



Measures the following:

- * cap reinforcement from 0 to 7/16"
- * undercut and pit from 0 to 1/4" deep
- * fillet leg from 0 to 1"
- * fillet throat from 0 to 7/8"
- * fillet hypotenuse
- * hi-lo from 0 to 7/8"
- * bevel angle from 0 to 90 °
- * porosity 1/16" and 1/8"
- * weld width from 0 to 1-3/8"
- * concavity, convexity, and overlap
- * complete weld profile
- * accuracy capability to 1/64"
- * all butt weld dimensions at once
- * all fillet weld dimensions at once

General Recommendations

To measure hi-lo on welded joint, set one gauge leg on the highest base-metal plane. Slowly lower other side of gauge until the pins are level with the dimension lines. Press the Profile Hold Button and read dimension.

If the weld or joint being measured is not in the flat position, keep slight pressure on button while pushing pins forward until they conform to the profile on the tips of the pins, or use the slots on the back of pins.

Fillet Weld

Place gauge on weld and press Profile Hold button firmly.

Read throat from this scale on the right side.

Profile Hold Button

Measure convexity and concavity from this scale (under zero).

Read both fillet legs from these scales.

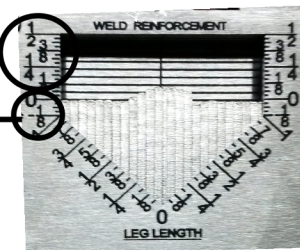
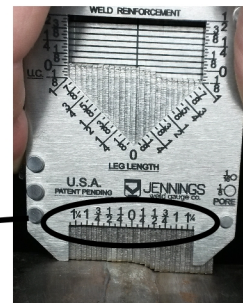
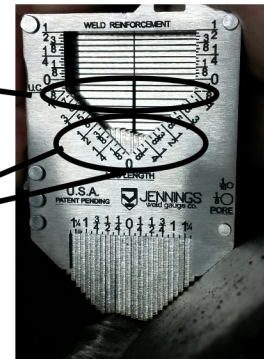
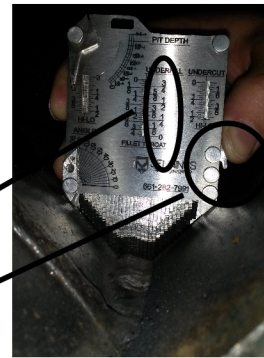
Butt Weld

Place gauge on weld and press Profile Hold button firmly.

Read width from this scale.

Read reinforcement from this scale.

Read undercut from this scale.

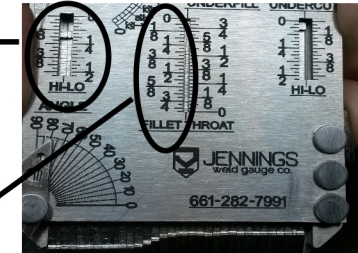


Hi-Lo

Set gauge on highest plane; raise dial indicator until it stops. Read from this scale.

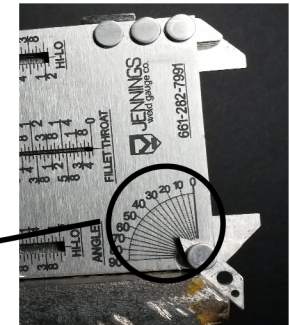


Read Hi-Lo after weld completion from these scales. Read under fill from this scale on the left.



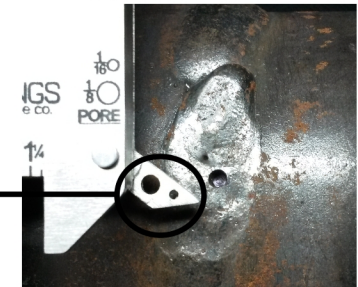
Bevel Angle

Set dial to 0°. Set gauge flush on base metal; slide back until dial conforms to bevel. Read from this scale.



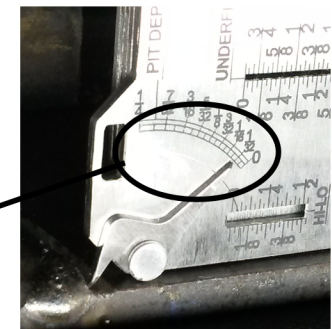
Porosity Diameter

Flip out Protractor. Compare pore to 1/16" or 1/8" holes.



