



QUICK GUIDE TO:

Precision Measuring Instruments



INSIDE

Calipers 03



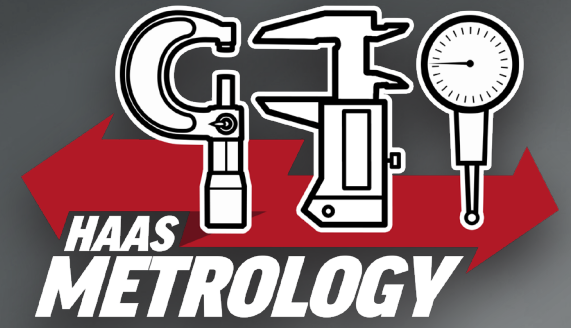
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Precision parts require precision measuring tools. Whether you're setting up a new job, building custom fixtures and workholding, proving out your processes, or inspecting your final product, precision measuring tools are essential to keeping your quality under control, and ensuring your parts are to spec. Haas Tooling top-quality measuring tools provide the accuracy you need, at prices that won't break the bank.



Dial Calipers:

- Available in inch or metric
- 0.001" / 0.02mm Graduations
- Shockproof gearing and easy-to-read dial
- Sizes available from 4" to 12" (100mm to 300mm)
- Metric calipers are carried in both Europe and the U.S.



Digital Calipers:

- Resolution 0.0005" / 0.01mm
- IP rated for dust and liquid resistance
- Simple button press for easy conversion between inch and metric
- Zero may be set at any position for easy comparative measurements
- Sizes available from 6" to 12" (150mm to 300mm)
- Different jaw styles are available for various applications

QUICK GUIDE TO:

Haas Tooling Calipers

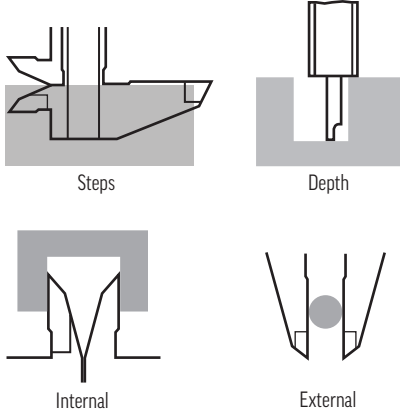
Calipers are versatile measuring tools found in every well-equipped machine shop. They take inside, outside, and depth measurements, and have a display or dial that indicates the smallest increments. Haas Tooling provides durable, high-quality, shockproof calipers in several styles to support different needs. Stainless-steel construction and precision-ground components ensure longevity and reliable measurements.

HAAS TOOLING CALIPERS

DIAL CALIPER

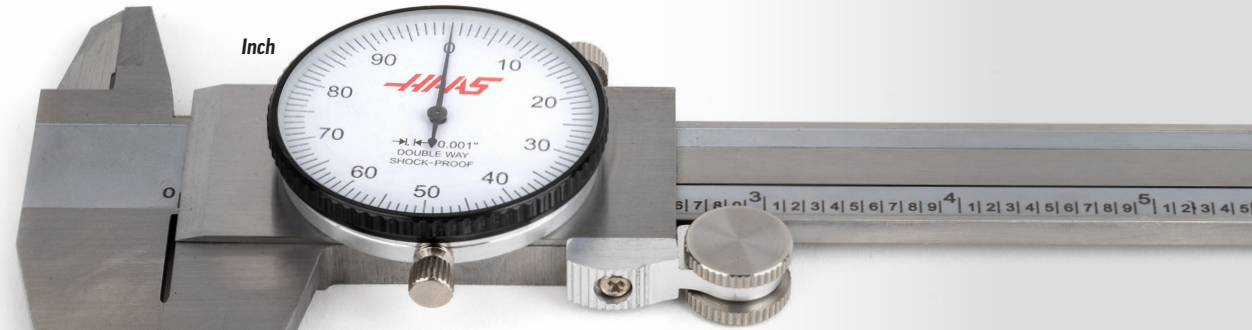
Dial Calipers are a sliding tool with an easy-to-read center dial indicator that is used to measure outside, inside, shoulder step, and depth dimensions. This type of caliper provides fast and accurate readings at a very affordable price. Haas Dial Calipers are offered in both inch and metric versions.

Common Caliper Usage



- Large, easy-to-read dial
- Made from solid stainless steel
- Shock-proof gearing
- Monoblock frame provides lasting stability
- Made to DIN862, ISO 13385-1, and JJG-2017 standards

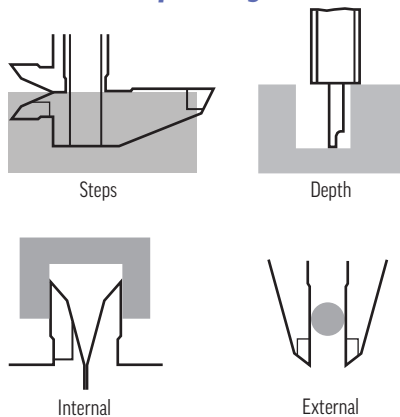
Measuring Range	0 - 6.0" (0-150mm)
Graduation	0.001" (0.02mm)
Accuracy	± 0.001" / ± 0.03mm
Standard	ISO 13385-1
Internal Gearing	Shockproof



DIGITAL CALIPER

- Large, easy-to-read digital screen
- Simple button press for easy conversion between in and metric
- Ground jaws for superior accuracy
- IP rated for dust & liquid resistance
- Made to DIN862, ISO9001, and JYG30-2017 standards

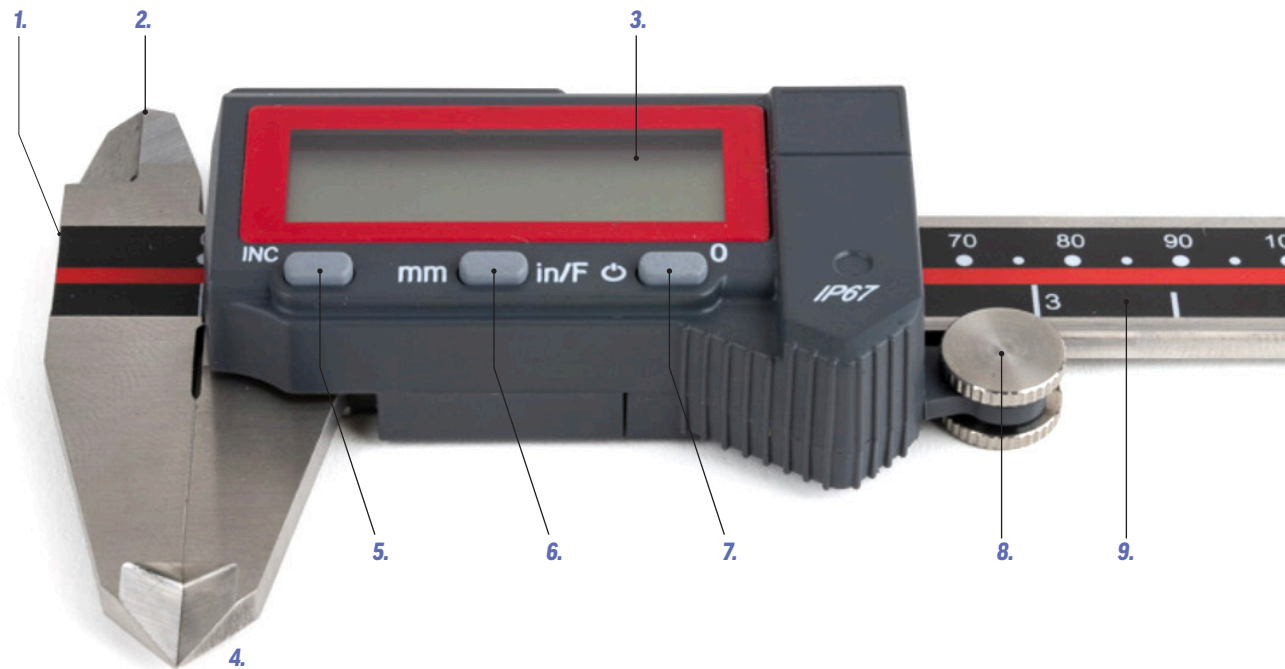
Common Caliper Usage



Caliper Features:

- 1. Step measurement face:** Used to measure step dimensions.
- 2. Internal jaws:** Used to measure inside dimensions.
- 3. Screen:** Displays measurement value.
- 4. External jaws:** Used to measure outside dimensions.
- 5. INC button:** Press and release INC incremental button at any position. When the displays shows "0.00" and "INC", the caliper is ready for relative measurement. Press the INC button again to return to absolute measurement.

Digital Calipers offer the same high-accuracy measurements as dial calipers, but with a large digital display for quick and easy measurement reading. Haas Tooling's digital calipers offer the ability to switch between inch and metric measurements at the press of a button.



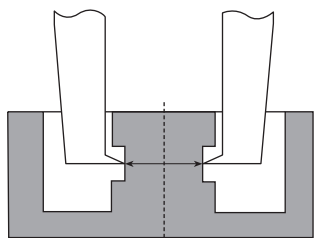
- 6. mm/in button:** Press to change between inch and metric.
- 7. I/O button:** Press and release to power on/off the caliper.
- 8. Thumb wheel:** Used to adjust caliper jaws.
- 9. Press and hold the INC button** to set the origin at any position. The LCD display will display "0.00"

Measuring Range	0-150mm (0-6") / 0-200mm (0-8") / 0-300mm (0-12")
Resolution	0.01mm / 0.0005" / 1/128"
Accuracy	6" (150mm) is $\pm 0.001"$ / $\pm 0.02\text{mm}$; 8" (200mm) and 12" (300mm) are $\pm 0.0015"$ / $\pm 0.03\text{mm}$
Power	Lithium battery (CR2032)

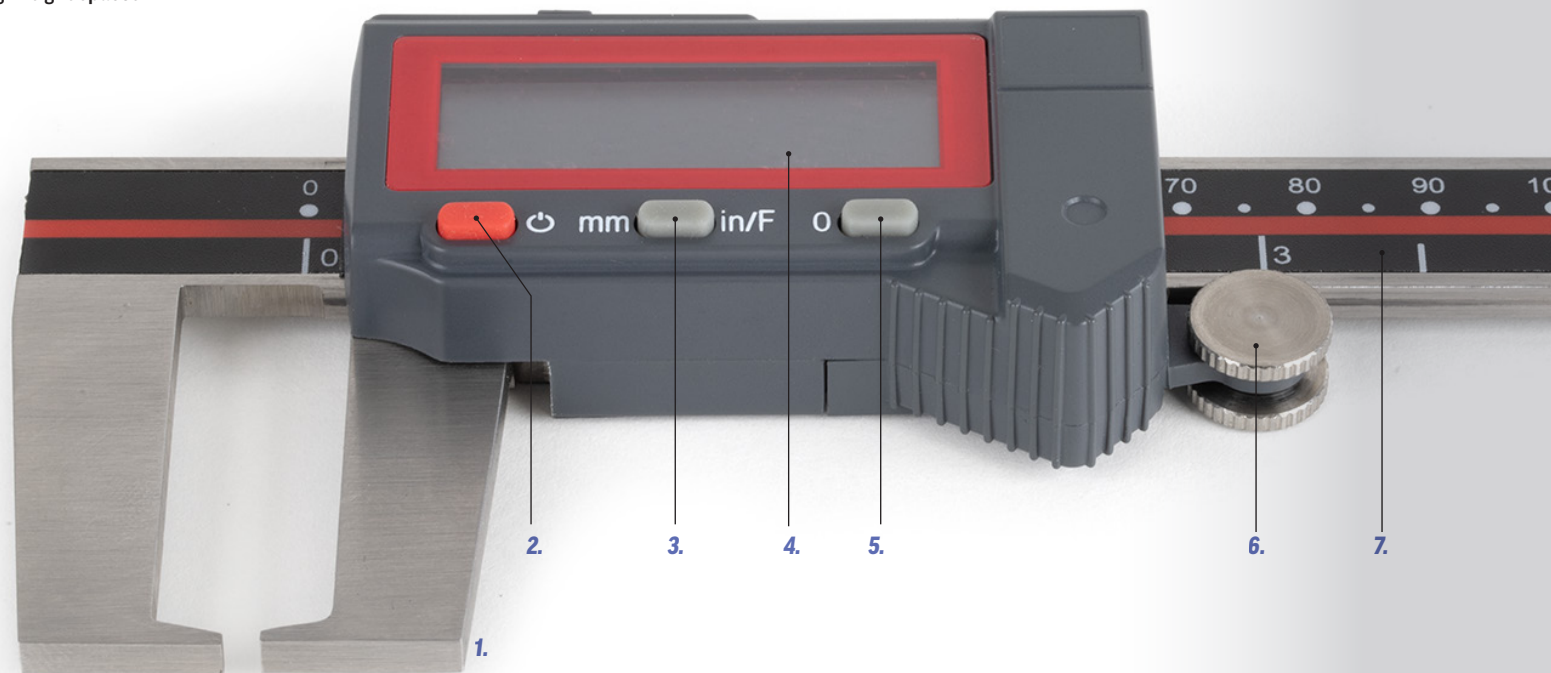
DIGITAL OUTSIDE GROOVE CALIPER

Digital Outside Groove Calipers have jaws with contact points for measuring external grooves, notches, and recesses of parts. The jaws that are found on this style of caliper allow for accurate and precise measuring in tight spaces.

