G.A.L. HI-LO®
WELDING
GAGE
MEASURES
INTERNAL
ALIGNMENT

of pipe after fit-up/alignment, cuts radiographic rejects.

Measures internal misalignment of pipe before and after tacking.

Measurements read in standard one side, metric opposite side.

SATISFY FIT-UP CODES ASME, ANSI, API & MILITARY

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-1</td>
<td>Standard &amp; Metric</td>
</tr>
</tbody>
</table>
G.A.L. ECONOMY SINGLE PURPOSE HI-LO WELDING GAGE

You can check the internal alignment of your fit-up quickly with the G.A.L. HI-LO gauge.

1. Unlock the retaining screw. Press the gauge legs beyond the barrel.

2. Insert the legs (wires) into the root gap space or the two pieces of pipe to be fitted. Turn the gauge 90°, being careful to apply a constant back pressure to the barrel.

3. Hold the gauge as square as possible with the fitting to obtain an accurate reading. Lock the retaining screw. Reverse the 90° turn and remove the gauge. You're now ready to read the increment opposite the red line.

4. When the red line aligns with the 1/32 increment line you have a good internal alignment and fit-up. Misalignment can be determined from the zero line by increment markings of 1/16 inch.

Eliminates rejects, improves productivity

Easy operation determines rootweld spacing.

1. Unlock the retaining screw and insert the gauge interior alignment stops between the two pieces of pipe to be fitted.

2. Insert the leg with the longer taper into the root gap until it makes contact with both sides of the gap.

3. Re-lock the retaining screw, remove the gauge and read it.

4. The scale is calibrated in fractional dimensions from 1/32 to 3/16 in 1/16 inch increments. The read-out you receive represents the amount of rootweld gap.

Part No. Description
GAL-2 Standard Econo Hi-Lo
GAL-2M Metric Econo Hi-Lo

Available in Standard or Metric. Specify when ordering.
ADJUSTABLE FILLET WELD GAUGE
WITH UNEQUAL LEG MEASUREMENT FEATURE

G.A.L. Adjustable Fillet Weld Gauge is easy to use.

To measure fillet welds place irregular curve edge flush to horizontal toe of weld so the straight edge is in line with the horizontal member.

To measure weld throat thickness place the 45° angle end flush to the horizontal and vertical members. Loosen the thumb screw and slide the pointer until it touches the face of the weld.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-3</td>
<td>Standard Gauge</td>
</tr>
<tr>
<td>GAL-3M</td>
<td>Metric Gauge</td>
</tr>
</tbody>
</table>
The following measurements are possible either in inches or millimeters.

- Angle of preparation, 0 to 60°
- Excess weld metal (capping size)
- Depth of undercut
- Depth of pitting
- Fillet weld throat size
- Fillet weld leg length
- Misalignment (High-Low)

Excess Weld Metal  Fillet Weld Throat  Angle of Preparation

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-4</td>
<td>Standard &amp; Metric Gauge</td>
</tr>
</tbody>
</table>
POCKET BRIDGE CAM GAUGE

The following measurements are possible either in inches or millimeters.

- Angle of preparation, 0 to 60°
- Excess weld metal (capping size)
- Depth of undercut by 1/32”
- Depth of pitting by 1/32”
- Fillet weld throat size (1/64” or .5mm) (Theoretical and Actual)
- Fillet weld leg length
- Misalignment (High-Low)

ALL STAINLESS CONSTRUCTION

Excess Weld Metal
Fillet Weld Throat
Angle of Preparation

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-4A</td>
<td>Standard Gauge</td>
</tr>
</tbody>
</table>
“V-WAC” WELD GAUGE

▶ Checks Undercut
▶ Checks Crown Height
▶ Checks Porosity
▶ Checks Pits
▶ All Stainless Steel

Features of the V-WAC™ Gauge

ACCURATE
Undercut depth or crown height scale can be read to 1/32 inch.
Porosity comparison of 1/8 inch and 1/16 inch.
Linear gauge in 1/16 inch increments.

EASY TO USE
Pointer is easy to set and a locking screw holds it in position for later reference.
Figures and increments are etched into surface. They are easy to read and will not rub off.

FAST
All four required measurements are made with a single gauge.

STURDY
Gauge is made of stainless steel.

