



### Thread Lead Inspection

Thread lead is one of the most important thread elements and directly affects a part's functional size.

Lead error is most commonly generated by manual and CNC lathes not cutting properly. Therefore, it's important to take measurements at the locations where the most lead error typically occurs. These readings help detect machine tool error and worn lead screws on your lathe.

Lead gages inspect both internal and external lead on a variety of thread forms.



#### Lead Gages

The **LG-5002** uses a two-point system to inspect thread lead for Acme, Stub Acme, Stub Acme Modified I and II, Metric M & J, UN, UNJ, UNR, 7° X 45° Buttress, and general purpose pipe threads. The two points allow for a sweeping action to obtain the measurement.

Before inspecting parts, the lead gage must be preset to a nominal predetermined dimension using a lead gage setting standard. See chart below for the proper standard based on pitch.

Contact points are sold separately. See page 17 or 124-125 for more.

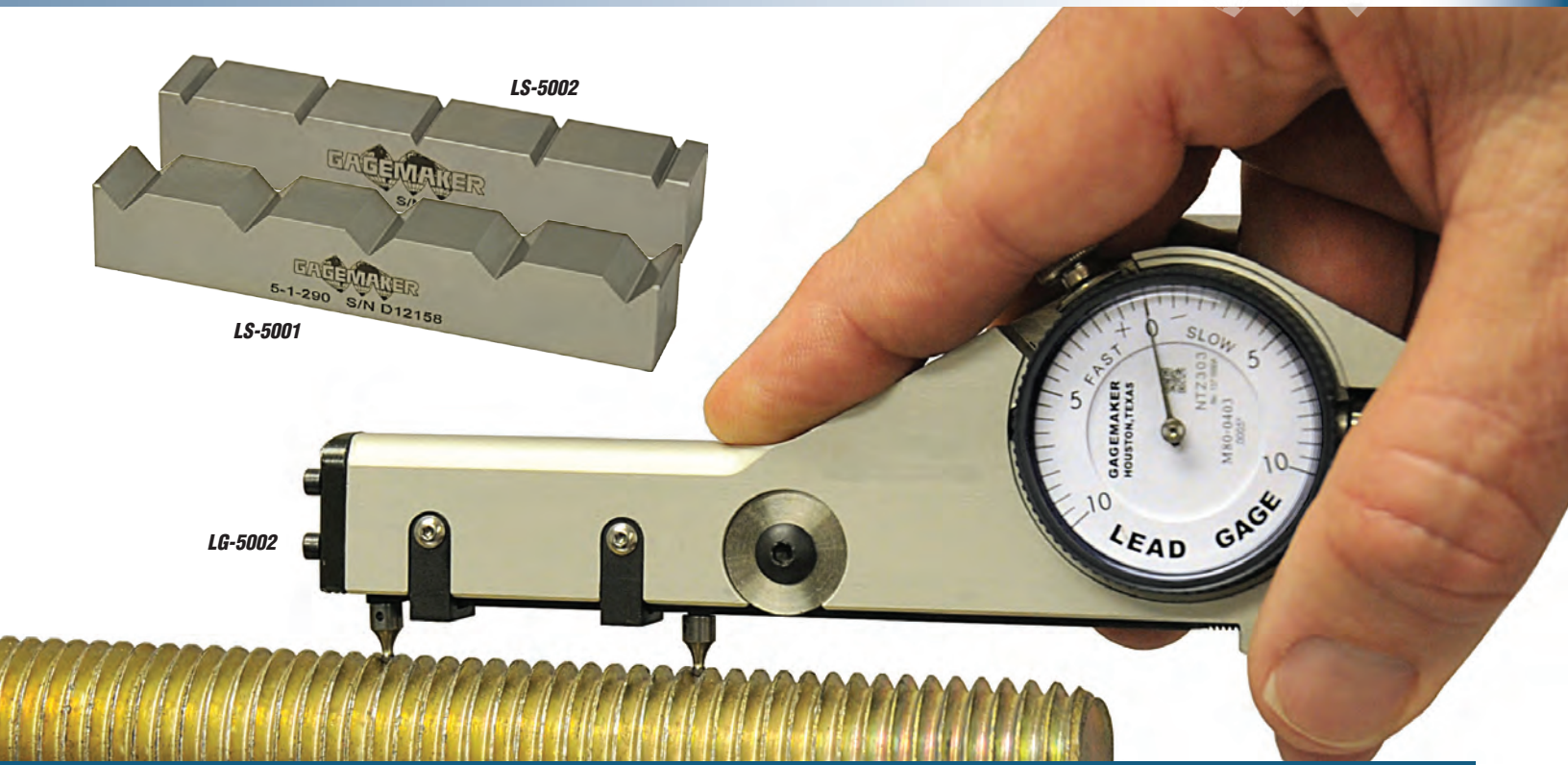
Higher resolution indicators are also available.

Model	Description	Minimum Bore	Range
LG-5002	2-point Lead Gage	1.200	½" - 4" (12.7mm - 101.6mm) Thread Length

#### Lead Gage Setting Standards

Gagemaker's precision lead gage setting standards are manufactured in accordance with ANSI Specifications. Lead gage standards are used to set the gage prior to the inspection.

Model	Connection Type/Description	Threads Per Inch (TPI)
LS-5001	Straight Threads, 1-5 pitch, 4" length	1 - 5
LS-5002	Straight Threads, 6-18 pitch, 4" length	6 - 18
LS-____mm	Straight Threads, Metric, specify pitch for model (e.g. LS-4mm)	



## Contact Points

### UN Series (60° “V”) Threads

These contact points are used to inspect the lead of machined parts with 60° “V” thread forms. Two are required per gage. Sold individually.

Model	Thread Pitch	Model	Thread Pitch	Model	Thread Pitch	Model	Thread Pitch
T562	1	T128	4.5	T072	8	T032	18
T288	2	T115	5	T057	10		
T188	3 & 3½	T105	5½	T050	11½ & 12		
T144	4	T096	6	T041	14 & 16		

### Acme or Stub Acme Threads

These truncated contact points are used to inspect the lead of machined parts with 29° Acme and Stub Acme thread forms. Two are required per gage. Sold individually.

Model	Thread Pitch	Model	Thread Pitch	Model	Thread Pitch	Model	Thread Pitch
T531T	1	T188T	3	T090T	6 & 7	T032T	16
T344T	1½	T144T	3½	T062T	8		
T266T	2	T128T	4	T050T	10		
T219T	2½	T105T	5	T041T	12 & 14		

### 7° x 45° Buttress Series Contact Points

These contact points are used to inspect the lead of machined parts with 7° x 45° Buttress thread forms. Two are required per gage. Sold individually.

Model	Thread Pitch	Model	Thread Pitch	Model	Thread Pitch	Model	Thread Pitch
T562	1	T219	2½	T115	5	T050	12
T437	1¼	T188	3	T096	6	T032	16 & 18
T375	1½	T156	3½	T072	8		
T281	2	T144	4	T057	10		

For Trapezoidal or ISO Metric contact points please see pages 125.