



The following pages show our varied line of precision end measuring rods and inside micrometers. The variations are fixed-range or adjustable-range micrometers and solid or tubular measuring rods.

Unless otherwise noted under the individual tools, all have these features:

- ◆ Balanced design for better feel and accurate measurement
- ◆ All contact points are hardened and ground for better accuracy and long life
- ◆ Satin chrome finish on all micrometer heads and reading surfaces that resist rust and also make for easy reading by providing a no-glare background for the sharp lines and figures
- ◆ Hardened and stabilized spindle for accuracy and long life
- ◆ Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- ◆ Quick and easy adjustment
- ◆ Starrett workmanship
- ◆ Inside Micrometers Nos. 121, 124, 823 and 824 by design have a firmer rotation than regular micrometers. This is to limit the tendency of the micrometer head to rotate when withdrawn from the workpiece.



### **Measuring Tips for Inside Measurements**

Whether to use a two-point or three-point contact measuring tool is usually a matter of preference, but there are some differences.

A two-point contact rod-type inside micrometer shown in this section is usually lighter, easier to handle, and more versatile over long ranges from approximately 6-107" (150-2700mm). Any two-point contact micrometer, regardless of range, can probe a hole better to find the geometry of that hole than a three-point contact.

Most three-point contact tools have setting rings to insure accuracy. If you desire very close tolerance work with

two-point contact inside micrometers, it is recommended that they be set to a ring gage or to an outside micrometer.

A three-point contact micrometer shown in the Bore Gages section has an advantage in that it can be seated in position more quickly than a two-point contact tool. Usually these tools can also be read to a finer accuracy. The three-point tool will tell the maximum true diameter that can enter the hole a little faster than a two-point contact tool.

Micrometer heads used in these tools are accurate to  $\pm 0.0001$ " or 0.002mm, but overall accuracy on tools that add rods is dependent on good practice and technique.

To insure accuracy, these practices should be followed:

- ◆ Always make sure that there are no specks of dirt between the clamping surfaces of the rods and micrometer heads
- ◆ Tighten all rods uniformly, not too tight, not too loose, but a fairly firm assembly
- ◆ Assemble long sections vertically or, with support, horizontally
- ◆ Because temperature can affect long rods used in these tools, they should be assembled in the same environment in which they will be used

**(For additional information,  
refer to the Bore Gage Section)**

Precision Measuring Equipment and Industrial Supplies since 1924.

4841 W. Chicago Ave. - Chicago, IL 60651 • Phone: 773-261-2182 • Fax: 773-261-2867 • [sales@jwdonchin.com](mailto:sales@jwdonchin.com)

J.W. Donchin Co. was established in 1924 and has been known world wide ever since. Customer Service is our Main Focus. We offer **Expert Product Knowledge, Large Stocking Inventory and Competitive Pricing** to assist you in locating and selecting the correct tool or product to fit your needs. (J.W. Donchin Co. is one of L.S. Starrett's largest stocking distributors.)

## Contact Information:

Phone: 773-261-2182

Fax: 773-261-2867

Email: [sales@jwdonchin.com](mailto:sales@jwdonchin.com)

## Direct Access Links

(View specific information, click on any of the following)

• Latest Website Updates:

• Website:

• Quotes:

• Latest Promos:

• Line Card (Product Lines & Mfg)

Catalog / Promo / Pricelist

• Starrett

• Mitutoyo

• Fowler

• Brown & Sharpe