- Specific jaws designed for measuring outside groove features
- Made from solid stainless steel
- IP rated for dust & liquid resistance
- Ground, lapped, and hardened measuring jaws for durability and accuracy
- Made to DIN862 standards



Measured Size
(With Lower Jaws)



Features:

- 1. Measuring faces:** Measures dimensions such as outer diameter, thickness, contours, and various features on the exterior surface of an object.
- 2. ON/OFF button:** Press and release to power on/off the caliper.
- 3. mm/inch button:** Press to change between inch and metric.

- 4. Display:** Displays measurement value.
- 5. Zero button:** Press to set zero.
- 6. Thumb wheel:** Used to adjust caliper jaws.
- 7. Beam**

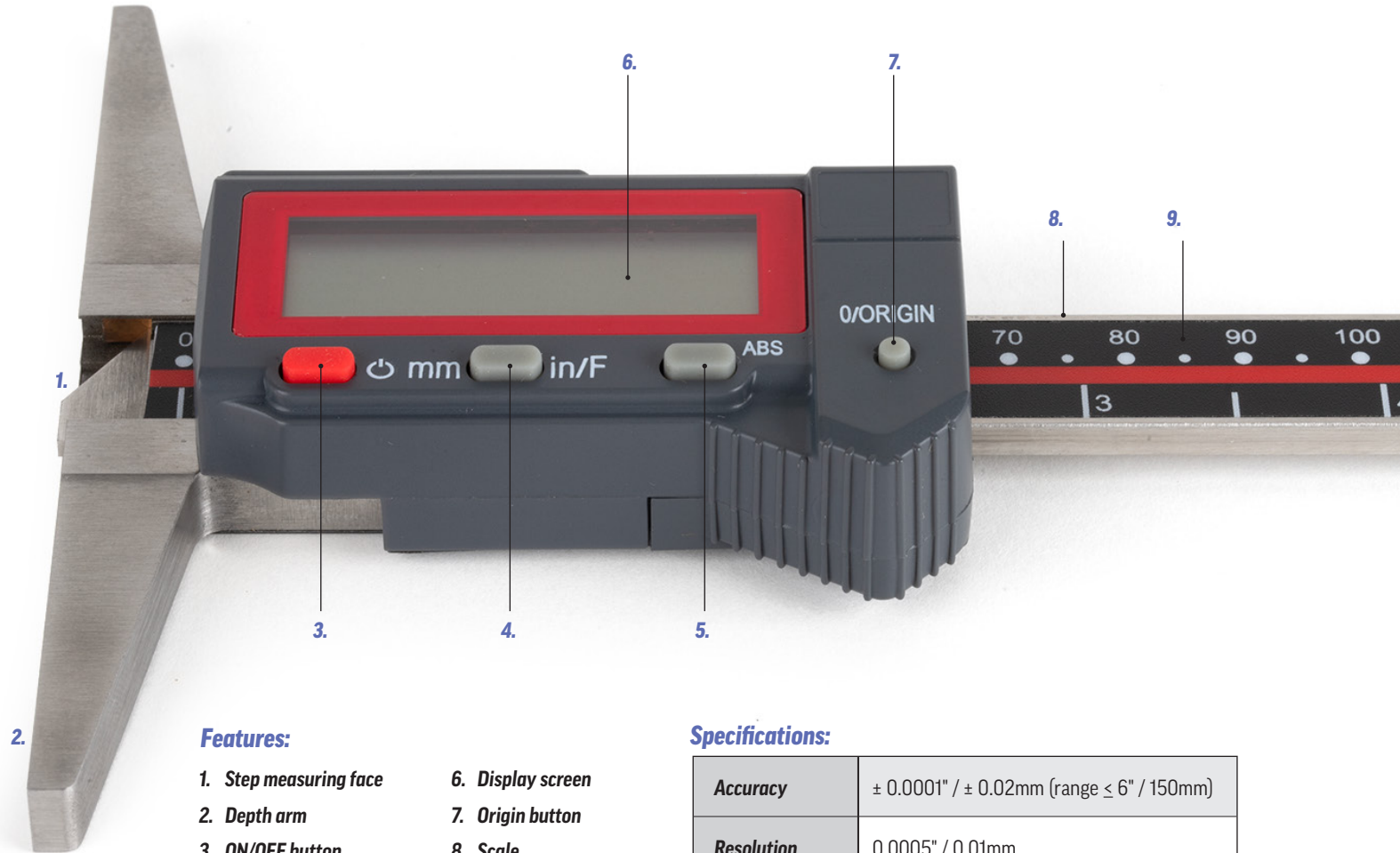
Specification:

Measuring Range	6" (150mm) – 8" (200mm)
Resolution	0.0005" / 0.01mm
Power	Lithium battery (CR2032)
IP Rating	IP54
Accuracy	± 0.0015" / ± 0.03mm

ABSOLUTE DIGITAL DEPTH CALIPER

The Absolute Digital Depth Caliper is used for measuring the depth of a feature or part. These types of calipers also feature absolute memory technology, meaning this caliper remembers the last position, when powered off.

- Used to measure a step or depth of a feature
- Made from solid stainless steel
- Large, easy-to-read digital screen
- IP rated for dust & liquid resistance
- Ground, lapped, and hardened measuring jaws for durability and accuracy
- Locking screw
- Made to DIN862 standards



Features:

- | | |
|------------------------|-------------------|
| 1. Step measuring face | 6. Display screen |
| 2. Depth arm | 7. Origin button |
| 3. ON/OFF button | 8. Scale |
| 4. mm/inch button | 9. Beam |
| 5. ABS button | |

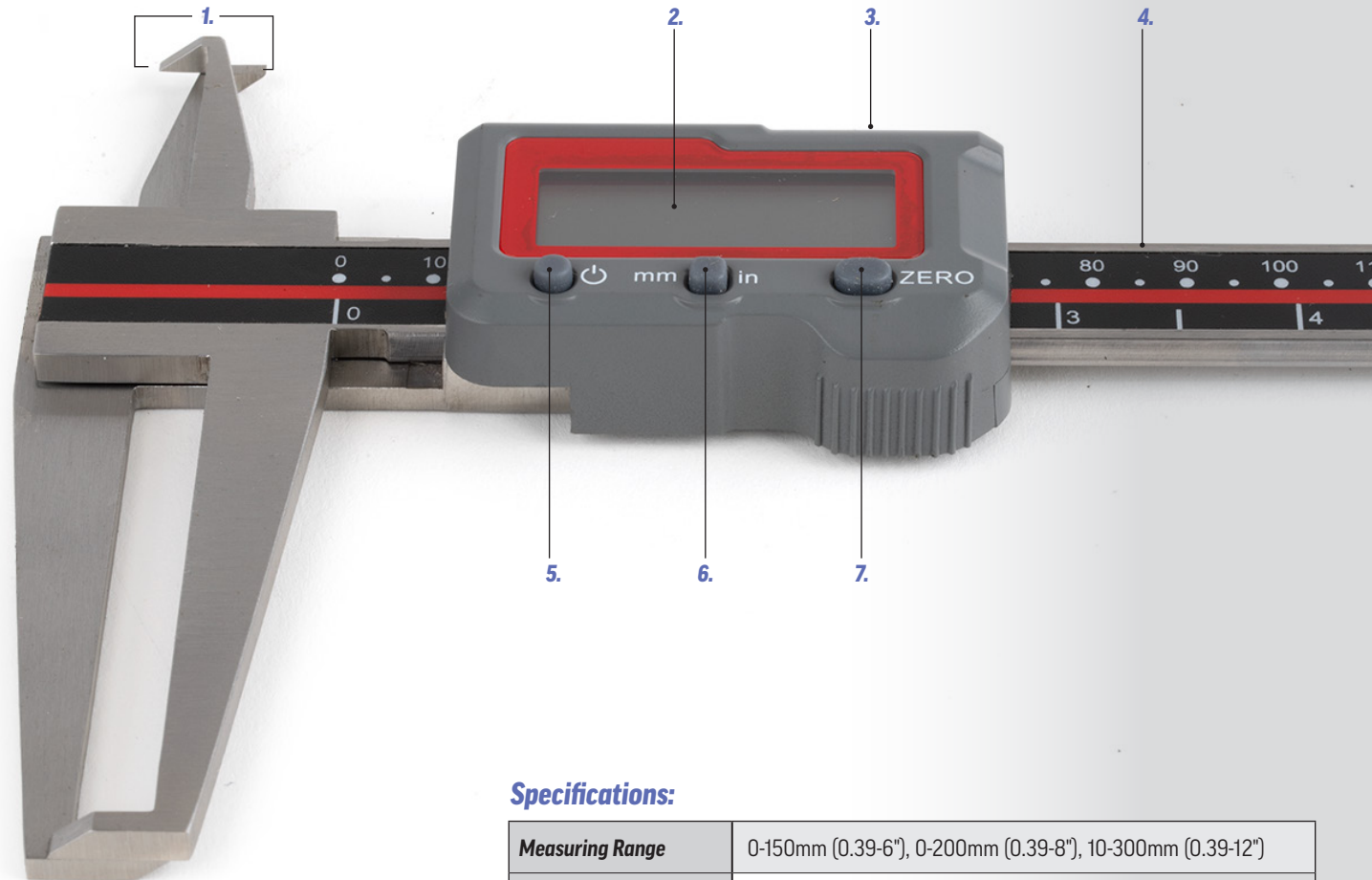
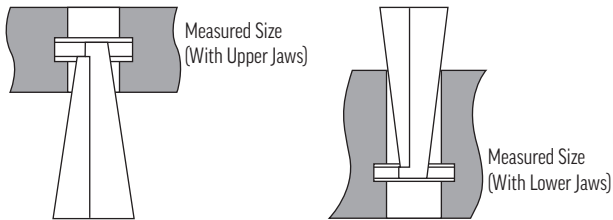
Specifications:

Accuracy	± 0.0001" / ± 0.02mm (range ≤ 6" / 150mm)
Resolution	0.0005" / 0.01mm
Power	Lithium battery (CR2032)
IP Rating	IP54

DIGITAL INSIDE GROOVE CALIPER

Inside Groove Calipers are designed for measuring the inside diameter of round parts, grooves, slots, and holes. The unique jaws found on these calipers allow them to get into tight parts with recessed features for accurate and precise measurements that a regular caliper cannot reach.

- Specific jaws designed for measuring inside groove features
- Made from solid stainless steel
- IP rated for dust & liquid resistance
- Ground, lapped, and hardened measuring jaws for durability and accuracy
- Made to DIN862 standards



Features:

- 1. Upper/lower jaws:** Measure internal features.
- 2. Screen:** Displays measurement value.
- 3. Data output port:** Used to transfer data.
- 4. Beam**
- 5. ON/OFF button:** Press and release to power on/off the caliper.
- 6. mm/in button:** Press button to change between inch and metric.
- 7. Zero button:** Press to set zero

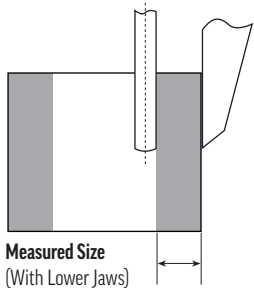
Specifications:

Measuring Range	0-150mm (0.39-6"), 0-200mm (0.39-8"), 10-300mm (0.39-12")
Accuracy	0.04mm / 0.0015", 0.04mm / 0.0015", 0.05mm / 0.0019"
Resolution	0.01mm / 0.0005"
Power	Lithium battery (CR2032)
IP Rating	IP40

DIGITAL TUBE THICKNESS CALIPER

Digital Tube Thickness Calipers feature an adjustable cylindrical rod on the main jaw that allows these calipers to make internal contact providing an accurate measurement compared to a standard jaw caliper when measuring the wall thickness of tubes, pipes, and other rounded features.

- Used to check wall thickness of rounded features
- Adjustable round pin jaw
- Made from solid stainless steel
- IP rated for dust & liquid resistance
- Ground, lapped, and hardened measuring jaws for durability and accuracy
- Made to DIN862 standards



Features:

- 1. Locking screw:** Locks adjustable pin jaw
- 2. Outside measuring faces:** Used to measure tube thickness.
- 3. ON/OFF button:** Press and release to power on/off the caliper.
- 4. mm/inch switch:** Press this button to change between inch and metric.
- 5. Display:** Displays measurement value.
- 6. Zero button:** Press to set zero.
- 7. Beam**
- 8. Thumb wheel:** Used to adjust caliper jaws.

Specification:

Measuring Range	0-150mm (0-6"), 0-200mm (0-8"), 0300mm (0-12")
Resolution	.01mm / 0.0005" / 1/128"
Power	Lithium battery (CR2032)
IP Rating	IP67
Accuracy	± 0.0015" / ± 0.03 mm



IP65

HAAS



QUICK GUIDE TO:

Micrometers

Haas Tooling's lineup of micrometers features incredible accuracy and precision, all at affordable prices. Micrometers are a necessity for shops looking to make highly accurate parts. Every Haas micrometer is manufactured and inspected with top-notch precision and accuracy in mind.

