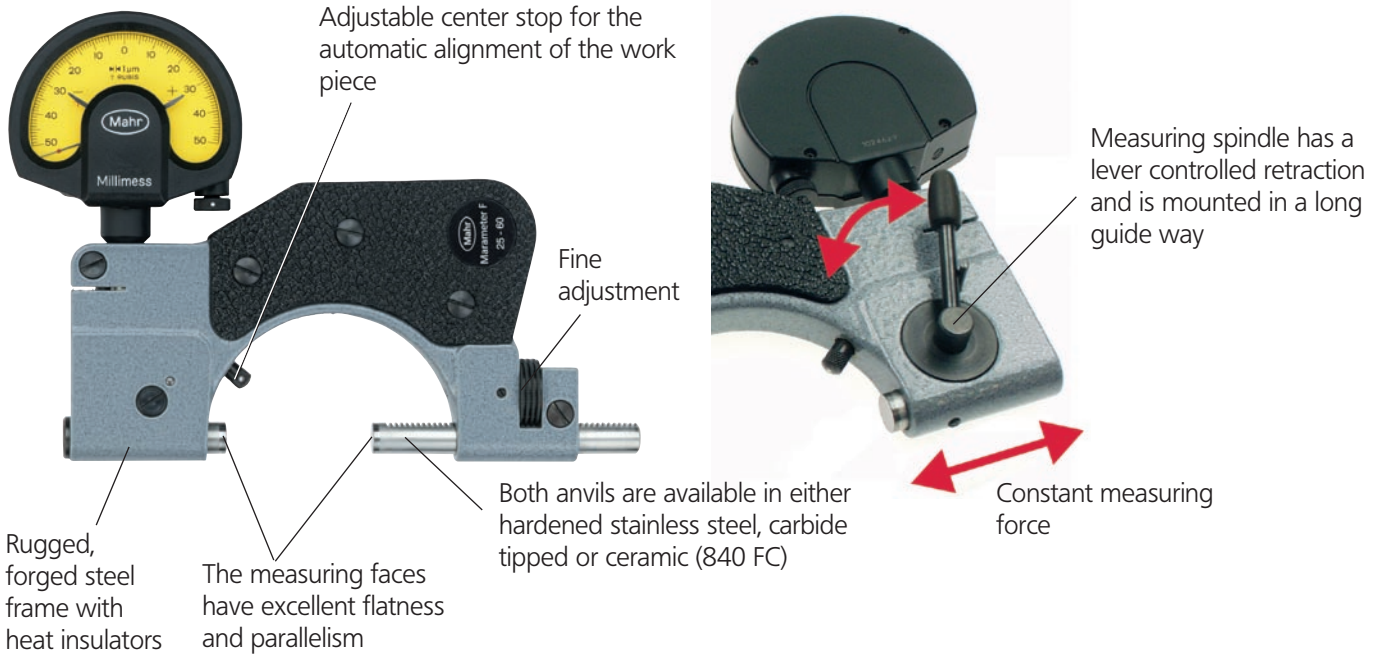


## MaraMeter. Indicating Snap Gages

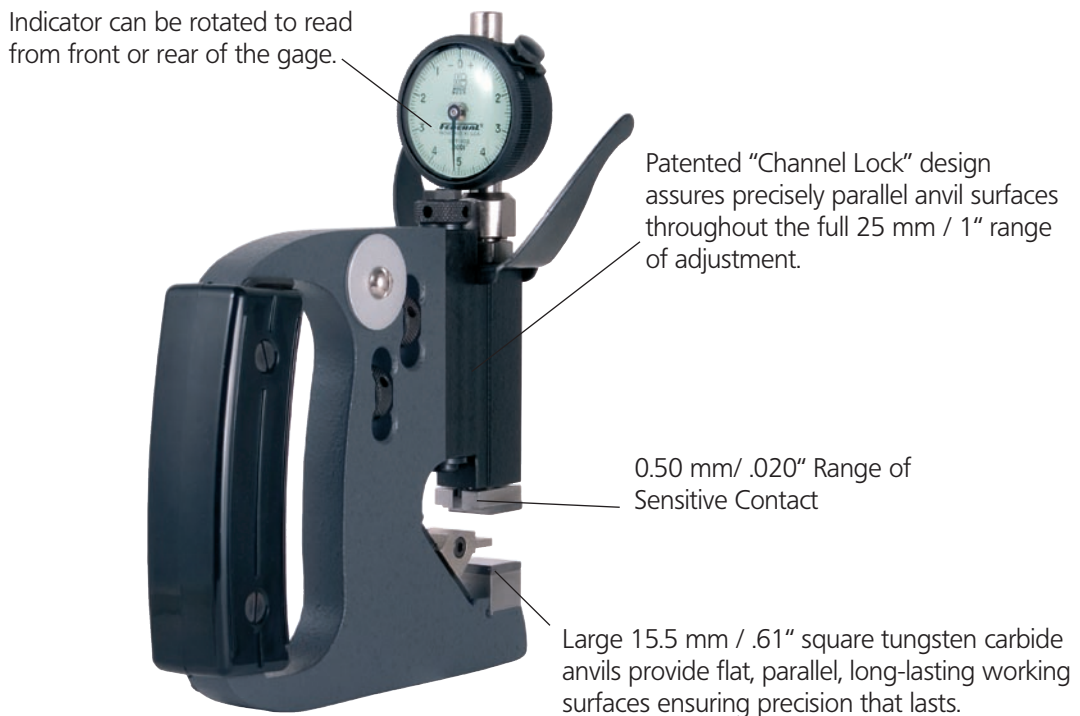
### Overview

▶ | **MaraMeter.** The Indicating Snap Gage is ideal for highly accurate and reliable results on cylindrical work pieces with a narrow tolerance. | ◀

