

Universal gauge WG11

(China)



Universal gauge is a new type of multi-functional measuring welding products. Mainly use Chinese to pressure vessel and welded pipe measurement.

The test items include edge angle, offset, surface smoothness, corrosion pit depth arc curvature and plane straightness.

Has the advantages of convenient carrying, simple operation, intuitive readings, real data, precision characteristics;

it is a pressure vessel manufacturing, ideal detection and President of welding tools.

This product is made of stainless steel material, the horse good rigidity, light weight, novel structure, beautiful shape.

Specifications:

Size - 320X170X15 mm

Scope of application - circumferential edge angle 400- 1 800 °C, the remaining items is not restricted;

The basic principle is - for a given cylinder diameter or diameter fixed length as a function of the diameter of the silver fox.

The expression for the $H = f ()$

Structure: (see Figure 1 below)

The ruler body 1 into the saddle, the lower symmetry is fixed with two small hollow axis 4, axis of each one measurement 5 measurement claw, claw can swing along the shaft, so that the measuring claw two points in close contact with the measured device wall, in the middle of the ruler body is fixed with a slide block 2, rule base provided with a concave dovetail groove and a sliding scale of 3 convex dovetail phase slip: slide ruler engraved with mm line, the ruler seat with vernier system, two kinds of line combination, make the indicating accuracy can reach 0.05mm.

Slide position can be adjusted to adapt to changes in vessel diameter, variety, the gauge can tune into the reference zero point, canceled the program, easy to use.

When measuring the gauge diameter of zero, with a locking screw plate 9 8 locking slide, then it can be used with a length of two feet 7, directly on the workpiece measurement, and no longer need to tape, feeler, AIDS can be read directly from the gauge error of numerical

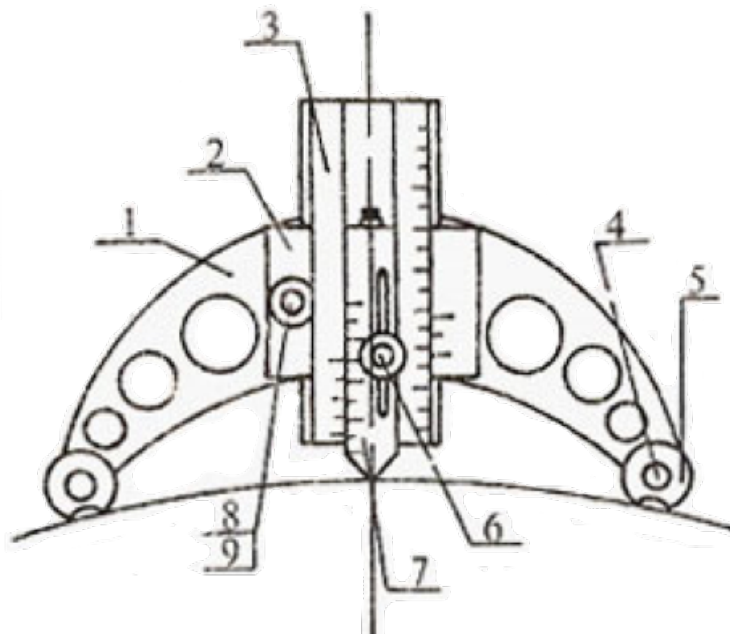


Figure 1

1. body size
2. slide seat
3. the slide rule
4. a small shaft
5. the measurement claw
6. screw
7. scale
8. plate
9. a locking screw

Measurement procedures:

1. the selected measurement object:

A. linear type - selection of short scale

B. cylindrical outer side -- to use short scale

C. cylinder surface measurement -- should replace the length scale

2. the zero reference:

A. will first ruler zero line and lock;

B. gage in the container is round, the gauge and the measured surface, use hand to push the sliding scale, the scale of measurement

surface and the part to be measured against the wall, zero reference for good.

(for accuracy, can be more of a couple, review, in order to provide certain reference accuracy)

C. finally locking feet ready.

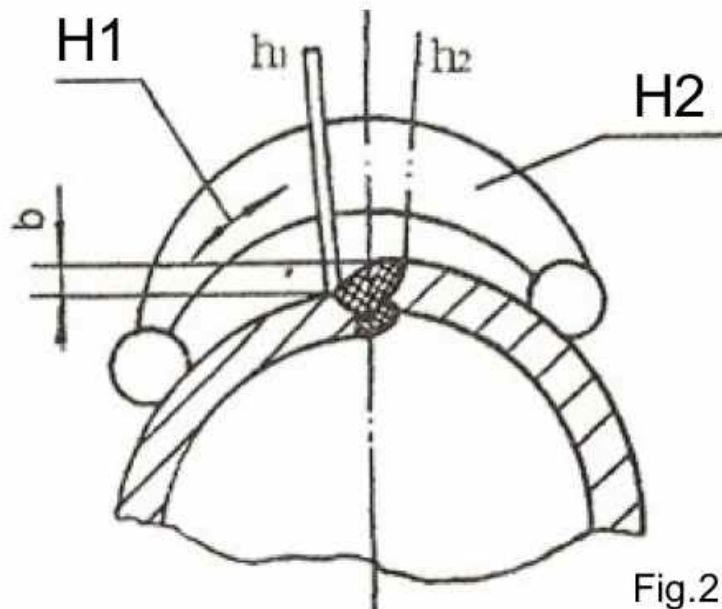
3. measurement:

In the wall of the workpiece to promote scale, the scale of end and side contact, see the scale read m , and then read out

the decimal tail values from a cursor, which is.