- Available in digital or analog styles
- 10 different micrometer types available
- Inch (U.S. only) and metric versions available
- Wide selection of ranges for large and small parts

HAAS TOOLING MICROMETERS

DIGITAL OUTSIDE MICROMETERS

Available in Inch and Metric thimble numbering

Inch Thimbles (U.S. only):

Graduation 0.0001"

Resolution 0.00005" / 0.001mm

Ranges:

- 0-1" / 0-25mm
- 1-2" / 25-50mm
- 2-3" / 50-75mm
- 3-4" / 75-100mm
- 4-5" / 100-125mm
- 5-6" / 125-150mm

Metric Thimbles:

Graduation 0.01mm

Resolution 0.001mm / 0.00005"

Ranges:

- 0-25mm / 0-1"
- 25-50mm / 1-2"
- 50-75mm / 2-3"
- 75-100mm / 3-4"
- 100-125mm / 4-5"
- 125-150mm / 5-6"

Features:

- Available in inch (U.S. only) & metric
- Ratchet stop thimble
- Carbide measuring tips
- Made in accordance to DIN863 standards
- IP rated for dust & liquid resistance
- Battery type: CR2032 / CR2450
- Stainless steel spindle
- Spindle thread is hardened, ground, and lapped for ultimate accuracy
- Digital configured features: Absolute, Metric/Inch Conversion Functions, and Zero
- Includes calibration standards for zero setting



Components:

1. Carbide anvil tips
2. Included features: Absolute Function, Metric/Inch Conversion Functions, and Zero Functions
3. Inch/metric thimble graduation: metric: 0.001mm / inch: 0.0001"
4. Ratchet stop
5. Calibration standard



OUTSIDE MICROMETERS

Available in Inch / Metric

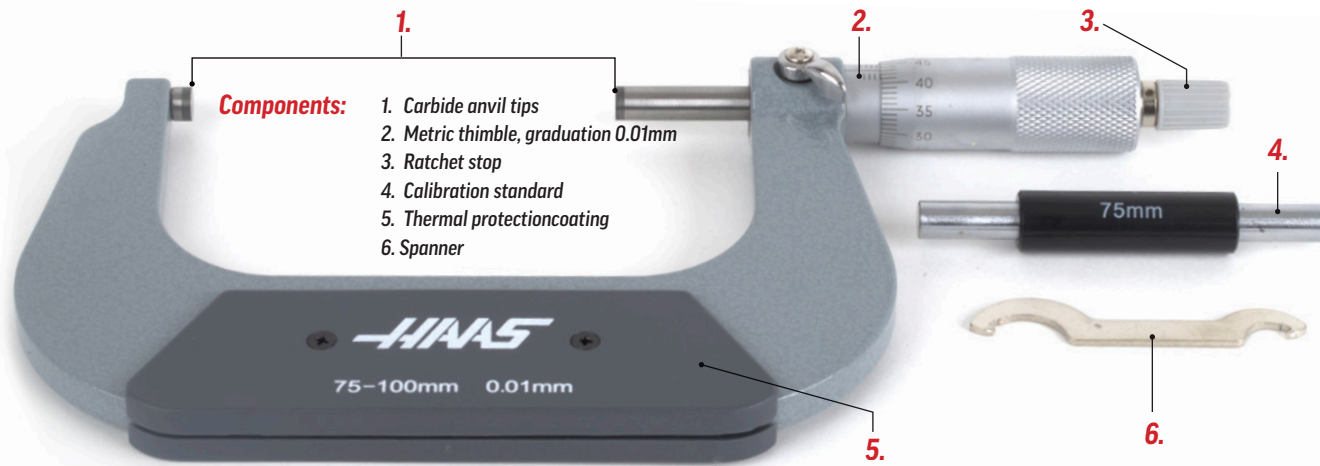
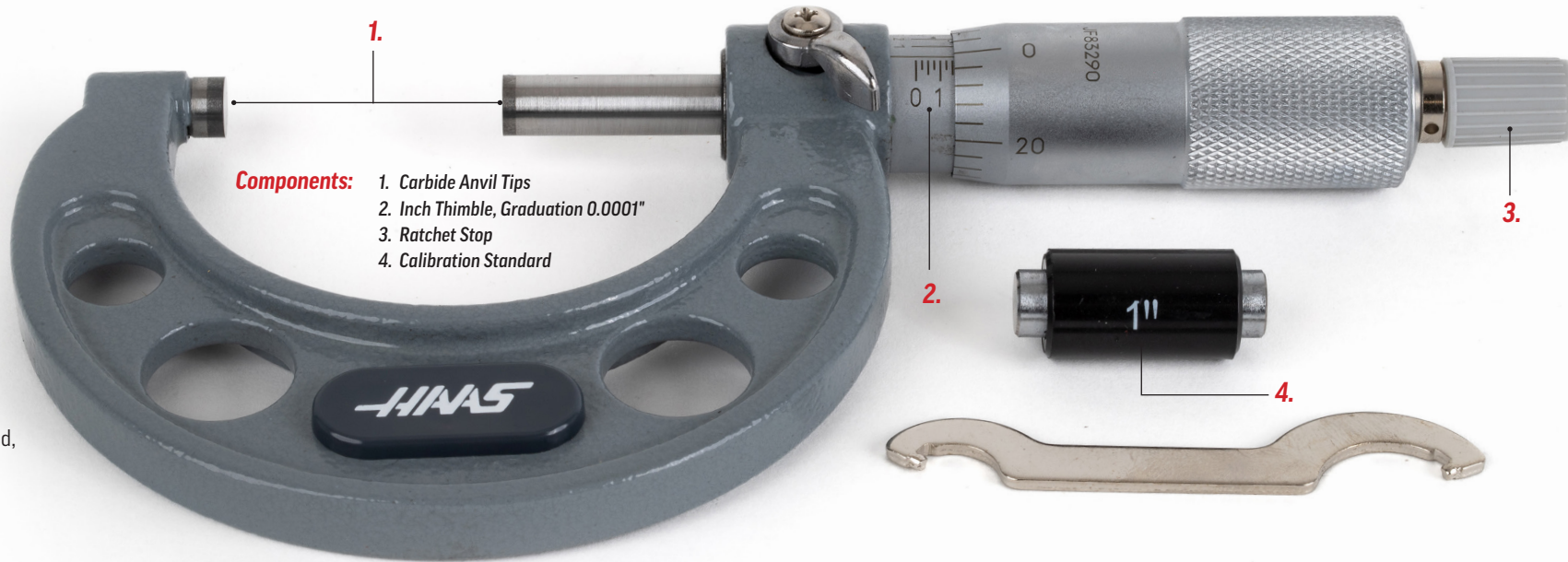
Graduation 0.0001" / 0.01mm

Ranges:

- 0-1"
 - 1-2"
 - 2-3"
 - 3-4"
 - 4-5"
 - 5-6"
 - 6-7"
 - 7-8"
 - 8-9"
 - 9-10"
 - 10-11"
 - 11-12"
- 0-25mm
 - 25-50mm
 - 50-75mm
 - 75-100mm
 - 100-125mm
 - 125-150mm

Features Include:

- Stainless steel spindle
- Spindle thread is hardened, ground, and lapped for ultimate accuracy
- Carbide measuring tips
- Ratchet stop thimble
- Made to DIN863 standards



INSULATED MICROMETERS

Metric Option Ranges:

Graduation 0.01mm

Ranges:

- 0-25mm
- 25-50mm
- 50-75mm
- 75-100mm
- 100-125mm
- 125-150mm

Features Include:

- Thermal insulated plastic grip
- Made to DIN863 standards
- Ratchet stop thimble
- Spindle thread is hardened, ground, and lapped for ultimate accuracy
- Carbide measuring tips

H A A S T O O L I N G M I C R O M E T E R S

DIGITAL SCREW THREAD MICROMETER

Available in Inch and Metric thimble numbering

Inch Thimbles (U.S. only):

Graduation: 0.0001"

Resolution: 0.00005" / 0.001mm

Ranges:

- 0-1"
- 1-2"
- 2-3"
- 3-4"

Metric Thimbles

Resolution 0.001mm

Ranges:

- 0-25mm
- 25-50mm
- 50-75mm
- 75-100mm
- 25-50mm
- 50-75mm
- 75-100mm

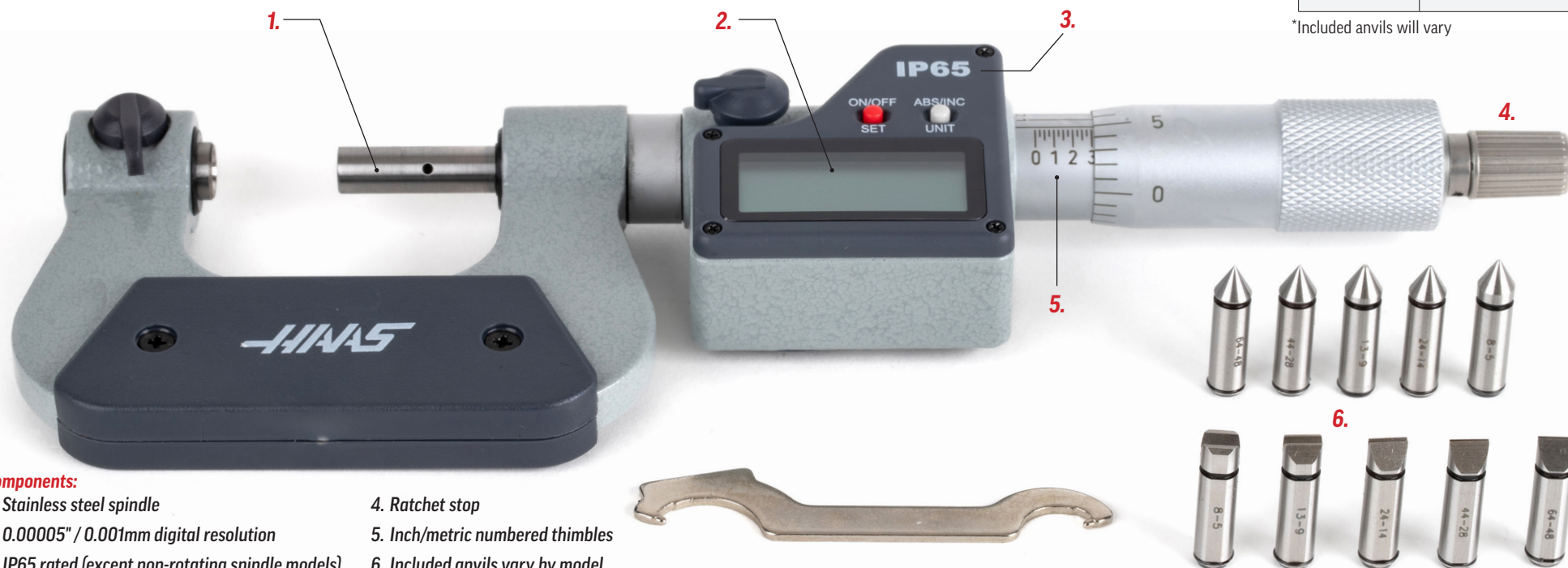
Features:

- Designed for accurately measuring pitch diameter of screw threads to ensure proper fit and engagement of threaded components
- Stainless steel spindle
- Spindle thread is hardened, ground, and lapped for ultimate accuracy
- Non-rotating spindle on metric thimble models up to 75-100mm
- Prevents surface damage to soft materials, because the spindle is not rotating on the workpiece
- Valuable in applications where precision measurements are required on sensitive components

- Anvils included - varies with model
- Anvils made of stainless steel
- Made to DIN863 standards
- Battery Type: CR2032
- IP Rating: IP65
(ONLY Rotating Screw Thread Mics)

Thread Type	Pitch
Metric 60°	0.4-0.5 / 64-48 TPI
Metric 60°	0.6-0.9 / 44-28 TPI
Metric 60°	1-1.75 / 24-17 TPI
Metric 60°	2-3 / 13-9 TPI
Metric 60°	3.5-5 / 8-5 TPI
Metric 60°	5.5-7 / 4.5-3.5 TPI

*Included anvils will vary



Components:

1. Stainless steel spindle
2. 0.00005" / 0.001mm digital resolution
3. IP65 rated (except non-rotating spindle models)
4. Ratchet stop
5. Inch/metric numbered thimbles
6. Included anvils vary by model

SCREW THREAD MICROMETERS

Available in Inch and Metric thimble numbering

Inch Thimble
Graduation 0.001"

Ranges:

- 0-1"
- 1-2"
- 2-3"
- 3-4"

Metric Thimble
Graduation 0.01mm

Ranges:

- 0-25mm
- 25-50mm
- 50-75mm
- 75-100mm

Features:

- Ratchet stop thimble
- Stainless steel spindle
- Spindle thread is hardened, ground, and lapped for ultimate accuracy
- Made to DIN863 standards

