

# FLEXBAR IPD GAGING SYSTEM

A versatile measurement system for internal pitch diameters, as well as internal bores, grooves, recesses and internal gears.

## **Major Features:**

- With this new concept, accurate measurements of internal threads and compensation calculations for ball diameter variations or lead angles are made extremely simple.
- The software diskettes supplied with the IPD Gage can be used in any compatible PC to obtain all data required for accurate inspection of any specific internal thread without the necessity of a master gage.
- Easy to set IPD Gage with Micrometer or Gage Blocks, etc.
- Universal, can be used as general purpose internal gage for measuring bores, grooves and pitch diameters of screw threads and internal gears, etc.
- Indicator alone, with the included adapter, extensions and contact points, make it possible to measure internal threads and bores from 7½" to 18".
- Rigid construction plus special high precision pivot bearings assure repeatability of .0002" or less.
- Adjustable contact pressure.
- Carbide ball contact points are optional, not included.
- System includes internal gage, 1" travel indicator, indicator-adapter, 8 extensions (1/4", 3/6", 1/2", 3/4", 1", 2", 3" and 4" long), measuring tip organizer, 2 standard contact points 1/4" long, allen wrench, fitted case plus software cassette for internal pitch diameter threads and instruction manual.

### **SPECIFICATIONS:**

Measuring Range: Bores
Nominal Size
Threads
Extended range with included indicator adapter
Gage arm travel
Maximum reach in 1-1/4" dia. bore
1" Travel indicator graduation
.0005"



Contact points with special ball diameter quoted on request



## **INCLUDES SOFTWARE CD**

The IPD software complies with ANSI standards; fully compensates for the effects of lead angle.

#### **USER FRIENDLY**

On screen explanation, no commands to remember. Error free data entry, will detect invalid input data.

#### INIVERSAL

Supports UN series and Metric threads as well as threads with user defined thread angle and number of starts for Acme, Whitworth and multiple start threads.

- Software calculates the correct diameter for any chosen ball contact point within the specified range per table below.
- Diameter setting with micrometer or gage blocks, no master thread setting ring required.

### MODEL NO. DESCRIPTION

15870	IPD Gage & Software Complete System. Supplied with one set of standard points for ID Measurement only			
15880	4 Pairs Carbide Ball Contact Points, Package #1 <sup>1</sup> / <sub>32</sub> , <sup>3</sup> / <sub>64</sub> , <sup>1</sup> / <sub>16</sub> , <sup>3</sup> / <sub>32</sub> " Dia. covering U Series threads from 24 to 4 pitch			
15881	7 Pairs Carbide Ball Contact Points, Package #2 1/32, 3/64, 1/16, 5/64, 3/32, 7/64, 1/8" Dia. covering UN Series 24 to 3 pitch single and multiple starts			
15870-3.0	3.0 Software CD Only			

OPTIONAL CARBIDE BALL CONTACT POINTS.  $\mbox{\ensuremath{\mbox{\sc V}}}{''}$  LENGTH, A.G.D. #4-48 THREAD. SOLD IN PAIRS

MODEL NO.	BALL DIAMETER Tolerance ±.0001"	UN SERIES Threads Per Inch	ACME Threads Per Inch	METRIC Threads Pitch (mm)
15871	.03125" (1/32)	24 - 14		1.25 - 1.75
15872	.046875" (3/64)	16 - 8		1.75 - 3
15873	.0625" (1/16)	11 - 6		2.5 - 4
15874	.07813" (5/64)	9 - 5		3 - 5
15875	.09375" (3/32)	6 - 4		4 - 6
15876	.10939" (7/64)	6 - 3.5	5	4 - 7
15877	.125" (1/8)	5 - 3	4	5 - 8
15878	.1875" (3/16)	3.5 - 2	3	7 - 13
15879	.250" (1/4)	3 - 1.5	2	8 - 17