Measurement applications: (see figure 2- shown in Figure 6)

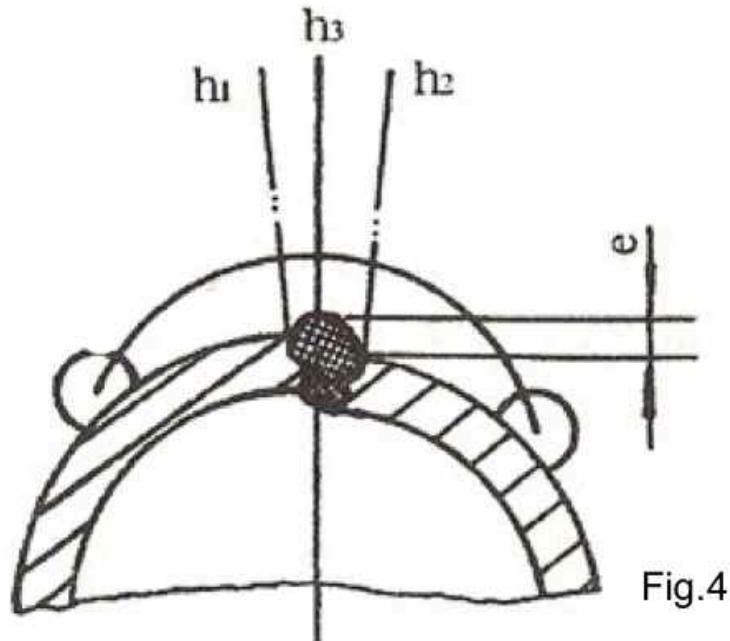
1. measuring angle, offset, the weld reinforcement.



A. mismatch, shown in figure 2;

$B = |h_1 - h_2|$ (mm)

Note: the H1 gauge stem weld left measurement value of H2 gauge dry welds the right measurements



When $|h_2| > |h_1|$ is $E = h_2$ (mm)

Note: scale up is positive, convex edges:
Scale down is negative, the concave edges.
c. weld reinforcement, shown in Figure 4

Note: 1. H3 gauges in the weld point measurements:

2. H1, H2, H3 measuring points in the same cross section

2. measurement of straightness, vertical edge angle, smoothness.

A. measurement of straightness, vertical edges and corners, shown in Figure 5

The slide rule is 70mm, is the measuring plane zero reference point, then the ruler for measuring value can be read out.

Connaught measuring straightness, according to its line direction, every shift 150mm measurement of a book,

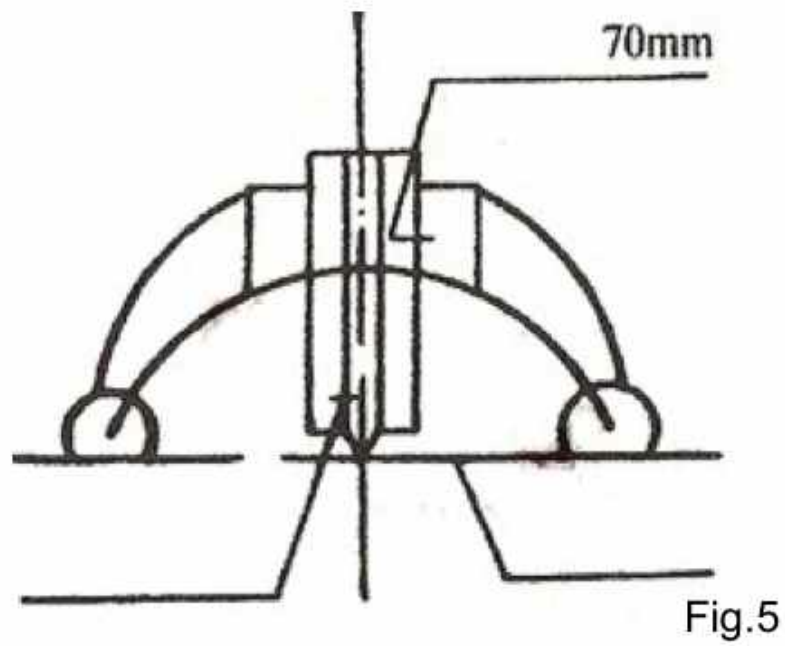
each book a gauge of three contact points must be repeated across the two contact points, and then various position measurements,

as a graph analysis, calculation, can obtain straightness values.

Slide the alignment of 70mm

Slide to zero

The datum plane



Maintenance

1. handle with care, not with other appliances together.
2. friction drag is not on the workpiece when in use. In order to avoid measuring claw wear, impact measurement accuracy.
3. measuring tip points for a total of three group, should be used to keep the gauge group, service life.
4. keep the gauge surface cleaning, wipe a little oil protection after used when