#### MaraMeter 840 F



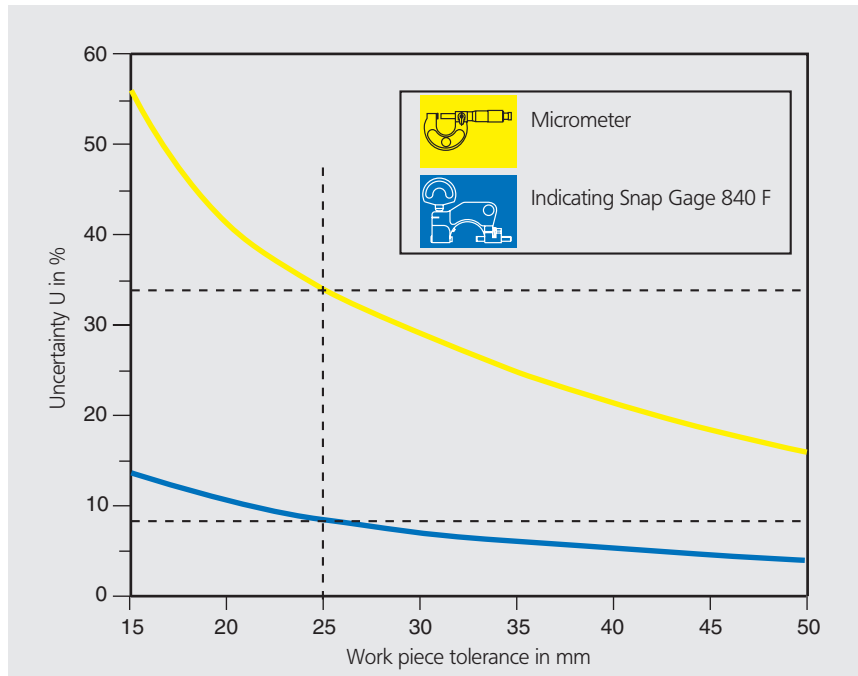
#### MaraMeter 300 P-1



## Advantages of the Snap Gage compared to a Micrometer

### • Reduced Measuring Uncertainty

The MaraMeter Indicating Snap Gages have a notably reduced measuring uncertainty in comparison to a Micrometer.