Thread Type	Pitch
Metric 60°	0.4-0.5 / 64-48 TPI
Metric 60°	0.6-0.9 / 44-28 TPI
Metric 60°	1-1.75 / 24-17 TPI
Metric 60°	2-3 / 13-9 TPI
Metric 60°	3.5-5 / 8-5 TPI
Metric 60°	5.5-7 / 4.5-3.5 TPI

*Included anvils will vary



Components:

1. Stainless steel spindle
2. Inch/metric thimbles
3. Ratchet stop
4. Included anvils vary by model

DIGITAL BLADE MICROMETER

Two (2) Inch Option Ranges:

Inch Thimble

Graduation: 0.001" / 0.01mm

Range: 0-1" / 0-25mm and 1-2" / 25-50mm

Resolution: 0.00005" / 0.001mm

Digital & Standard Features:

- Available in inch (U.S. only) / metric thimbles
- Standard or digital configurations available
- Made to DIN863 standards
- Stainless steel spindle
- Spindle thread is hardened, ground, and lapped for ultimate accuracy
- Ratchet stop thimble
- Non-rotating spindle
- "Blade" anvil style

Components:

1. Blade type anvil
2. Stainless steel, non-rotating spindle
3. Inch thimble, graduation 0.001"
4. Ratchet stop thimble



BLADE MICROMETER

Six (6) Inch Option Ranges:

Inch Thimble

Graduation: 0.001"

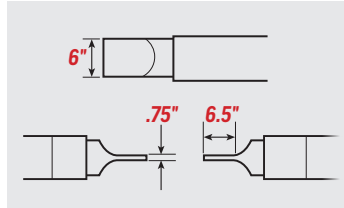
- 0-1" / 1-2" / 2-3" / 3-4" / 4-5" / 5-6"

Six (6) Metric Option Ranges:

Metric Thimble

Graduation: 0.01mm

- 0-25mm / 25-50mm / 50-75mm
75-100mm / 100-125mm / 125-150mm



Components:

1. Blade type anvil
2. Stainless steel, non-rotating spindle
3. Inch thimble w/ 0.001" graduation
4. Ratchet stop thimble





Disc Micrometers have much wider anvils, allowing them to measure specialized features and hard-to-reach spots that standard anvils have trouble with, such as:

- Root tangent length on gears
- Width of ribs, fins, etc.
- Across gaps, into recesses, etc.
- Thin or deformable materials – sheets, gaskets, etc.

DIGITAL DISC MICROMETER

Available in Inch and Metric thimble numbering

Inch Thimble

Ranges:

- 0-1"
- 1-2"
- 2-3"

Metric Thimble

Ranges:

- 0-25mm
- 25-50mm
- 50-75mm

Features:

- Ratchet stop thimble. Allows for consistent and controlled amounts of pressure applied to each measurement. Too much pressure might deform the feature being measured, leading to inaccurate readings, while too little pressure results in incomplete contact and unreliable measurements.
- Made to DIN863 standards
- Stainless steel spindle
- Spindle thread is hardened, ground, and lapped for ultimate accuracy
- Digital functions: Absolute/Relative measuring, Metric/Inch conversion, and Zero-setting

Components:

1. Disc-style anvil
2. Stainless steel spindle
3. Metric/inch conversion functions
4. Inch/metric thimble options available
5. Ratchet stop



DIGITAL DEPTH MICROMETER

Available in Inch and Metric thimble numbering

Resolutions: 0.00005" / 0.001mm

Ranges:
0-6.0" / 0-150.0mm



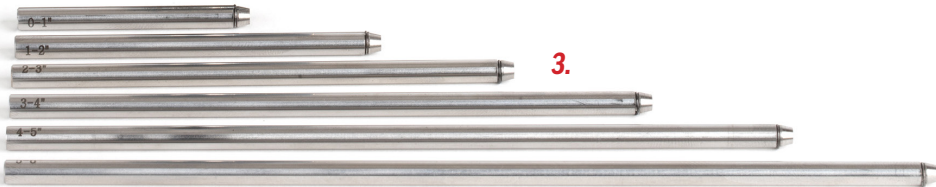
Haas Depth Micrometers are available in standard and digital configurations. Depth micrometers are designed to measure the depth of holes and parts featuring slots, pockets, or raised surfaces.

Features:

- Made to DIN863 standards
- Ratchet stop thimble
- Carbide measuring surfaces, machine ground for longer service life
- Extension rods capable of measuring 0 - 6.0" / 0 - 150.0mm
- Spindle thread is hardened, ground, and lapped for ultimate accuracy

Components:

1. Ratchet stop
2. Resolution 0.00005" / 0.001mm
3. Measuring rod set



DEPTH MICROMETER

Available in Inch and Metric thimble numbering

Ranges:

- 0-6" Thimble, Graduation 0.001" / 6 Rods included
- 0-12" Thimble, Graduation 0.001" / 12 Rods included

Metric Ranges:

- 0-150mm, Thimble Graduation 0.01mm, 6 rods included
- 0-300mm, Thimble Graduation 0.01 mm, 12 rods included

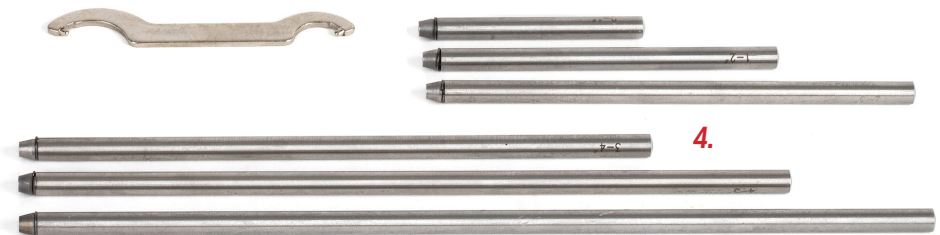
Components:

1. Ratchet stop
2. Inch or metric thimble
3. Base
4. Measuring rod set



Features Includes:

- Carbide measuring surfaces
- Available in inch (U.S. only) & metric thimbles
- Ratchet stop thimble
- Made to DIN863 standards
- IP rating: IP40



GEAR TOOTH MICROMETER

Metric thimble graduation: 0.01mm

Resolution: 0.001mm (0.00005")

Ranges:

- 0-25mm / 0-1"
- 25-50mm / 1-2"
- 50-75mm / 2-3"

Features:

- Ratchet stop thimble
- Made to DIN863 standards
- Digital display & functions
- IP65 rated

Anvils sold separately (09-0292)
See table for anvils included for the gear micrometers



Haas Part #	Ball Diameter	Module (Metric)	Diametral Pitch (Imperial / Inch)
09-0292	sØ 1.0mm / 0.0394"	0.6-0.65	42.3 - 39.1
	sØ 1.5mm / 0.0591"	0.9-1.0	28.2 - 25.4
	sØ 2.0mm / 0.0787"	1.25	20.3
	sØ 2.5mm / 0.0984"	1.5	16.9
	sØ 3.0mm / 0.1181"	1.75	14.5
	sØ 3.5mm / 0.1378"	2.0	12.7
	sØ 4.0mm / 0.1575"	2.25	11.3
	sØ 4.5mm / 0.1772"	2.5	10.2
	sØ 5.0mm / 0.1969"	2.75	9.2
	sØ 6.0mm / 0.2362"	3.5	7.3



Components:

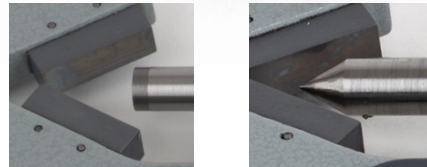
1. Anvils sold separately
See part number 09-0292
2. Setting standard
3. Ratchet stop

DIGITAL V-ANVIL MICROMETER

Available in 5 metric thimble options



V-Anvil Micrometers are specialized for measuring cutting tools or parts with an odd number of flutes, where a direct diameter reading is not possible. V-angles for 3-flute and 5-flute available.



2 Anvil types

- Flat carbide anvil
- Pointed carbide anvil (Only 09-0287, 3F, 1-15mm)

Components

1. Carbide pointed anvil tips
2. Metric thimble, graduation 0.001 mm
3. Ratchet stop

Graduation 0.001 mm
Resolution 0.00005" / 0.001 mm
Ranges:
• 3FL, 1-15mm
• 3FL, 5-20mm
• 3FL, 20-35mm
• 5FL, 5-25mm
• 5FL, 25-45mm

Metric Thimble
Graduation 0.01mm
Ranges
• 0-25mm
• 25-50mm
• 50-75mm
• 75-100mm

Features:

- Ratchet stop thimble
- Stainless steel spindle
- Carbide measuring tips
- Made to DIN863 standards
- IP rating: IP65

UNIVERSAL DIGITAL MICROMETERS

Ranges: 0-25mm / 0-1"
Resolution 0.00005" / 0.001mm
Ranges: 25-50mm / 1-2"
Resolution 0.00005" / 0.001mm

Anvil Types Included:

- Spline
- Disc
- Blade
- 60° Knife-Edge
- 60° Point
- Spherical
- Flat

Features Includes:

- Spindle thread is hardened, ground, and lapped for ultimate accuracy
- Made to DIN863 standard 7 pairs of anvils

Button Features:

- SET, to set origin
- ABS, to switch from relative to absolute measuring
- HOLD, to store the displayed value
- mm/in, to select inch or metric



Components

1. Stainless steel spindle
2. Ratchet stop thimble



SPLINE MICROMETER

Spline Micrometers have small diameter anvils to measure features such as splined shafts, slots, and keyways.

Resolution: 0.00005" / 0.001mm

Size Ranges:

- 0-25mm / 0-1"
- 25-50mm / 1-2"
- 50-75mm / 2-3"
- 75-100mm / 3-4"

Features:

- Carbide measuring tips
- IP Rating: IP40
- Made to DIN863 standards
- Stainless steel spindle
- Digital functions: Absolute/Relative measuring, Metric/ Inch conversion, and Zero-setting

Components:

1. Carbide anvil tips
2. Stainless steel spindle
3. Universal / ratchet stop thimble

INTERNAL GROOVE MICROMETER

Two (2) Inch options

- 0-1" / Graduation 0.001"
- 1-2" / Graduation 0.001"

Two (2) Metric options

- 0-25mm / Graduation 0.01mm
- 25-50mm / Graduation 0.01mm

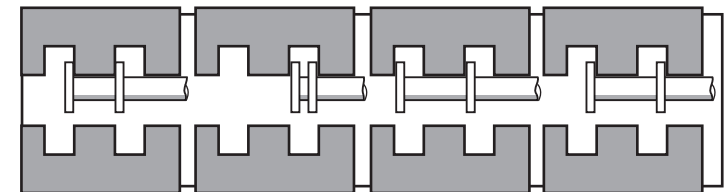
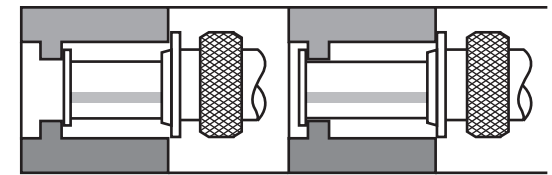
Features:

- Flange parallelism: 0.001" / 0.01mm
- Friction thimble - Provides constant resistance for consistent pressure during measurements.
- Made to DIN863 standards
- Non-rotating spindle



Components:

1. Measuring flanges
2. Inch/metric thimbles available
3. Friction thimble



Flanged measuring surface for measuring width, depth, and location of grooves inside bores.



QUICK GUIDE TO:

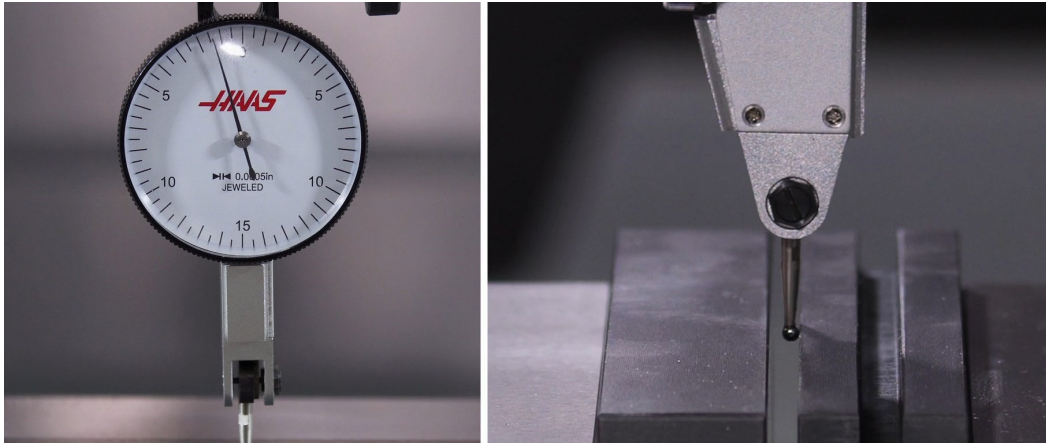
Indicators

Indicators amplify and display small displacement measurements for inspection or setup operations requiring high precision and sensitivity.

