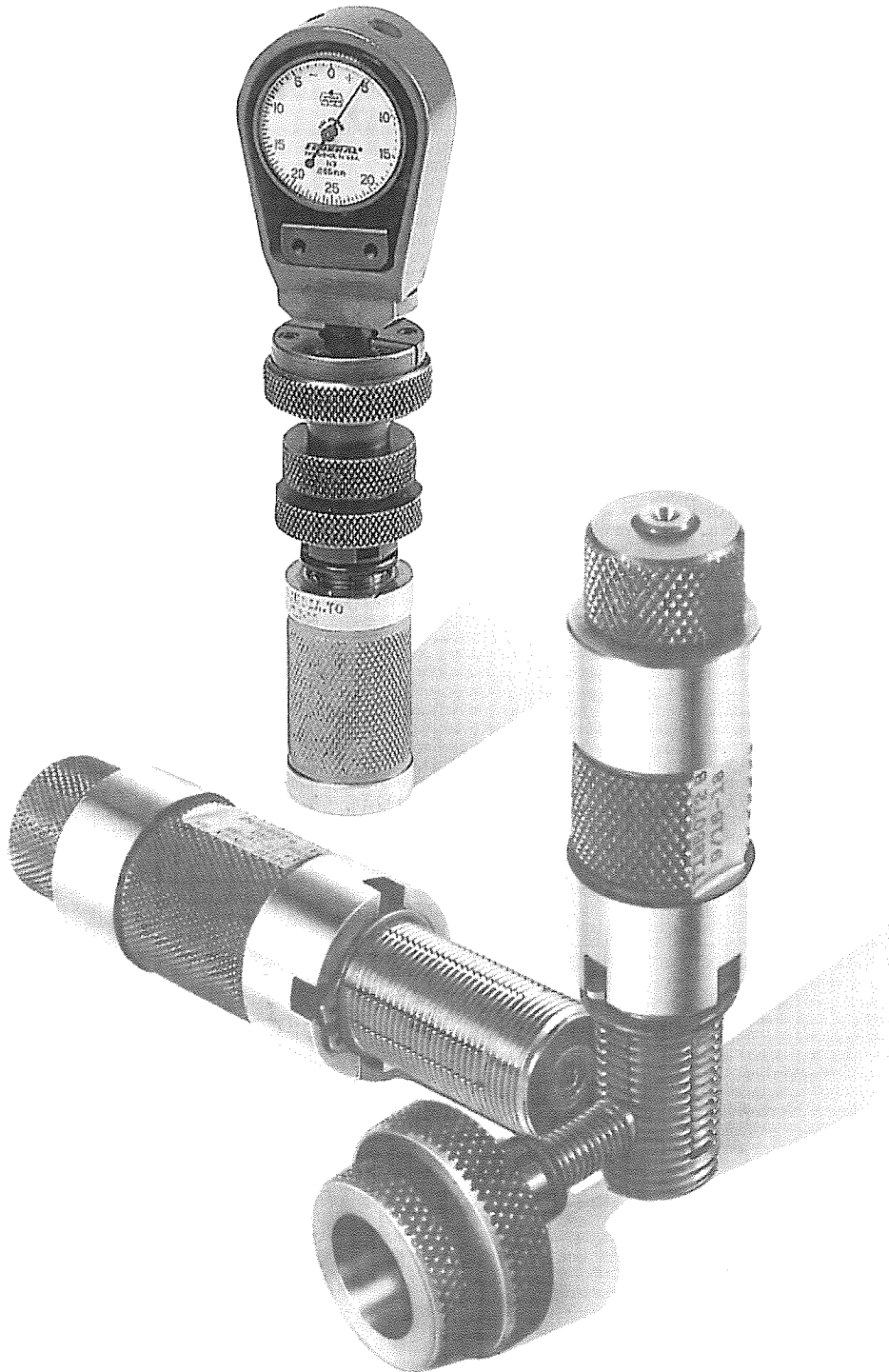


Con-Ax Precision Thread Locator

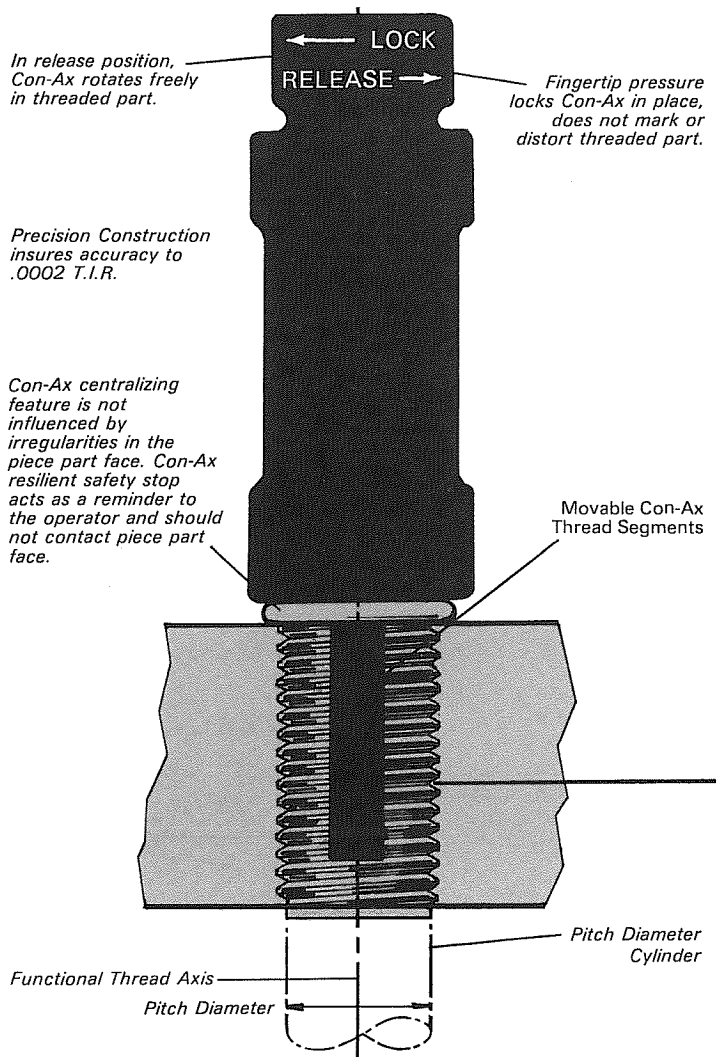


CON-AX PRECISION THREAD LOCATOR

Locates the functional axis of an internal screw thread. Once established, the functional thread axis becomes a reliable datum from which accurate gaging is possible.

Use Con-Ax whenever it is necessary to check:

- True axial position of an internal screw thread.
- Concentricity of related diameters to the axis of an internal screw thread.
- Squareness of surfaces to the axis of an internal screw thread.



Functional Thread Axis

The functional thread axis is by definition that axis established by the largest acceptable solid thread member that will assemble in a screw thread for its full length.