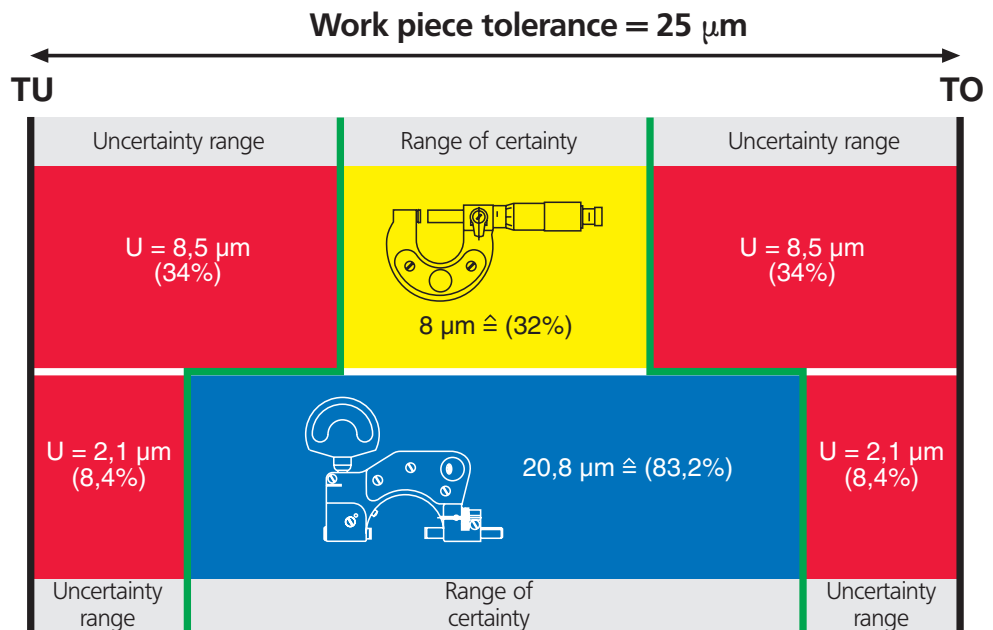
Measuring Uncertainty U is dependent upon the tolerance of the work piece

### • Better utilization of the tolerance zone

Example:  
Work piece tolerance 25  $\mu\text{m}$

The measured value in the uncertainty range can lie outside of the tolerance range, therefore the utilized tolerance of the micrometer is reduced to only 32% (8  $\mu\text{m}$ ).

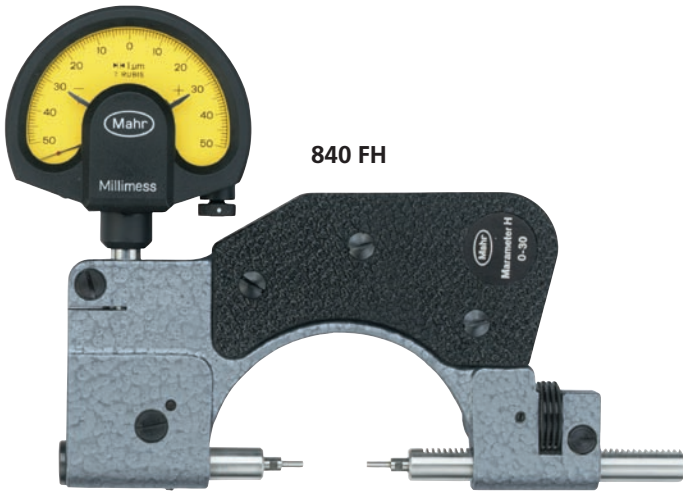
With a MaraMeter Indicating Snap Gage 83% (20.8  $\mu\text{m}$ ) of the work piece tolerance can be utilized.



### Advantage:

With the Indicating Snap Gage the tolerance zone can be used to far greater extent, thus reducing the production costs.

## Indicating Snap Gage 840 FH with interchangeable anvils



### Features

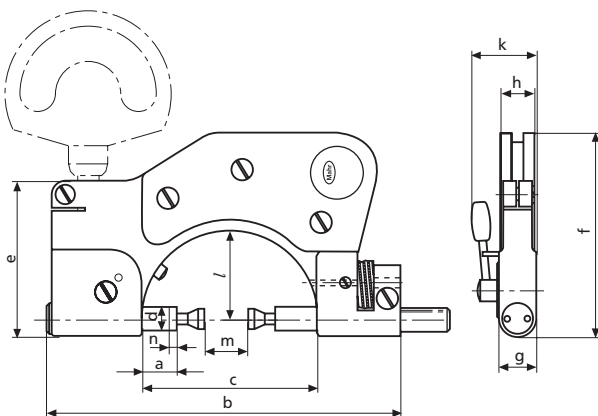
- Measuring spindle and anvil spindle have precision tapered bores for mounting interchangeable anvils 40 He
- For cylindrical parts such as shafts, bolts and spindles
- Rugged, forged steel frame with heat insulators
- Measuring spindle is mounted in long guide way with lever-controlled retraction
- Anvil spindle can easily be fine adjusted
- Measuring spindle and anvil spindle and both made from hardened stainless steel
- Maximum wear resistance due to non-contact positioning
- Constant measuring force as a result of built-in spring, thus eliminating user influence
- Universally applicable
- All kinds of measurement problems can be solved with the broad range of interchangeable anvils

### Technical Data

Catalog no.	Measuring range*		Distance of moveable anvil mm	Meas. force N	Order no.**	Order no. Wooden case
	mm	(inch)				
840 FH	0 - 30	(0 - 1.18")	2	7.5	4451000	4510010
	30 - 80	(1.18 - 3")	2.5	7.5	4451005	4510011