HANDY
Gauge is 1¼ inches by 4 inches, and can be easily carried in your pocket.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-5</td>
<td>Gauge with 1/64” Tolerance</td>
</tr>
<tr>
<td>GAL-5-7</td>
<td>Gauge with WTPS Gauge &amp; Block</td>
</tr>
<tr>
<td>GAL-5-8</td>
<td>Gauge Set (GAL-5, GAL-8)</td>
</tr>
<tr>
<td>GAL-5-7-8</td>
<td>Gauge Set with WTPS Gauge &amp; Block</td>
</tr>
<tr>
<td>GAL-5M</td>
<td>Metric Gauge with 1-64” Tolerance</td>
</tr>
</tbody>
</table>
AUTOMATIC WELD SIZE
WELD GAUGE
For Accurate Calibration of Butt and Fillet Type Welds.

With the A.W.S. Gauge shown above it is possible to meet specifications of butt and fillet type welds. New redesigned instrument is pocket sized and easy to operate, new feature includes thumb screw which replaces old hard to operate rivet type.

The convexity and concavity sizes have automatically been predetermined in accordance with American Welding Society DI.I. Paragraph 3.6.

Instrument is precision built of stainless steel with dimensional readings chemically etched and filled for easier reading.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>GAL-6</td>
<td>Standard Gauge</td>
</tr>
<tr>
<td>GAL-6M</td>
<td>Metric Gauge</td>
</tr>
</tbody>
</table>
G.A.L. GAGE WTPS GAUGE
MEASURE UNDERCUT .010 DEEP

Undercut shall be no more than .010 in. (0.25) mm) deep when the weld is transverse to the primary stress in the part that is undercut.

From GAL Gage, Co. WTPS Gauge is precision made from stainless steel all markings and dimensions are laser engraved for ease and clarity when reading.

Gauge set comes with a precision ground calibration block as shown above, each block has been surface ground to .0005 tolerance for exceptional accuracy.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-7</td>
<td>Standard Gauge / Calibration Block</td>
</tr>
</tbody>
</table>
7 PIECE FILLET WELD SET

Gage now available with markings on both sides upon request.

- STAINLESS STEEL
- CAN BE CERTIFIED

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-8</td>
<td>Standard &amp; Metric Gauge</td>
</tr>
<tr>
<td>GAL-8A</td>
<td>Gauge w/ Markings on Both Sides</td>
</tr>
</tbody>
</table>
Patented

SKEW-T FILLET WELD GAUGE

•• CALCULATOR ••

A handy compilation of mathematical relationships between leg length, throats, skew angles and inspection dimensions. A must for designers and inspectors. The perfect companion to the G.A.L. SKEW-T FILLET GAUGE, (Gauge measures in english & metric.)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-9A</td>
<td>Weld Gauge Standard &amp; Metric Gauge</td>
</tr>
<tr>
<td>GAL-9B</td>
<td>Weld Calculator Standard &amp; Metric</td>
</tr>
<tr>
<td>GAL-9C</td>
<td>Weld Gauge and Calculator Standard &amp; Metric</td>
</tr>
</tbody>
</table>
PRE INSPECTION POCKET FILLET WELD GAUGE

- New Pocket Size - Measures 8 Size Fillets
- Checks Leg Length
- Throat Size, Plus Allowable Convexity
- All Increments Permanently Engraved
- Available in Standard or Metric
- Each Welder can Carry Set for Pre Inspection
- Handy Key Chain Holes Keep Set Together
- Material Anodized Aluminum

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-10</td>
<td>Standard Gauge</td>
</tr>
<tr>
<td>GAL-10M</td>
<td>Metric Gauge</td>
</tr>
</tbody>
</table>
COMBINATION 0" - 10" DIAL/PIT DEPTH GAUGE

- Measuring Range 0 - 10"
- Graduations .001"
- Accuracy meets or exceeds federal specs.
- Continuous dial for 1/2" travel.
- Revolution Counter.
- Uniform pressure over full range of travel.
- Complete with 6 extension rods in fitted case.
- Micro probes for small diameter pits .062 to .025
- Interchangeable Bases.

Gauge shown with welding base and .062 microprobe attached

Measures undercut socket weld

Measures undercut butt weld

Measures crown height butt weld

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-13</td>
<td>Standard Gauge</td>
</tr>
</tbody>
</table>
“MINI SUB” SOCKET WELD GAUGE

- Check Throat Dimensions
- Check Leg Length
- Checks All Pipe Schedule
- All Stainless Steel

Sliding Pointer for Different pipe Schedules

Sliding Pointer for Throat Measurement

Part No. Description
GAL-14 Standard Gauge

© November 2005
NEW! NEW! NEW!

