA has been granted the right of use of API Official Monogram for the following API Thread Gauges since 1957; Specification 5B under the License no. 5B-0015, Specification 7-2 under the License no. 7-2-0187.



Kuroda Precision Industries: A Brief introduction

Kuroda was founded in 1925 as one of the first dedicated gauge manufacturers in Japan. Since then, they have developed various products based on precision measuring and processing technology. While working to preserve traditional skills, techniques and reputation for best quality, they also employ latest technologies through active R&D. Kuroda's mission continues to be that of support to the customers through their high precision measuring and processing technology based on the philosophy of P&P (Precision and Productivity) and the spirit of C&C (Challenge and Create).

FEATURES

- Light construction
- Longer operating life
- Manufacturing to the highest Japanese quality standards
- Best Raw materials from Japan used
- Easy to use: The handle is standard-equipped on all products
- Upon request, a Hook Ring can be mounted on larger diameter ring gauges for better work ability

When ordering, please provide information on:

- Type of gauge
- Size of gauge
- Reference master or working gauges
- Plug or ring or both
- Right hand or left hand, in case of API Spec. 7-2 thread gauges
- Inspection results to be stated in inches or mm



API (Oil) Thread Gauge



API SPEC. 5B (Casing & Tubing)

LP

Line Pipe Thread Gauges
Thread angle 60°

Size	T.P.I.	Taper
1/8	27	1 : 16
1/4	18	1 : 16
3/8	18	1 : 16
1/2	14	1 : 16
3/4	14	1 : 16
1	11 1/2	1 : 16
1 1/4	11 1/2	1 : 16
1 1/2	11 1/4	1 : 16
2	11 1/2	1 : 16
2 1/2	8	1 : 16
3	8	1 : 16
3 1/2	8	1 : 16
4	8	1 : 16
5	8	1 : 16
6	8	1 : 16
8	8	1 : 16
10	8	1 : 16
12	8	1 : 16
14D	8	1 : 16
16D	8	1 : 16
18D	8	1 : 16
20D	8	1 : 16

CSG

Casing Round Thread Gauges
Thread angle 60°

Size	T.P.I.	Taper
4 1/2	*8	1 : 16
5	*8	1 : 16
5 1/2	*8	1 : 16
6	*8	1 : 16
7	*8	1 : 16
7 3/8	*8	1 : 16
8 3/8	*8	1 : 16
9 3/8	*8	1 : 16
10 3/8	8	1 : 16
11 3/8	8	1 : 16
13 3/8	8	1 : 16
16	8	1 : 16
18 3/8	8	1 : 16
20	*8	1 : 16

Note : *Short and long

BUTTRESS CSG

Buttress Casing Thread Gauges
Thread angle : 3° x 10°

Size	T.P.I.	Taper
4 1/2	5	1 : 16
5	5	1 : 16
5 1/2	5	1 : 16
6 3/8	5	1 : 16
7	5	1 : 16
7 3/8	5	1 : 16
8 3/8	5	1 : 16
9 3/8	5	1 : 16
10 3/8	5	1 : 16
11 3/8	5	1 : 16
13 3/8	5	1 : 16
16	5	1 : 12
18 3/8	5	1 : 12
20	5	1 : 12

TBG

Non-Upset Tubing Thread Gauges
Thread angle 60°

Size	T.P.I.	Taper
1.050	10	1 : 16
1.315	10	1 : 16
1.660	10	1 : 16
1.900	10	1 : 16
2 3/8	10	1 : 16
2 7/8	10	1 : 16
3 1/2	10	1 : 16
4	8	1 : 16
4 1/2	8	1 : 16

UP TBG

External-Upset Tubing Thread Gauges
Thread angle 60°

Size	T.P.I.	Taper
1.050	10	1 : 16
1.315	10	1 : 16
1.660	10	1 : 16
1.900	10	1 : 16
2 3/8	8	1 : 16
2 7/8	8	1 : 16
3 1/2	8	1 : 16
4	8	1 : 16
4 1/2	8	1 : 16

Ex. Li. Casing

Extreme-Line Casing Thread & Seal Gauges
Thread angle : 6° x 6°

Size	T.P.I.	Taper
5	6	1 : 8
5 1/2	6	1 : 8
6 3/8	6	1 : 8
7	6	1 : 8
7 3/8	6	1 : 8
8 3/8	5	1 : 9.6
9 3/8	5	1 : 9.6
10 3/8	5	1 : 9.6

Note : Taper of seal = 1 : 6

API SPEC. 7-2 (Rotary Shouldered Connections)

NC

Number Style
Thread angle 60°

Size	T.P.I.	Taper
NC 23	4	1 : 6
NC 26	4	1 : 6
NC 31	4	1 : 6
NC 35	4	1 : 6
NC 38	4	1 : 6
NC 40	4	1 : 6
NC 44	4	1 : 6
NC 46	4	1 : 6
NC 50	4	1 : 6
NC 56	4	1 : 4
NC 61	4	1 : 4
NC 70	4	1 : 4
NC 77	4	1 : 4

REG

Regular Style (Right or left hand)
Thread angle 60°

Size	T.P.I.	Taper
1	6	1 : 8
1 1/2	6	1 : 8
2 3/8	5	1 : 4
2 7/8	5	1 : 4
3 1/2	5	1 : 4
4 1/2	5	1 : 4
5 1/2	4	1 : 4
6 3/8	4	1 : 6
7 3/8	4	1 : 4
8 3/8	4	1 : 4

FH

Full-hole Style
Thread angle 60°

Size	T.P.I.	Taper
3 1/2	5	1 : 4
4	4	1 : 6
4 1/2	5	1 : 4
5 1/2	4	1 : 6
6 3/8	4	1 : 6

IF

Internal-flush Style
Thread angle 60°

Size	T.P.I.	Taper
2 3/8	4	1 : 6
2 7/8	4	1 : 6
3 1/2	4	1 : 6
4	4	1 : 6
4 1/2	4	1 : 6
5 1/2	4	1 : 6