Undercut

Set gauge on base metal; raise dial indicator until it stops. Read from this scale.



Jennings Weld Gauge Streamlines QC Welding Inspection Process

Industries including shipbuilding, railroad, process piping, power piping, structural fabrication, aviation, aerospace, automotive and others perform welding which must conform to code requirements. To meet these standards, quality control technicians and welding inspectors document weld size and integrity with the aid of several measuring tools (gauges) and standard mathematical calculations. Jennings Weld Gauge Co. LLC has developed a patented, stainless-steel universal gauge which displays simultaneous readout of all fillet and butt weld dimensions.

Jennings weld gauge is a single high quality tool capable of measuring both legs, throat, convexity/concavity, hypotenuse, profile, cap reinforcement, overlap, high-low misalignment, porosity, beveled angle, weld width/pit depth, and undercut, and automatically displays any diversion from desired throat-to-leg ratio. It measures virtually all common pipe and structural welds. This non-electronic gauge has immense versatility, durability, and ease of use, fitting into the palm of the user's hand.

Jennings weld gauge enables higher quality control efficiency due to several factors:

- Eliminates manual calculation of fillet weld throat-to-leg and hypotenuse-to-leg ratios
- Displays all weld dimensions simultaneously
- Uses single-action weld profile measurement
- Is a single-tool operation system
- Is readily accessible in its carrying case hung on belt or kept in pocket
- Fits where other gauges cannot
- Measures welds and discontinuities with high accuracy
- Has ambidextrous orientation
- Has non-threaded connections to eliminate inadvertent loosening of components which enhances reliability.
- Is 100% made in America and very durable



Two unique, prominent features of Jennings gauge are its ratio calculating and profile display, all in one physical action. Traditionally, the necessity of manually calculating the throat-to-leg ratio consumes time. Jennings Weld Gauge now does this for the user and displays it along with all the other critical dimensions of each weld a single measurement, freeing the inspector to move through projects rapidly and accurately. The user can take less measurements and still obtain all information needed to determine the entire cross sectional weld size.

The way it works is, in a single reach, the user sets the gauge on the weld, presses the lock button, and then pulls the gauge away. An impression has been made by a series of durable pins conforming to the weld profile, allowing the user to read all measurements. Photographs may be taken of the gauge for future documentation as well as demonstrating areas of deficit to the welder.

This single-tool system minimizes the need to carry a multi-gauge case or to sift through a tool bag to find the proper gauge needed. Because this tool is compact, measurement may be taken inside pipes as narrow as 4-inch nominal pipe size. Laser etching provides high-definition print dimensions with high accuracy. All components are cut with linear-motor laser CNC machines, providing optimum dimensional accuracy. This gauge has been designed to allow left- or right-side measuring as it faces the user, minimizing awkward arm contortion to measure the weld and then turn it around for the readout.

SUMMARY

With steep competition causing production requirements to budget less time and money, and increasing litigation resulting in stringent quality requirements, the quality control sector is constantly pushing for balance between quality and efficiency. There is no room for error in the inspector's scope of work. Now, the Jennings weld gauge increases weld measuring efficiency thus increasing the inspector's availability to visually inspect more welds by deleting the need for weld-size calculation, and giving welders a visual aid to achieve quality. By preventing wasted time and materials spent on re-inspections and repairs, the ability to meet the deadline is impacted positively. For all users, this one tool can be carried on the belt or in the pocket, while being strong and secure enough to endure repeated use, and it is able to measure otherwise unreadable welds.

For more information, visit
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Jennings Weld Gauge Company LLC Important Note

Our gauges are designed to assist in general dimensional weld inspection. They are not designed to measure machined components for highest degree accuracy as this application would use machine shop precision electronic or digital instruments. Jennings Weld Gauge does not measure density, strength, or material used. Jennings Weld Gauge Company assumes no responsibility for consequential damages resulting from the user's interpretation of measurements.