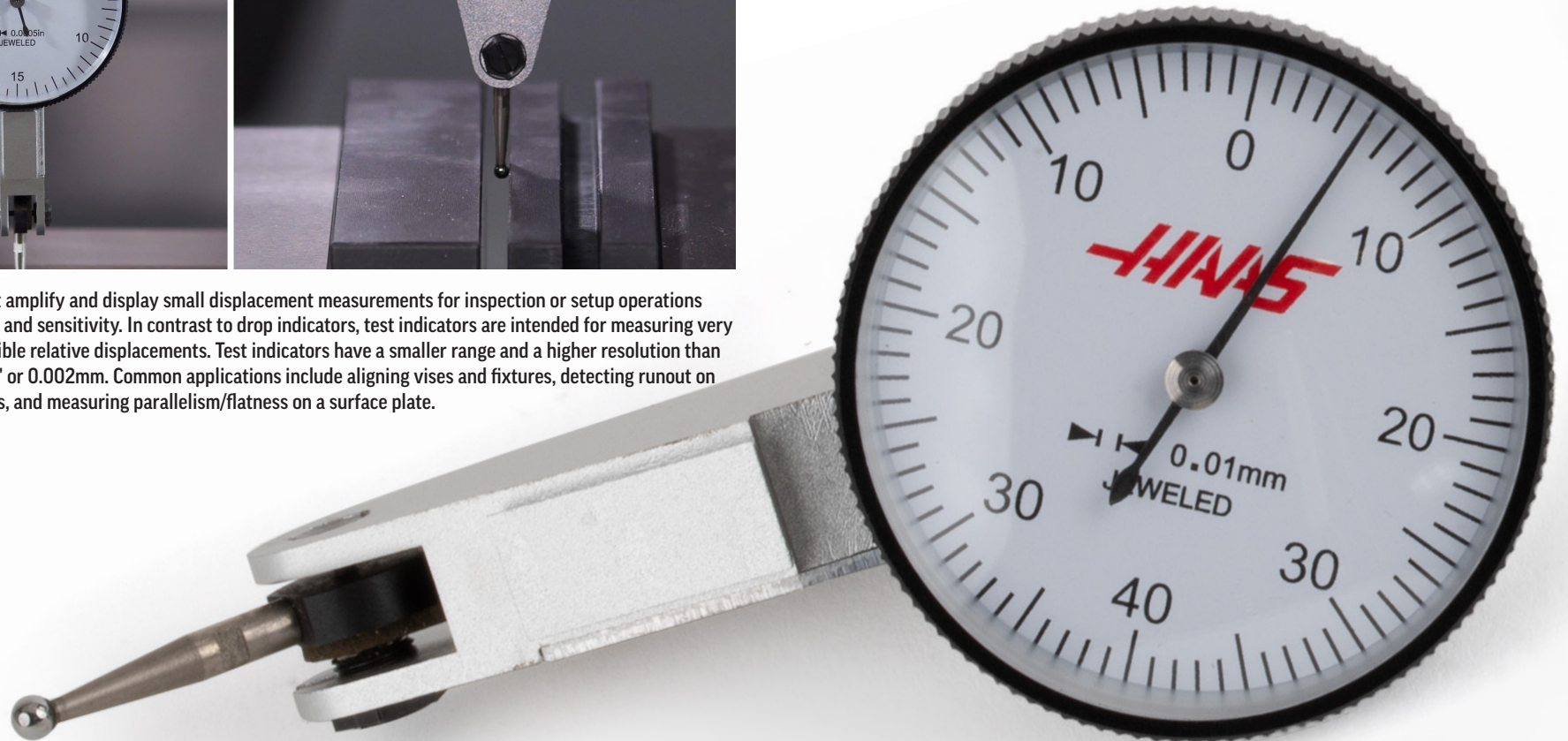
DIAL TEST INDICATORS

- Standard Metric 0.01mm / fine resolution 0.002mm
- Standard Inch 0.0005" / fine resolution 0.0001"
- Tip diameters 1mm, 2mm, 3mm
- Ruby tips offered – Even more wear resistant than carbide
- Used when electrical conductivity is a concern – like EDM setups or on components sensitive to static discharge

- Long stylus options for tight and hard-to-reach areas
- Different dial position options for different viewing angles
- Horizontal, vertical, and tilted body styles available
- Large dial options available
- 2x range options for extended travel
- Metric versions made to DIN2270 standards
- Inch versions made to ASME B89.1.10M-2001 standards



Indicators are tools that amplify and display small displacement measurements for inspection or setup operations requiring high precision and sensitivity. In contrast to drop indicators, test indicators are intended for measuring very small, nearly imperceptible relative displacements. Test indicators have a smaller range and a higher resolution than drop indicators: 0.0001" or 0.002mm. Common applications include aligning vises and fixtures, detecting runout on toolholders and spindles, and measuring parallelism/flatness on a surface plate.





DIAL DROP INDICATORS

Inch Range (U.S. only): 0.5", 1", and 2"
Inch Graduations: 0.001" or 0.0005", depending on model
Metric Range: 10, 20, 25, 30, 50, 80, 100mm
Metric Graduation: 0.01mm
Accuracy: $\pm 0.00075"$ - $\pm 0.002"$ / $\pm 0.017\text{mm}$ - $\pm 0.05\text{mm}$

Haas Tooling offers a full lineup of drop indicators for improving setups and calibrations. Drop indicators allow operators to easily and quickly measure runout, height, flatness, and distance in multiple applications. These indicators feature a dial or digital face fixed to a stem with a plunger-type contact point.

Dial Drop Indicators

- Available with inch and metric dials
- Bidirectional dial allows for easy readings in positive and negative directions
- Every size available has an option for jeweled bearings
- Shockproof versions are more resistant to impacts and vibration
- Made to DIN878 standards

Digital Drop Indicators

- Large, easy-to-read display
- Instant switching between metric and inch measurements
- Includes certificate of calibration

Range: 0.5" (12mm), 1" (25mm), or 2" (50mm)
Resolution: 0.0005" / 0.01mm
Accuracy: $\pm 0.00015"$ - $\pm 0.0002"$ / $\pm 0.004\text{mm}$ - $\pm 0.006\text{mm}$



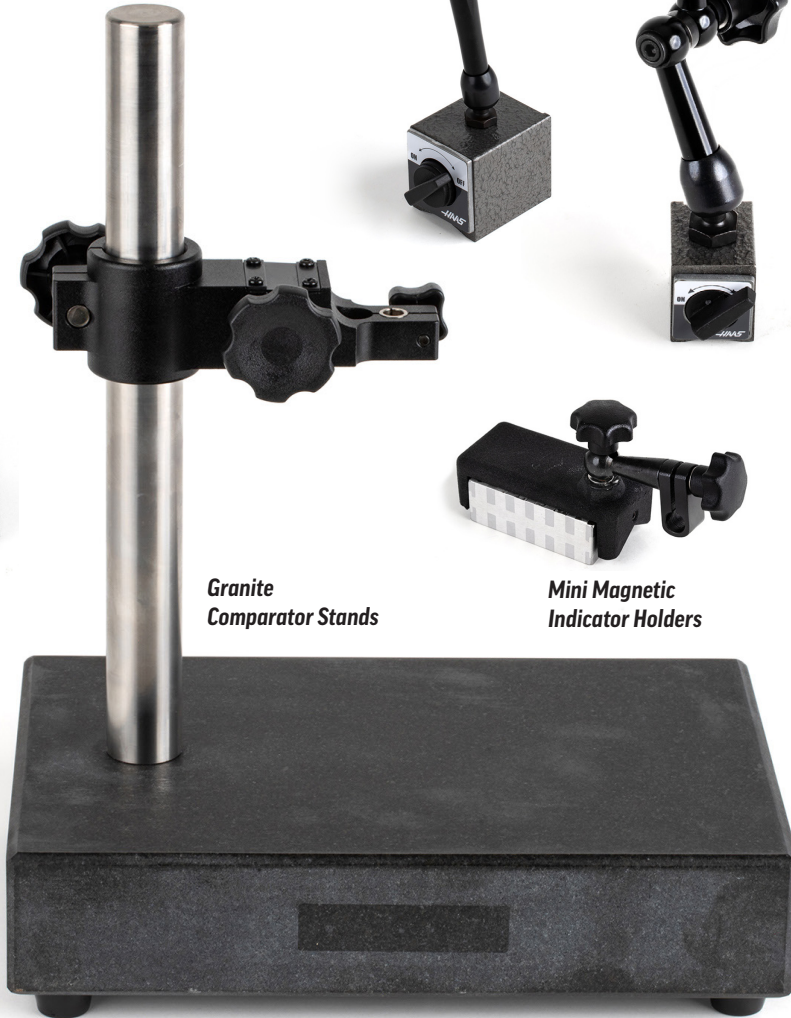
1. Inch dial drop indicators
2. Metric dial drop indicators
3. Digital drop indicators

INDICATOR ACCESSORIES

We have a complete lineup of Haas indicator accessories to make mounting your indicator even easier.



Precision Ground Indicator Stands



Granite Comparator Stands



Mini Magnetic Indicator Stands with Articulating Arms



Mini Magnetic Indicator Holders



Half Round Arc Indicator Holder



Indicator Holders



Surface Gauge, Magnetic Base



LED Work Light, Magnetic Base



Magnetic Bases



QUICK GUIDE TO:

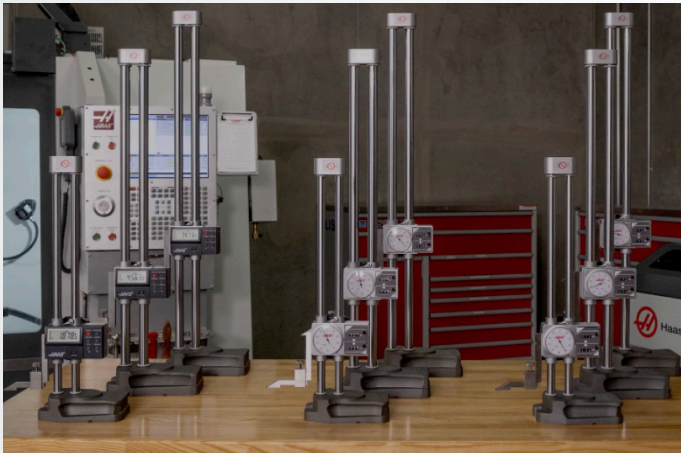
Haas Height Gauges

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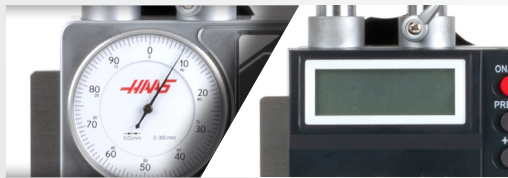
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HAAS TOOLING HEIGHT GAUGES

HEIGHT GAUGE HIGHLIGHTS:



Available in 12" (300mm), 18" (500mm),
or 24" (600mm) ranges



Offered in dial and digital versions



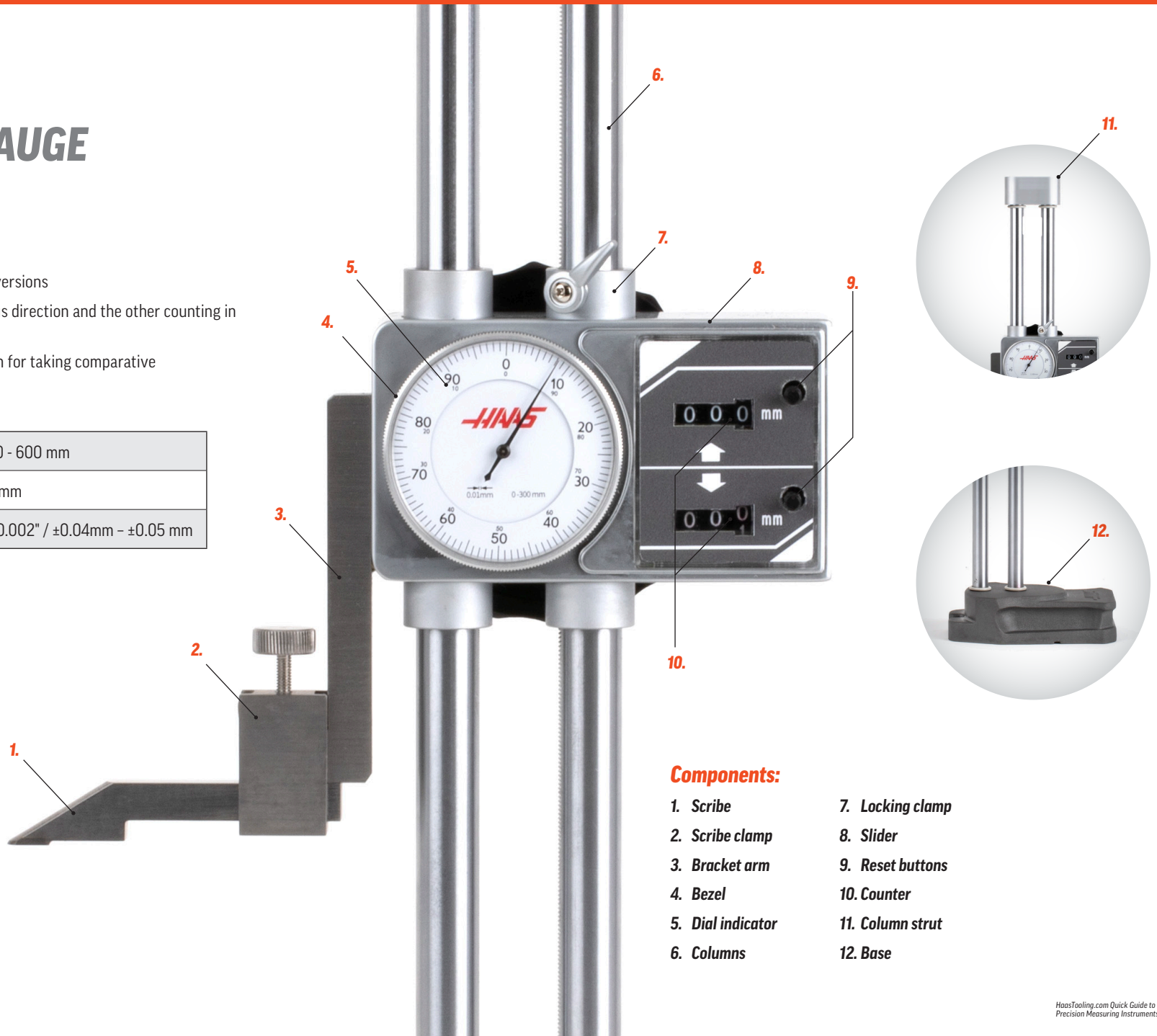
Height Gauges are commonly used metrology tools for both measuring and scribing vertical distances. The Haas height gauge line features a heavy-duty double-column design, offering better rigidity and accuracy than single-column types. The carbide-tipped scriber ensures a long service life, and can be swapped for other accessories, such as indicator holders, depth gauge attachments, and center masters. A large handwheel on the slider allows for smooth and easy adjustment, and the base is hardened, ground, and lapped for maximum flatness.