MINI FILLET WELD KEYS

• ALL GAUGES STAINLESS STEEL

• SET COMES WITH HANDY KEY CHAIN AND POCKET POUCH

• 11 DIFFERENT SIZES IN STANDARD SIZES WITH METRIC EQUIVALENT MARKINGS – 1/8" to 1"

CHECKING WELD LEG SIZE
CHECKING WELD DIMENSION OF SKEWED MEMBER
CHECKING THROAT DIMENSION

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-16</td>
<td>Standard Gauge</td>
</tr>
</tbody>
</table>
The **G.A.L. PIPE PIT GAGE** will give long life in the field or factory.

- Range is 0 to 1/2” in 1/64 & .020 increments.
- Arm can be locked in place at any dimension.
- All Stainless Steel
- Gage will fit in shirt pocket and comes in a pocket protector.
- Has handy formulas on front and decimal equivalents on back

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-17</td>
<td>Standard Gauge</td>
</tr>
</tbody>
</table>
**CHECK PLATE FIT-UP**

- **Front Side - STANDARD**
- **Back Side - METRIC**

**TAPER GAUGES**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUB-28</td>
<td>Taper Gauge 5/8&quot; to 1-3/16&quot;</td>
</tr>
<tr>
<td>SUB-28A</td>
<td>Taper Gauge 1/32&quot; to 5/8&quot;</td>
</tr>
<tr>
<td>SUB-28C</td>
<td>Taper Gauge 1-3/16&quot; to 2&quot;</td>
</tr>
</tbody>
</table>
SPECIAL GAUGES SECTION

OUTSIDE FILLET GAUGES,
VARIOUS SIZES AVAILABLE

SPECIAL DESIGN FILLET GAUGE

1-1/4" DESIGN FILLET GAUGE

SMALL TOLERANCE FILLET GAUGE

SPECIAL FILLET GAUGE
LEG LENGTH ONLY

- Custom Gauges fabricated to your design or ours
- Tolerances to your specification, logos and identification permanently engraved, quick turnaround
- Automotive • Military • Aerospace

END PROFILE GAUGE - PIPE

END PROFILE GAUGE - PIPE

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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</thead>
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<tr>
<td>SUB-20</td>
<td>Special Design Fillet Gauge</td>
</tr>
<tr>
<td>SUB-21</td>
<td>1-1/4&quot; Design Fillet Gauge</td>
</tr>
<tr>
<td>SUB-22</td>
<td>Small Tolerance Fillet Gauge</td>
</tr>
<tr>
<td>SUB-23</td>
<td>Special Fillet Gauge</td>
</tr>
<tr>
<td>SUB-24</td>
<td>Outside Fillet Gauge</td>
</tr>
<tr>
<td>SUB-25</td>
<td>Special Undercut Gauge</td>
</tr>
<tr>
<td>SUB-26</td>
<td>End Profile Gauge</td>
</tr>
</tbody>
</table>
WELDERS, CWI® INSPECTORS, INSTRUCTORS

NOW YOU CAN DESIGN YOUR INSPECTION TOOL KIT
Specify the tools you need from our catalog to suit your particular needs and we’ll put them in kit form with your own personalized nameplate.

WRAP-AROUND POUCH
MEASURES 9” x 6 1/2” OPEN.
MEASURES 6 1/2” x 4 1/4 WRAPPED UP.
FITS IN POCKET.

Kit Includes:
V-Wac Gauge (GAL-5)
Econo Hi-Lo Gauge (GAL-2)
6” General Scale
Telescoping Mirror
Pen Light

BRIEF CASE TYPE/LOCK & KEY
MEASURES 18” x 12 1/2” x 3”

Kit Includes:
V-Wac Gauge (GAL-5)
Fillet Weld Gauge (GAL-8)
WTPS / Block (GAL-7)
Bridgecam Gauge (GAL-4)
Economy HI-LO Gauge (GAL-2)
HI-LO Gauge (GAL-1)
AWS Gauge (GAL-6)
Skew-T Fillet Weld Gauge w/ Calculator (GAL-9C)
Adj Fillet Weld Gauge (GAL-3)
6” Starrett Scale
Telescoping Mirror
Micrometer with Ball
Magnifier
Brief Case with Lock and Key

KIT WITHOUT HANDLE
MEASURES 13” x 8” x 3”

Kit Includes:
V-Wac Gauge (GAL-5)
AWS Gauge (GAL-6)
HI-LO Gauge (GAL-1)
Micrometer with Ball
Telescoping Mirror
6” Starrett Scale
Magnifier
Sturdy Protective Case

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL-12W</td>
<td>Wrap-A-Round Pouch</td>
</tr>
<tr>
<td>GAL-12M</td>
<td>Medium Size Kit</td>
</tr>
<tr>
<td>GAL-12B</td>
<td>Deluxe Brief Case Kit</td>
</tr>
</tbody>
</table>
GAP-A-LET®

The Common Sense approach to Quick, Safe socket welds

Accept No Substitutes


Call or write for Catalog, Video & Free Sample Ring...