\* Measuring is dependent upon the length of the anvils being used

\*\* Excludes indicating instrument



Meas. range m (mm)	840 FH	
	0 - 30	30 - 80
a*	12.5	7.5
b	140	193
c	68	110
d	9	10
e	60	60
f	77	103
g	13	13
h	13	13
k	25	28
l	34	59
n**	2	2.5

\* In initial position

\*\* Distance of moveable anvil

**Accessories** for Dial Indicators and Dial Comparators



**Holder 840 Fk** for Dial Indicators and Dial Comparators

- For attaching to the following measuring instruments **840 F/FC, 840 FH, 840 FG, 840 FM** and **852**
- Straight transfer of the spindle movement to the indicator
- Following the Abbe principle allows an even higher degree of accuracy than the already excellent level obtained with the standard set-up employing 90° transmission
- When the indicating instrument is in the shown position it is often easier to read
- For stationary application when in conjunction with the **Stand 840 Ff**

Catalog no.	Suitable for instruments with measuring ranges (mm)					Order no.
	840 F/FC	840 FH	840 FG	840 FM	852	
<b>840 Fk/1</b>	0 - 25					<b>4450050</b>
<b>840 Fk/2</b>	25 - 60	0 - 30	0 - 50	0 - 40	0 - 45	<b>4450051</b>
<b>840 Fk/3</b>	50 - 100	30 - 80	40 - 90	40 - 80	45 - 85	<b>4450052</b>
<b>840 Fk/4</b>	{ 100 - 150 150 - 200			80 - 130 130 - 180	{ 85 - 140 140 - 190	<b>4450053</b>



**Stand 840 Ff**

- For stationary application in conjunction with the following measuring instruments **840 F/FC, 840 FH, 840 FG, 840 FM, 840 E** and **852**
- User has both hands free for insertion of work piece and retraction of moving spindle
- Indicating instrument is always in operator's field of vision
- Rugged, rigid cast-iron stand with clamp for locking the indicating snap gage
- Indicating snap gage is locked in mounting hole for dial comparator
- Only in conjunction with **Holder 840 Fk**

Catalog no.	Suitable for instruments with measuring ranges (mm)					Order no.	
	840 F/FC	840 FH	840 FG	840 FM	840 E		852
<b>840 Ff</b>	{ 0 - 25 25 - 60	0 - 30	0 - 50	0 - 40	0 - 25	0 - 45	<b>4450020</b>

## Interchangeable Anvils 40 He for Indicating Snap Gage 840 FH

with tapered shank

Catalog no.	Features	Order no.
40 He 0H*	Flat faces	4152036
40 He 1	Stepped flat faces	4152011
40 He 1H*	Stepped flat faces	4152033
40 He 2	Stepped flat faces	4152012
40 He 2H*	Stepped flat faces	4152032
40 He 3	Discs	4152013
40 He 4	Discs with V-groove	4152014
40 He 5	Blades	4152015
40 He 6	Offset blades	4152016
40 He 7	Recessed blades	4152017
40 He 8	Recessed flat faces with V-grooves on sleeve	4152018
40 He 9	Recessed flat faces with slip on support	4152019
40 He 10	With clearance bores	4152020
40 He 11	Point	4152021

\* Carbide version

### Indicating Instruments

All indicating instruments that has a 8 mm mounting shank may be used. Recommended are:

Dial Comparator	Readings mm / inch	Order no. mm / inch
Compramess 1004 / 1004 Z	5 µm / .0001"	4333000/4333900
Millimess 1003 / 1003 Z	1 µm / .00005"	4334000/4334900
Millimess 1003 XL	2 µm	4334001
Supramess 1002 / 1002 Z	0.5 µm / .00002"	4335000/4335900
Extramess 2000	0.2 µm / .00001"	
	0.5 µm / .00002"	4346000*
	1 µm / .00005"	
Extramess 2001	0.2 µm / .00001"	
	0.5 µm / .00002"	4346100*
	1 µm / .00005"	
µMaxµm	0.5 µm / .00002"	EDI-20302**

Digital Indicators see Chapter 5

Electrical Indicating Instruments see Chapter 7

\* 230 V, for 115 V please refer to page 6-5 \*\* requires contact 4360107

### Accessories

**Spanner** (Included in scope of supply) for 840 FH, to loosen anvils

Order no. 4880210

**Reference Discs 390** see Chapter 13

**Gage Blocks** see Chapter 13

**Holder 840 Fk** and **Stand 840 Ff** see Page 9-15