DOUBLE BEAM DIAL HEIGHT GAUGE

Features:

- Large, easy-to-read dial
- Offered in inch (U.S. only) and metric versions
- Two counters – one counting in the plus direction and the other counting in the minus direction
- Counters can be zeroed at any position for taking comparative measurements

Range	12 - 24" / 300 - 600 mm
Graduations:	0.001" / 0.01mm
Accuracy	±0.0015" - ±0.002" / ±0.04mm - ±0.05 mm



Components:

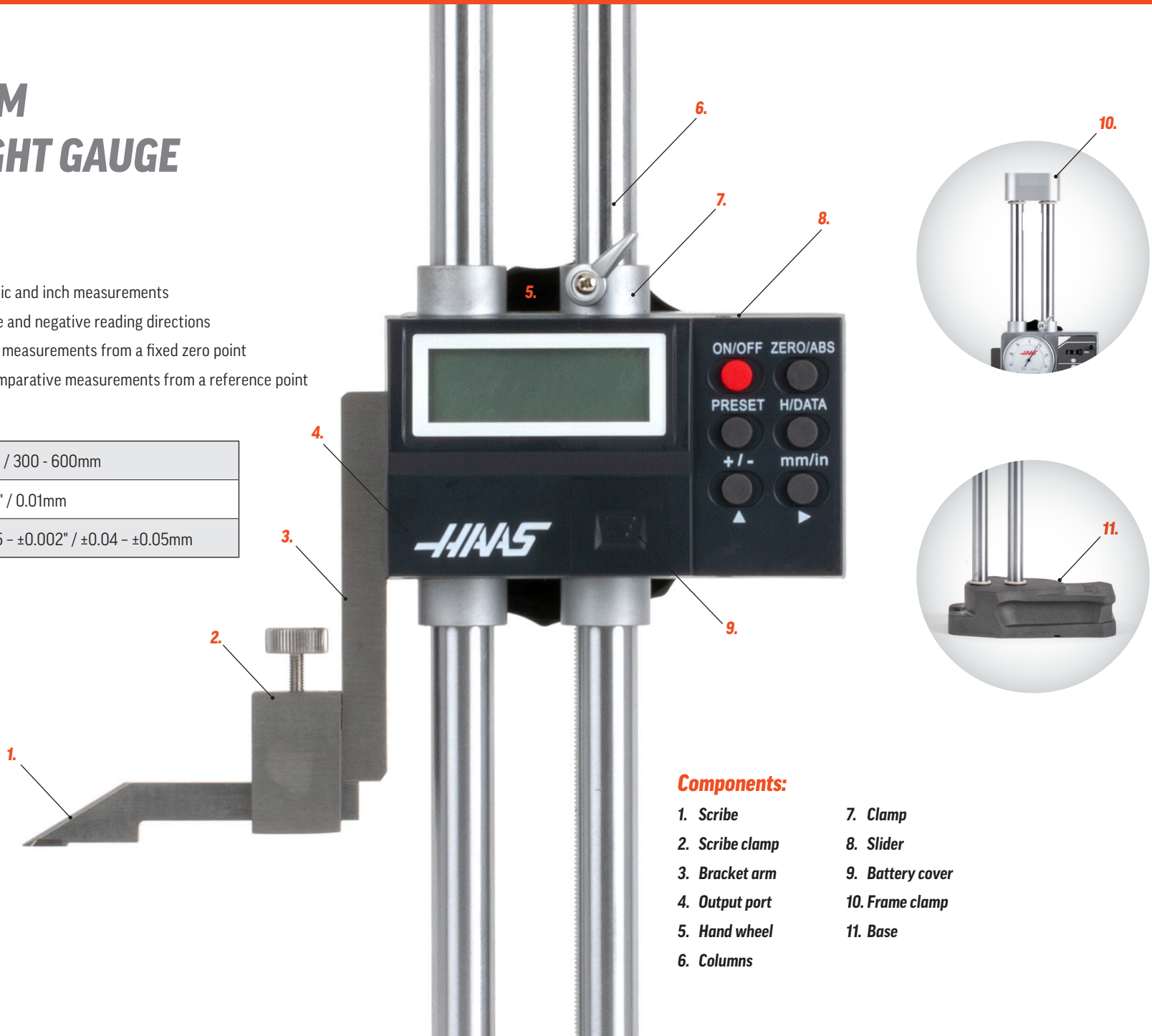
- | | |
|-------------------|------------------|
| 1. Scribe | 7. Locking clamp |
| 2. Scribe clamp | 8. Slider |
| 3. Bracket arm | 9. Reset buttons |
| 4. Bezel | 10. Counter |
| 5. Dial indicator | 11. Column strut |
| 6. Columns | 12. Base |

DOUBLE BEAM DIGITAL HEIGHT GAUGE

Features:

- Large, easy-to-read screen
- Instant switching between metric and inch measurements
- Quickly switch between positive and negative reading directions
- Absolute mode for taking direct measurements from a fixed zero point
- Incremental mode for taking comparative measurements from a reference point

Range	12 - 24" / 300 - 600mm
Resolutions:	0.0005" / 0.01mm
Accuracy	±0.0015 - ±0.002" / ±0.04 - ±0.05mm



Components:

- | | |
|-----------------|------------------|
| 1. Scribe | 7. Clamp |
| 2. Scribe clamp | 8. Slider |
| 3. Bracket arm | 9. Battery cover |
| 4. Output port | 10. Frame clamp |
| 5. Hand wheel | 11. Base |
| 6. Columns | |



QUICK GUIDE TO:

Bore Gauges

HAAS TOOLING BORE GAUGES



DIGITAL 3-POINT SNAP-OPEN BORE GAUGES

Available in 13 size ranges:

0.275-0.35" / 6-8mm	1.2-1.6" / 30-40mm
0.35-0.425" / 8-10mm	1.6-2" / 40-50mm
0.425-0.5" / 10-12mm	2-2.5" / 50-63mm
0.5-0.65" / 12-16mm	2.5-3" / 62-75mm
0.65-0.8" / 16-20mm	3-3.5" / 75-88mm
0.8-1" / 20-25mm	3.5-4" / 87-100mm
1-1.2" / 25-30mm	

Features:

- Carbide contact points
- Dual-dimensioned setting ring
- 330° display rotation
- Resolution: 0.00005" / 0.001 mm
- Tolerance setting for quick GO/NO-GO checking
- Ergonomic grip and handle for quick engagement and disengagement of carbide contact points.
- IP rated for dust and liquid resistance

Haas Snap Bore Gauges are designed for accurately measuring the bore diameter of parts and features. All Haas snap bore gauges have three contact points for better accuracy and precision when measuring round holes. The anvils are made of carbide to ensure a long service life.

Bore Gauges measure bores and grooves with ease. Haas Automation offers a complete range of bore gauges, with a variety of electronic, mechanical, and dial designs.

Balanced: Negative values on one side of zero, and positive values on the other

Continuous: The value keeps ascending until the dial returns to zero

- Steel body and interchangeable carbide anvils
- Extension rods and washers for fine adjustment in sizes to select a specific range
- Thermally insulated for extra stability of accuracy
- Carbide-tipped contact points for durability
- Includes screw anvil for dimension setting convenience
- Large dial or digital display for easy reading



Components:

1. Handle with rotating display
2. 3-point measuring head
3. Dual dimensioned setting ring
4. Accessory wrenches



DIAL BORE GAUGES

Dial Bore Gauges are available in a wide variety of lengths and ranges. These gauges feature carbide anvil tips for long service life.

- **Inch graduations** (U.S. only): 0.0005" standard, 0.0001" high resolution
- **Metric graduations:** 0.01mm standard, 0.001mm high resolution
- Measure IDs from 0.4" (10mm) up to 2.4" (60mm) with standards sets, and up to 6" (160mm) using the extensions supplied with the full kit
- Depth reach of up to 6" / 150mm
- Carbide and ceramic anvils available
- Both balanced and continuous dial numbering options are available



3-POINT MICROMETERS

Inch ranges available:

- 0.275-0.5" - includes 3 measuring heads, 3 setting rings, 1 extension rod
- 0.5-0.8" - includes 1 measuring head, 1 setting ring, 1 extension rod
- 0.8-2.0" - includes 2 measuring heads, 2 setting rings, 2 extension rods
- 2-4.0" - includes 4 measuring heads, 2 setting rings, 1 extension rod

Metric ranges available:

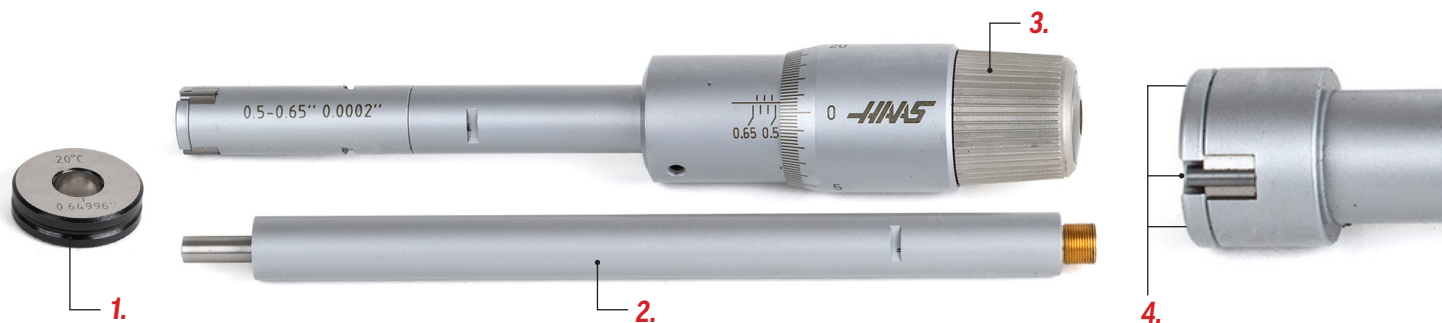
- 6.0 - 12.0mm - includes 3 measuring heads, 3 setting rings, 1 extension rod
- 12.0 - 20.0mm - includes 2 measuring heads, 1 setting ring, 1 extension rod
- 20.0 - 50.0mm - includes 4 measuring heads, 2 setting rings, 2 extension rods
- 50.0 - 100.0mm - includes 4 measuring heads, 2 setting rings, 1 extension rod

Components:

1. Setting ring
2. Extension rod
3. Ratchet stop thimble
4. Three carbide anvils

Features:

- Carbide measuring tips
- Calibration ring
- Made to DIN863 standards
- IP Rating: IP40
- Graduations: 0.0001" / 0.0002" / 0.001mm / 0.005mm







QUICK GUIDE TO:

Calibration Gauges

HAAS TOOLING CALIBRATION GAUGES

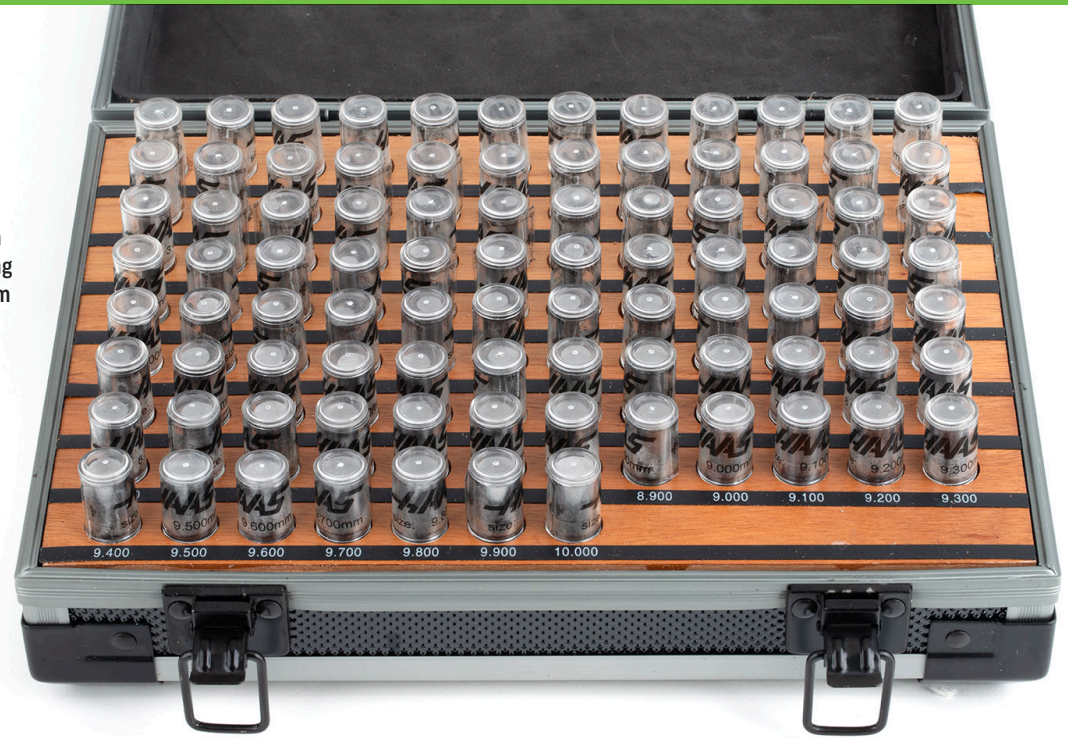
PIN GAUGE SETS

Pin Gauge sets are a must-have in any shop producing quality parts! Pin gauges are essential for quality control processes, helping to quickly identify out of tolerance components early in the production process, ensuring the form, fit, and function of machined features. Haas Tooling grade ZZ pin gauges are manufactured within a tolerance of **0.0002" (0.005mm)**, making them some of the highest precision gauges available, and ideal for features requiring a high level of accuracy and reliability.



Available in the following sets:

- Minus Pin Gauge Set, 0.011 - 0.060" (U.S. only)
- Minus Pin Gauge Set, 0.061 - 0.250" (U.S. only)
- Minus Pin Gauge Set, 0.251 - 0.500" (U.S. only)
- Metric Pin Gauge Set, 1 - 10mm
- Metric Pin Gauge Set, 0.99 - 10.01mm



GO/NO-GO HANDLES

Haas Go/No-Go Pin Gauge Handles securely grip pin gauges to ensure accurate inspection of holes. Easily and quickly check if holes and features are within tolerance to ensure the high quality and functionality of parts.

- Available in 5 different clamping ranges
- **GO** and **NO-GO** color-coded caps for easy identification

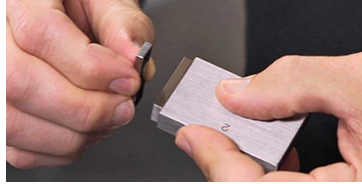


GAUGE BLOCKS

Haas Tooling Gauge Blocks are an essential tool for making quality parts, and in calibration applications. These blocks are made of a high-carbon, high-chromium steel, providing a hardness of ≥ 63 HRC for a long service life. Gauge blocks are made to ASME B89 / ISO 3650 standards. A certificate of calibration is included with each set.

Sets are Available in the Following Specifications:

- 36-Piece, Inch Gauge Block Set, AS-0 & AS-1 Grades, 0.05 - 4" (U.S. only)
- 81-Piece, Inch Gauge Block Set, AS-0 & AS-1 Grades, 0.1001 - 4" (U.S. only)
- 47-Piece, Metric Gauge Block Set, AS-0 & AS-1 Grades, 1.005 - 100mm
- 83-Piece, Metric Gauge Block Set, AS-0 & AS-1 Grades, 0.5 - 100mm



AS-0 Grade / High-Precision Calibration
Made to the highest grade of precision, with extremely tight tolerances, offering unmatched accuracy. This grade is the primary calibration standard in laboratories, and for critical applications where maximum precision is essential for maintaining quality and accuracy in dimensional measurements.



AS-1 Grade / General Shop Use
Used in general industrial applications, where high precision is required. AS-1 gauge blocks have slightly larger tolerances than AS-0 gauge blocks, but are important for maintaining accuracy and consistency when precise dimensional measurements are essential for quality control and manufacturing processes.



ANGLE GAUGE BLOCKS

Angle Gauge Blocks are a crucial tool for accurately setting and measuring inclines. By stacking angle gauge blocks, users can make precise slopes or measurements for various applications. Haas angle gauge blocks are made of hardened steel (58-63 HRC). Our grade ZZ angle gauge blocks are manufactured to a tolerance of 0.0002" (0.005mm), and conform to ISO 3650, making them the highest precision angle gauge blocks available.



PLUG & RING GAUGES

Haas offers a full range of Plug & Ring Gauges made from hardened steel, rated at 58-63 HRC. Plug and ring gauges are designed for GO/NO-GO testing of threaded features on machined parts. Ring gauges are meant to check external threaded features, while plug gauges are ideal for checking internal threaded features. Both gauges ensure thread quality and pitch diameter are within tolerance. Haas plug & ring gauges are manufactured to ANSI B1.2/DIN ISO 1502 standards. A certificate of calibration is included with each set and/or individual gauge.

THREAD PLUG GAUGES

Available in the following threads:
Metric M3x0.5 to M18x2.5
Inch #6-32 to 1/2"-20

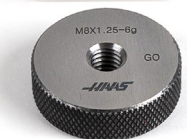
Single Thread Plug Gauges



Thread Plug Gauge Sets

THREAD RING GAUGES

Available in the following threads:
Metric M3x0.5 - M18x2.5
Inch #6-32 - 1/2"-20



Single Ring Gauges



Ring Gauges Sets

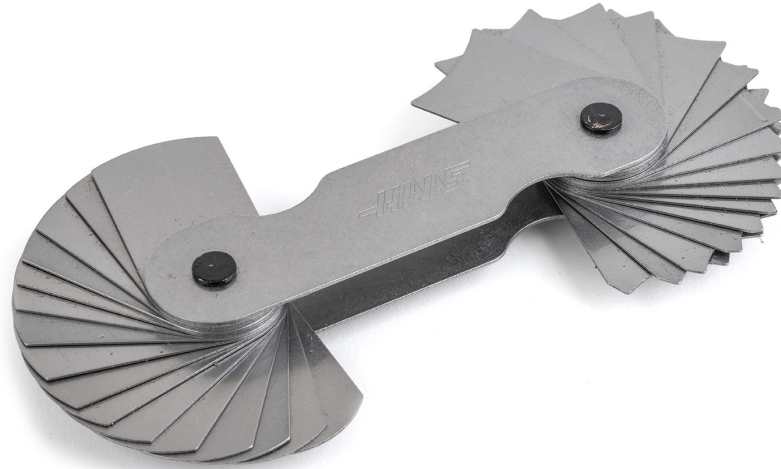
When precision and accuracy are essential, comparative measuring gauges ensure quality and efficiency.

QUICK GUIDE TO:

Comparative Gauges

HAAS TOOLING COMPARATIVE GAUGES

Haas Tooling offers a wide range of all types of comparative gauges that allow for quick comparisons and measuring of such features as radii, angles, threads, small bores, and thicknesses. By providing a direct comparison between standards and measured parts, the need for complex calculations and multiple measurements is eliminated, streamlining inspections without compromising quality.



RADIUS GAUGE

- Verify the radius of curved or rounded features
- Ensures accuracy in various applications, like machining, woodworking, and metalworking
- Measure raised and recessed curves
- Both convex and concave blades
- Radius size is etched on each blade

ANGLE GAUGE, 1° - 45°

- Used to measure, transfer, and replicate angles, allowing you to work precisely and efficiently
- Made from hardened stainless steel
- Finely machined edges and beveled at various angles



THREAD PITCH GAUGE, METRIC & UNIFIED

- Quickly identify the pitch of threads on screws, bolts, and nuts, ensuring the compatibility of threaded components
- Precisely ground and finished premium stainless steel blades
- Thread size marked on each blade
- Narrow-designed blades for internal and external screw threads
- Locking nut at each end helps secure blades

SMALL BORE GAUGES

- These versatile tools are designed to accurately measure the diameters of small holes, bores, and cylindrical recesses
- Used with a micrometer to check small inside diameters
- Hardened gauging surface to ensure long tool life and maintain accuracy



FEELER GAUGE

- Useful for measuring small gaps, clearances, and tolerances in mechanical systems and components
- Great for manufacturing, automotive, precision machinery, metal parts, and other applications
- Made to DIN2275 standards
- Size is etched on each blade.



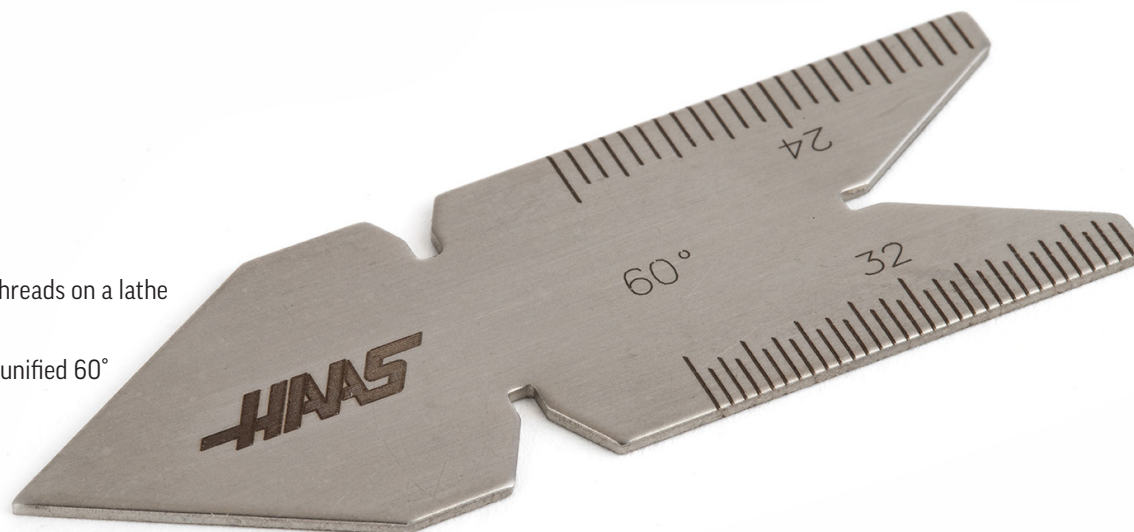
WIRE & SHEET METAL GAUGES

- Designed for measuring wire, sheet metal, and other thin materials
- American standard 0-36 gauge
- Tool features a matte finish, with sheet metal gauge values etched on one side and decimal equivalents on the other side

HAAS TOOLING COMPARATIVE GAUGES

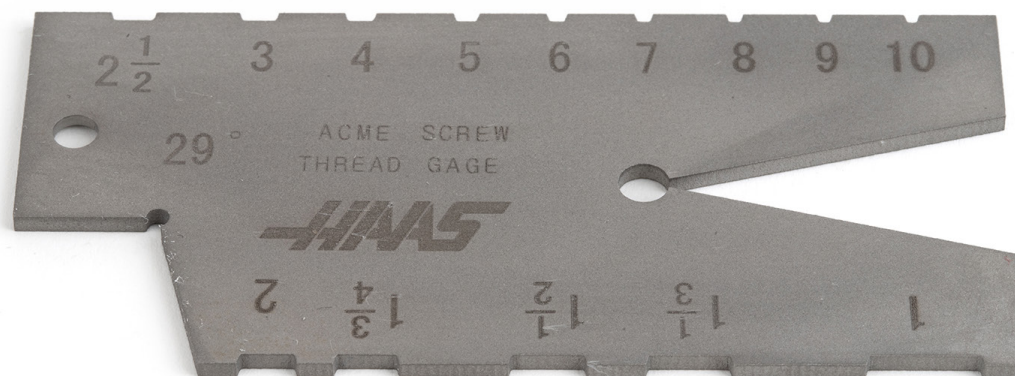
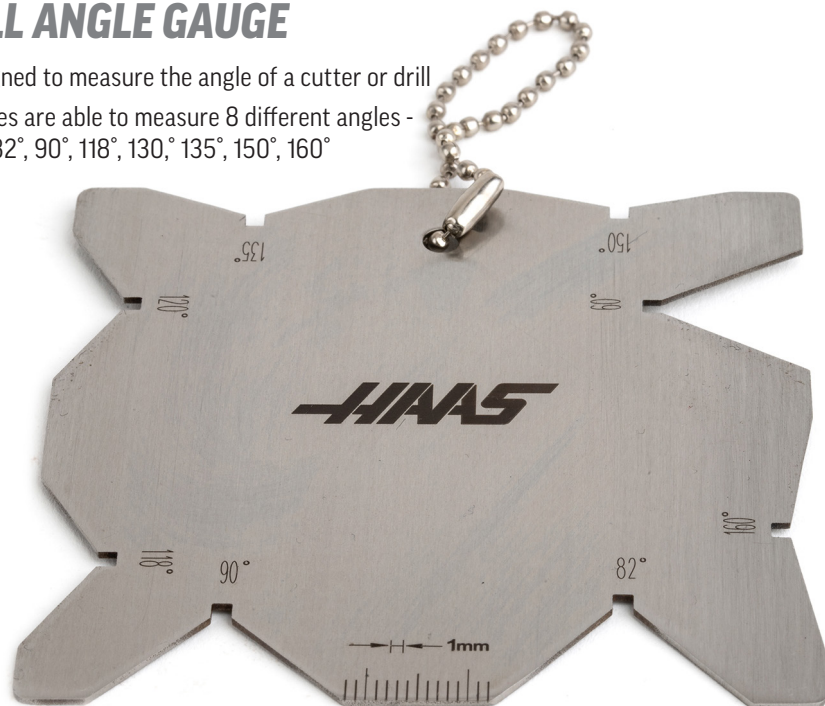
THREAD CENTER GAUGE

