

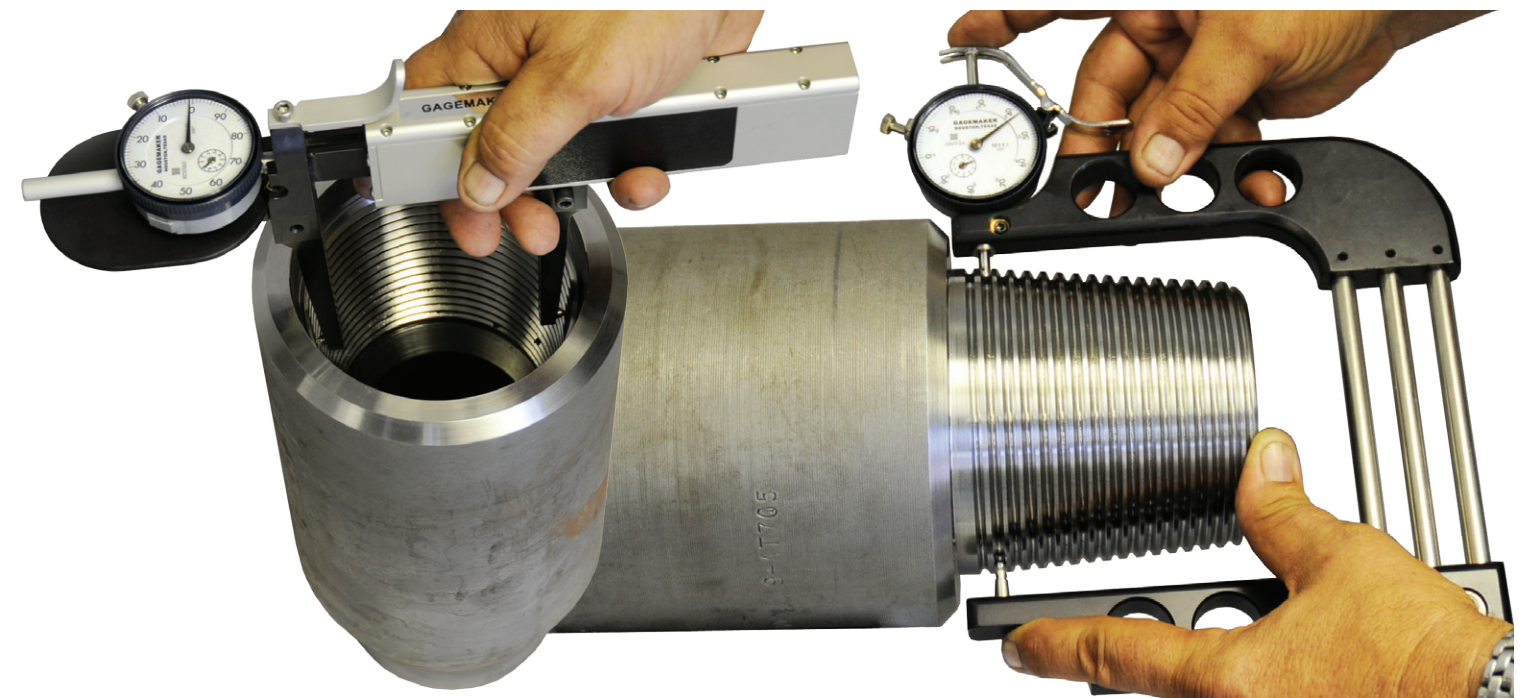
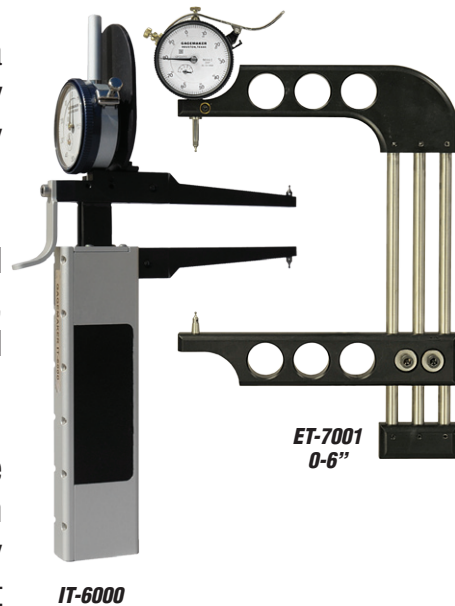


## Thread Taper Inspection

Thread Taper is the change in pitch diameter over the length of a connection, typically designated in inches per foot. For all rotary shouldered connections, measuring thread taper is not only an industry wide practice; it is an API mandated inspection.

During the manufacturing process, taper must be accurately measured and quantified to avoid mismatched tapers. When under a service load, mismatched tapers between pins and boxes diminish proper thread engagement resulting in reduced connection performance.

Gagemaker's IT-6000 and ET-7000 series gages are the best choice for measuring and controlling both pin and box taper values within the required specification limits. When RSC connections are properly manufactured utilizing Gagemakers precision taper gages, product performance is maximized.



### External Taper Gages

Gagemaker's external taper gages inspect variation in connection taper. External taper gages are shipped with .072" diameter contact points unless otherwise requested. Refer to the contact point chart on the next page for the proper contact point for your particular connection. Higher resolution indicators are available. For larger diameters, see page 115.

Model	Description	Range	Travel	Resolution
ET-7003	External Taper Gage	0" - 10"	1"	.001"

### 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 chart on the next page for the proper contact point for your particular connection. Higher resolution indicators are available. For larger diameters, see page 115.

Model	Description	Range	Travel	Resolution
IT-6000	Internal Taper Gage, 4¼" Depth	1½" - 9" Diameter	1"	.001"

### API Contact Points for Taper Gages

Gagemaker's standard contact points are manufactured with carbide balls. Taper gages use threaded shank contact points. Threaded shanks are #4-48 UNF. For other contact points, please see pages 124-125. Taper gages require two contact points. Sold individually.

Model	Point Diameter	Threads Per Inch (TPI)	Connection Type
T235	0.235"	3	Hughes Slim Line H-90
T200	0.200"	3½	All Hughes H-90
T144	0.144"	4	API Rotary Shouldered Connections
T115	0.115"	5	API Rotary Shouldered Connections
T096	0.096"	6	API Rotary Shouldered Connections