Functional thread axis refers to the location or position of the pitch diameter cylinder. While the pitch diameter is a variable parameter, (somewhere within a given tolerance) Con-Ax presents a constant, reliable datum (the functional thread axis) from which accurate gaging is possible.

Con-Ax centralizes by gripping both flanks of the maximum number of threads over the full thread length.

Release Position—Movable thread segments are aligned with body threads.

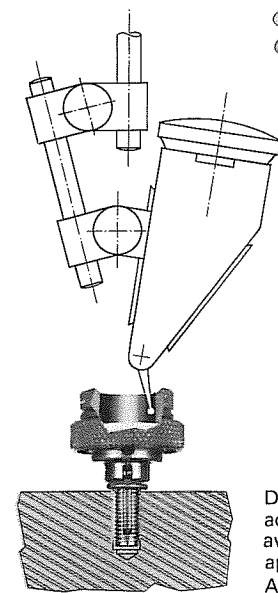
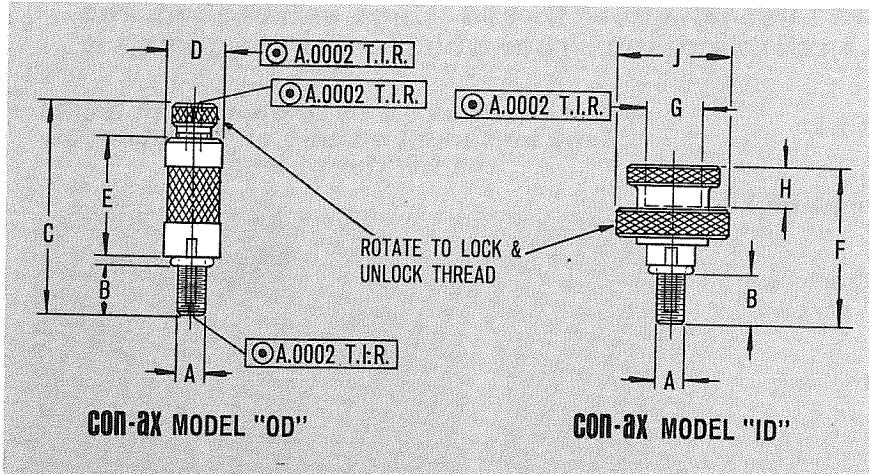
Lock Position—Movable thread segments advance to engage one flank of piece part, while body threads remain stationary, addressing the opposite flank of the piece part thread.

Side View in Lock Position—Note that Con-Ax centralizes by gripping both flanks of the maximum number of piece part threads over the full thread length.

Does Con-Ax Check The Thread?

