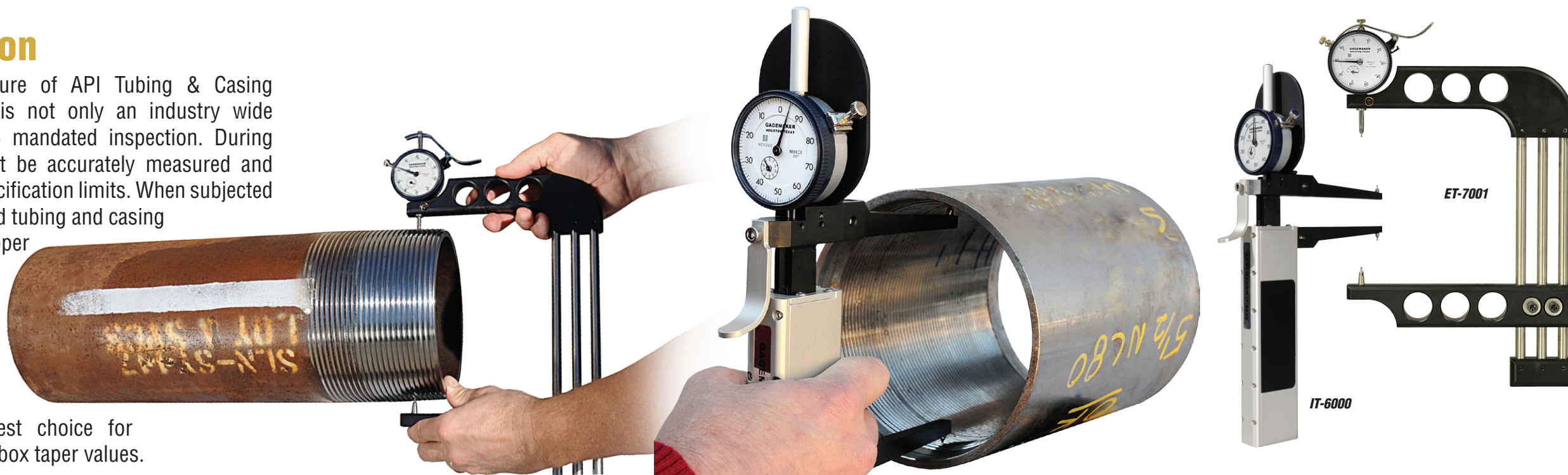




## Thread Taper Inspection

Tapered threads are a signature feature of API Tubing & Casing connections. Measuring thread taper is not only an industry wide practice, it is an API Specification 5B mandated inspection. During the manufacturing process, taper must be accurately measured and quantified to stay within the required specification limits. When subjected to a service load, taper error on threaded tubing and casing connections can lead to galling, improper fit, and reduced performance.

For the most accurate taper inspection, use Gagemaker taper gages to verify both the threaded pin and coupling meet all customer and industry requirements. Gagemaker's taper gages are the best choice for measuring and controlling both pin and box taper values.



### External Taper Gages

Gagemaker's external taper gages inspect variation in external thread taper. Unless specified otherwise, external taper gages are shipped with .072" diameter contact points (T072) as standard. Refer to the chart on the following page for the proper contact point for your particular connection. Each gage requires two contact points. Higher resolution indicators are available.

Model	Description	Range	Travel	Resolution
ET-7001	External Taper, 1/2" travel	0" - 6"	1/2"	.001"
ET-7002	External Taper, 1/2" travel	0" - 10"	1/2"	.001"
ET-7003	External Taper, 1" travel	0" - 10"	1/2"	.001"
ET-7004	External Taper, 1/2" travel	0" - 16"	1/2"	.001"
ET-7006	External Taper, 1/2" travel	16" - 24"	1/2"	.001"

### Internal Taper Gages

Gagemaker's internal taper gages measure variation in thread taper. Taper gages are shipped with our standard set of .072" diameter contact points (T072), unless specified otherwise or requested. Refer to the chart on the following page for the proper contact point for your particular connection. Each internal gage requires two contact points. Higher resolution indicators are available.

Model	Description	Range	Travel	Resolution
IT-6000	Internal Taper Gage	4 1/4" Depth, 1 1/2" - 9" Diameter	1"	.001"
IT-6001	Internal Taper Gage	Any Depth, 5" - 13 3/8" API Sizes	1/2"	.001"

### API Contact Points for Taper Gages

Gagemaker's standard ball contact points are manufactured with carbide balls. All of Gagemaker's inspection gages use threaded shank contact points. Threaded shanks are #4-48 UNF. Metric threads are available upon request. Taper gages require two contact points. Additional contact points can be found on pages 124-125.

Model	Point Diameter	Threads Per Inch (TPI)	Connection Type
T090	0.090"	5	Buttress Casing – Taper
T072	0.072"	8	API Tubing and Casing
T057	0.057"	10	API Tubing and Line Pipe