G.A.L. Gage CO.

PATENTED THROUGHOUT THE WORLD
GAP-A-LET®

Socket Weld
Contraction Rings

- Proper socket weld fit-up in one-tenth the time.
- Accurate 1/16” min. Gap without time consuming measuring, scribing and pull-out.
- Eliminate cracked welds resulting from improperly gapped joints.
- Meets military and commercial construction code standards.
- Patented - United States, Canada, Germany, United Kingdom and Japan.
- Sizes from ¼” NPS to 5” NPS.
- Instrumentation tubing sizes 3/8” to 2”.
- Boiler tubing sizes as required.

DESIGN DATA

Note: Width designed for minimum pipe wall schedules listed in American Standard B36.10 - B36.19

Popular Sizes in stock for immediate delivery
316L Certified Stainless Steel

<table>
<thead>
<tr>
<th>Standard GAP-A-LET Ring</th>
<th>Fitting</th>
<th>Ring Free Outside Diameter</th>
<th>Ring Wall Radial</th>
<th>Ring Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>¼” NPS</td>
<td>.555</td>
<td>.600</td>
<td>.070</td>
<td>.025</td>
</tr>
<tr>
<td>3/8” NPS</td>
<td>.690</td>
<td>.730</td>
<td>.070</td>
<td>.025</td>
</tr>
<tr>
<td>½” NPS</td>
<td>.855</td>
<td>.880</td>
<td>.070</td>
<td>.025</td>
</tr>
<tr>
<td>¾” NPS</td>
<td>1.065</td>
<td>1.110</td>
<td>.105</td>
<td>.025</td>
</tr>
<tr>
<td>1” NPS</td>
<td>1.330</td>
<td>1.385</td>
<td>.105</td>
<td>.030</td>
</tr>
<tr>
<td>1 ¼” NPS</td>
<td>1.675</td>
<td>1.780</td>
<td>.105</td>
<td>.030</td>
</tr>
<tr>
<td>1 ½” NPS</td>
<td>1.915</td>
<td>2.020</td>
<td>.105</td>
<td>.030</td>
</tr>
<tr>
<td>2” NPS</td>
<td>2.406</td>
<td>2.580</td>
<td>.105</td>
<td>.030</td>
</tr>
<tr>
<td>2 ½” NPS</td>
<td>2.905</td>
<td>3.010</td>
<td>.105</td>
<td>.030</td>
</tr>
<tr>
<td>3” NPS</td>
<td>3.500</td>
<td>3.885</td>
<td>.105</td>
<td>.030</td>
</tr>
<tr>
<td>3 ½” NPS</td>
<td>4.000</td>
<td>4.150</td>
<td>.105</td>
<td>.030</td>
</tr>
<tr>
<td>4” NPS</td>
<td>4.500</td>
<td>5.110</td>
<td>.103</td>
<td>.040</td>
</tr>
<tr>
<td>5” NPS</td>
<td>5.563</td>
<td>5.880</td>
<td>.103</td>
<td>.040</td>
</tr>
</tbody>
</table>

All dimensions are in inches
Get Proper Socket Weld Fit-Up
In One-Tenth the Time

GAP-A-LET®

SOCKET WELD
CONTRACTION RINGS

PATENTED

- Every socket weld gap, the proper 1/16” minimum required by ANSI 31.1, Section III, ASME, US Navy & Military Codes
- No more scribe and pull out procedure
- No more measuring or guessing gap distance
- And no more cracked welds due to contraction of improperly gapped joints

East to Store, Easy to Distribute

Gap-A-Let socket weld contraction rings come in packages of 20 rings per resealable plastic bag. No messy case of loose rings... No spillings of rings on floor while working. Just hand your welders and fitters the number of packages they need for the day and they’re ready to make perfect, premeasured socket welds to code. And the pre-counted contents make inventory and re-ordering easier too. Helps prevent over and under stocking.

Every packet of Gap-A-Let socket weld contraction rings comes with a certified test report verifying the chemical analysis and physical properties of material shipped. While we do guarantee the test reports on the product material, any product can be misused, which in this instance could result in an improper weld. This certification and the use of a Gap-A-Let ring in no way guarantees the quality, condition or durability of the weld. G.A.L. Gage Company will assume no responsibility for damage to the piping system or to component parts due to the use or misuse of this ring.