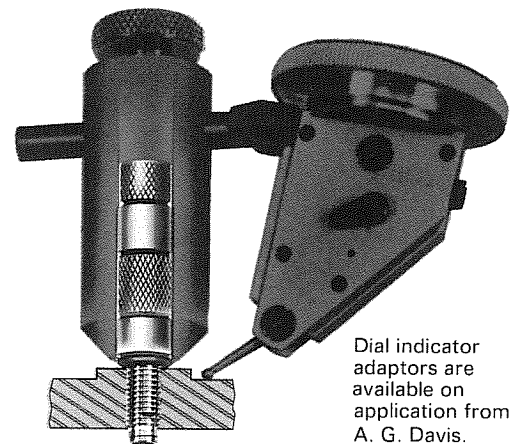
No. The screw thread must first be inspected and determined to be "in tolerance" with respect to size, straightness, roundness, etc. Likewise, the surface or surfaces to be checked in relation to the screw thread must be qualified and "in-tolerance" as to flatness, roundness, etc. Unless the quality of the screw thread and related surfaces has been established, subsequent checks for concentricity, squareness or true position will be meaningless.

CON-AX O.D. AND I.D. MODELS



Dial indicator adaptors are available on application from A. G. Davis.

Application of Model I.D.



Dial indicator adaptors are available on application from A. G. Davis.

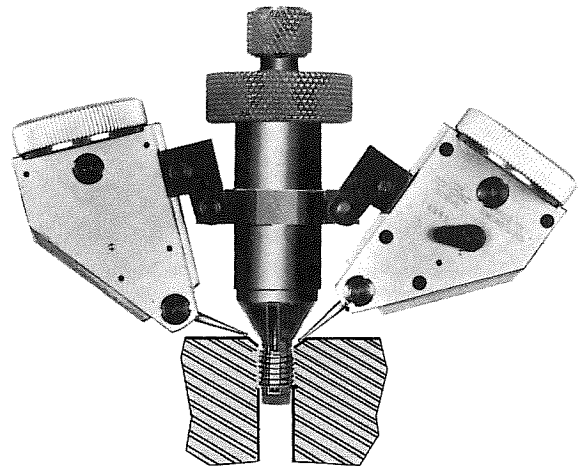
Application of Model O.D.

A	NUMBER OF THREADS			B	C	D	E	F	G	H	J
	UNC	UNF	NEF								
1/4	20	28	32	.44	1.87	.500	1.05	1.39	.500	.38	1.00
5/16	18	24	32	.55	1.93	.500	1.05	1.50	.500	.38	1.00
3/8	16	24	32	.66	2.35	.600	1.26	1.61	.500	.38	1.00
7/16	14	20	28	.77	2.46	.600	1.26	1.72	.500	.38	1.00
1/2	13	20	28	.88	3.08	.800	1.68	1.83	.500	.38	1.00
9/16	12	18	24	.99	3.19	.800	1.68	2.06	.562	.38	1.25
5/8	11	18	24	1.10	3.84	1.000	2.10	2.51	.625	.50	1.50
1 1/16			24	1.21	3.95	1.000	2.10	2.62	.687	.50	1.75
3/4	10	16	20	1.32	4.06	1.000	2.10	3.04	.750	.50	1.75
1 3/16			20	1.43	4.68	1.200	2.52	3.28	.812	.50	1.75
7/8	9	14	20	1.54	4.79	1.200	2.52	3.39	.875	.50	2.00
1 5/16			20	1.65	5.43	1.400	2.94	3.53	.937	.50	2.00
1"	8	12	20	1.76	5.54	1.400	2.94	3.64	1.000	.50	2.00

When ordering, give Con-Ax model, thread size and hand. Example: Con-Ax Model OD 1/4-28 R.H. Other thread sizes, special pitch diameters, other thread forms and special lengths of engagement are available. Contact A. G. Davis.

MODEL CS

For checking concentricity and squareness on Military "MS-33649" or NASA "MC-240" straight thread tube fittings.



CON-AX MODEL CS Selector Guide

Con-Ax Model Number	Equiv. Tube Dash Number	Tube O.D.	Thread Size
CS-2	2	.125	.3125-24
CS-3	3	.188	.3750-24
CS-4	4	.250	.4375-20
CS-5	5	.312	.5000-20
CS-6	6	.375	.5625-18
CS-7	7	.438	.6250-18
CS-8	8	.500	.7500-16
CS-9	9	.562	.8125-16
CS-10	10	.625	.8750-14
CS-11	11	.688	1.0000-12
CS-12	12	.750	1.0625-12
CS-14	14	.875	1.1875-12
CS-16	16	1.000	1.3125-12
CS-18	18	1.125	1.5000-12
CS-20	20	1.250	1.6250-12
CS-24	24	1.500	1.8750-12
CS-28	28	1.750	2.2500-12
CS-32	32	2.000	2.5000-12

Model numbers are less dial indicators. If indicator is desired specify "with .0005 or .0001 indicator(s)."