- Used to check tool angles while machining threads on a lathe
- Made from stainless steel
- Available in Whitworth 55°, metric 60°, and unified 60°



DRILL ANGLE GAUGE

- Designed to measure the angle of a cutter or drill
- Gauges are able to measure 8 different angles - 60°, 82°, 90°, 118°, 130°, 135°, 150°, 160°



ACME SCREW THREAD GAUGE

- Used as a standard when making acme threads
- Angles and edges are hardened and precision ground
- Acme thread inclination: 14-1/2 degree (29-degree inclined angle)



QUICK GUIDE TO:

Tool Setting Measuring Gauges

SETUP BLOCKS

Also known as 1-2-3 blocks, setup blocks are a shop staple with a variety of uses. Cross-drilled with 23 holes (5 threaded), they can be bolted together, to a machine table, or to workpieces for ultimate versatility when building jigs and setups. Haas setup blocks are hardened and precision ground for reliable accuracy in any situation, whether you use them as height references, or as setup components in layout, fixturing, or inspection tasks.



EDGE & CENTER FINDERS

Accurately locating the position of your workpiece is a critical step in any machining process. If your mill doesn't have a built-in probing system, Haas Tooling offers different options to cover your edge finding needs - choose from the traditional mechanical, electric, or the modern Haimer 3D-Sensor style.

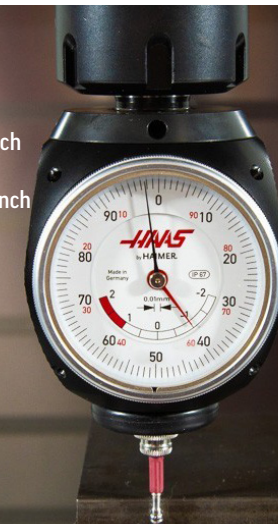
Edge Finder, Mechanical



Haas Probe Tips

Haas 3D Sensor

- CT40, inch
- HSK63A, Metric/Inch
- BT40, Metric
- Universal, Metric/Inch

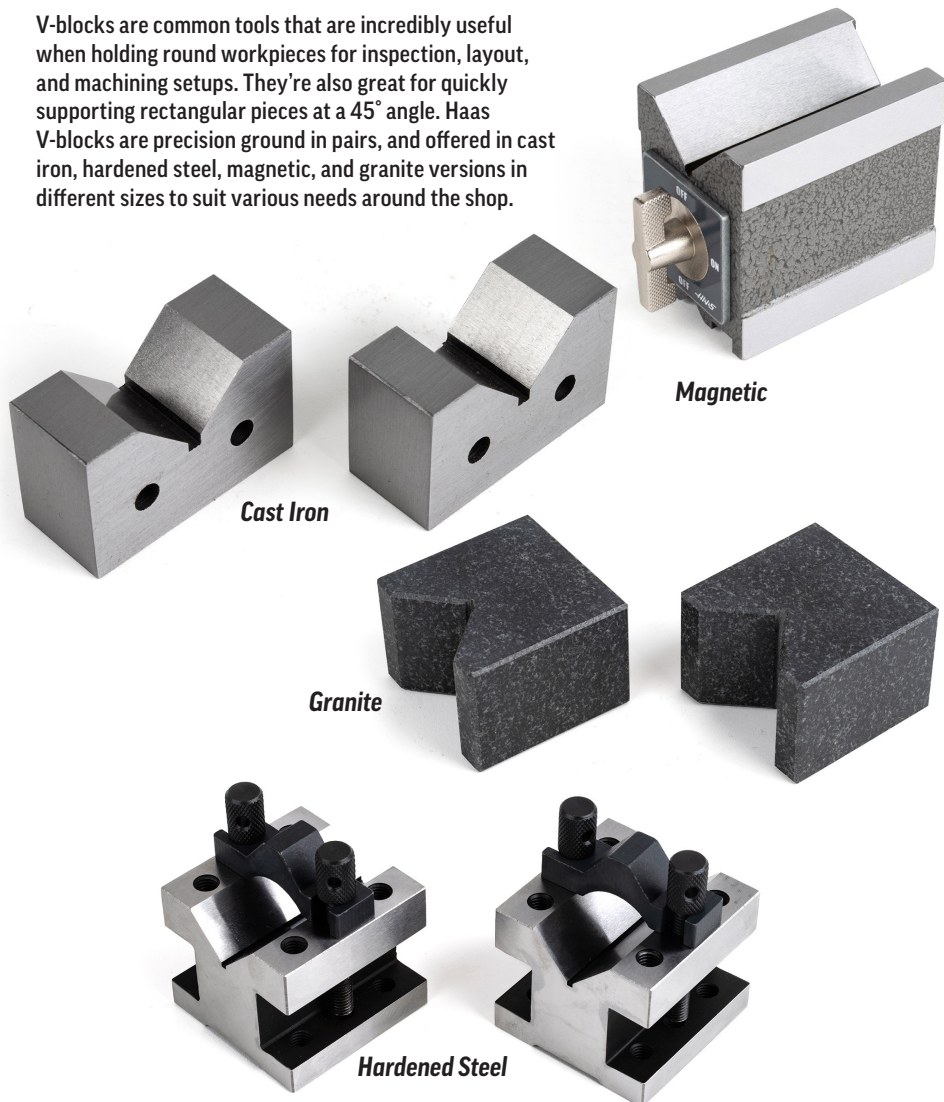


Applications:

- 3-dimensional edge finder locates in X, Y, and Z axis
- Locate edges of workpieces and fixtures
- Measure surface flatness
- Measure workpiece dimensions
- Accurately locate centers of holes and shafts
- Use with machine doors open

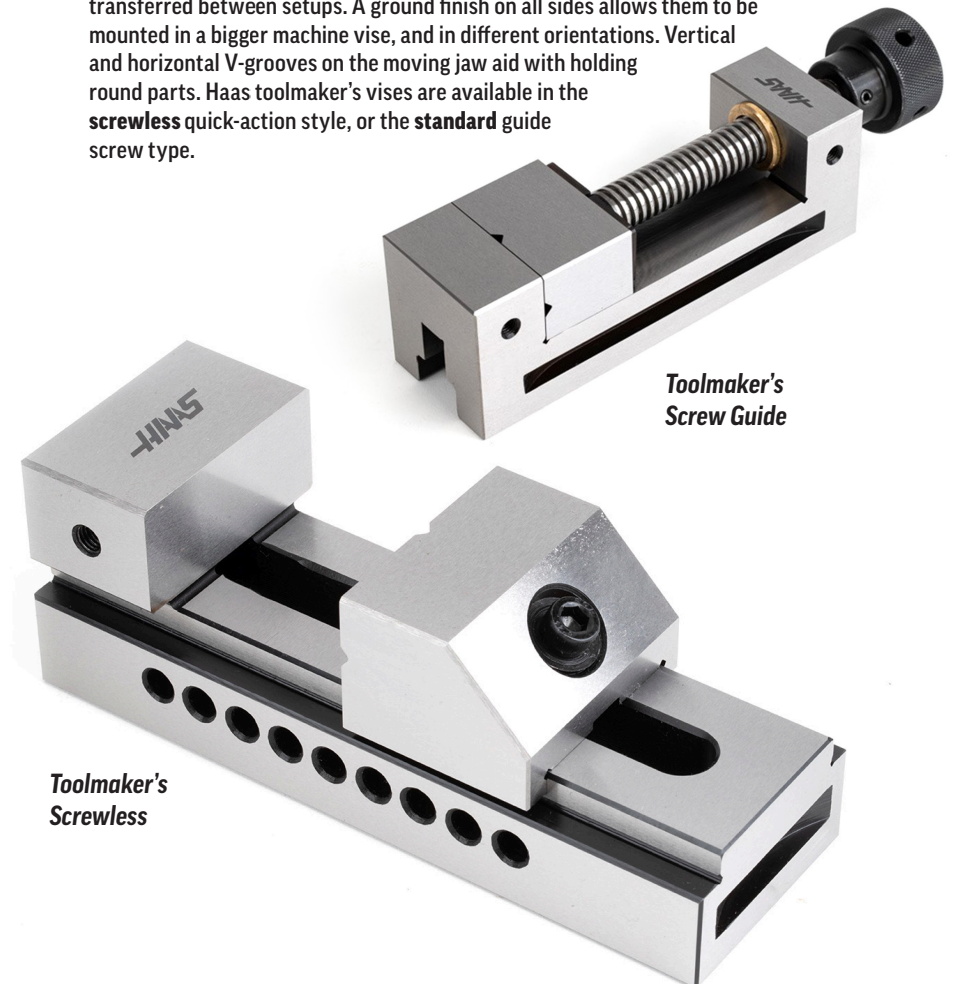
V BLOCKS

V-blocks are common tools that are incredibly useful when holding round workpieces for inspection, layout, and machining setups. They're also great for quickly supporting rectangular pieces at a 45° angle. Haas V-blocks are precision ground in pairs, and offered in cast iron, hardened steel, magnetic, and granite versions in different sizes to suit various needs around the shop.



TOOLMAKER'S VISE

Toolmaker's vises are high-precision vises that are useful for more delicate workholding tasks – such as small parts in grinding, EDM, or light milling setups. Parts can be conveniently loaded outside of the machine and transferred between setups. A ground finish on all sides allows them to be mounted in a bigger machine vise, and in different orientations. Vertical and horizontal V-grooves on the moving jaw aid with holding round parts. Haas toolmaker's vises are available in the **screwless** quick-action style, or the **standard** guide screw type.



HAAS TOOLING TOOL SETTING MEASURING GAUGES

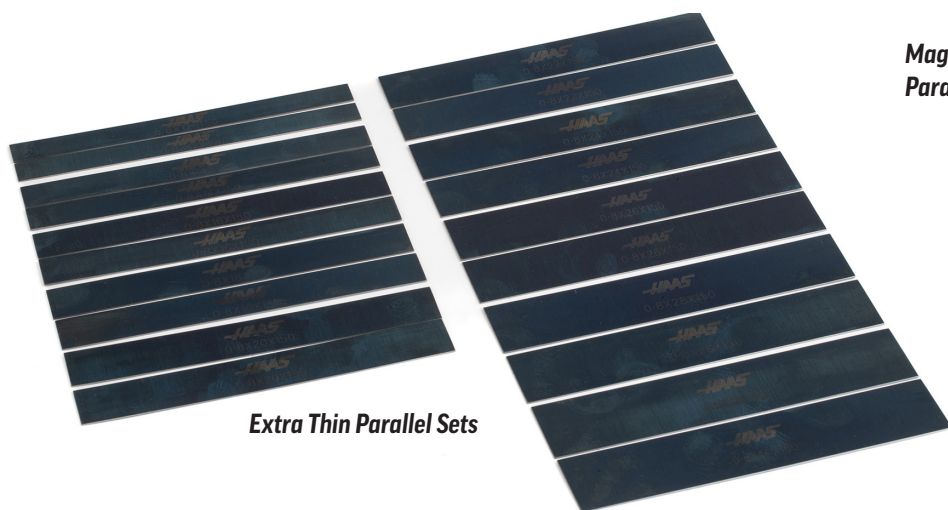
VICE PARALLELS



Vise Parallels are another shop staple, used for supporting workpieces inside machine vises. Parts often need to be raised off the bed of the vise to allow for tool clearance, or because of part geometry that can't lay flat. Haas Tooling's steel vise parallels are great for workpiece alignment, and for holding the workpiece in place on your vise. Haas Tooling parallels come in sets of matched pairs, and are made from hardened and precision-ground steel. Blank, drilled, and magnetic types are offered in different thicknesses and height ranges to suit your shop's needs.



Standard Parallel Sets



Extra Thin Parallel Sets

Magnetic Parallel Sets





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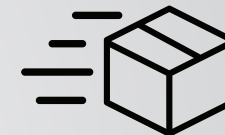
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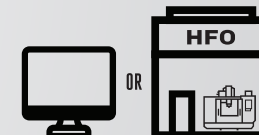
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