A high precision tracking system that maintains the torch in optimum operating position regardless of variations in the weld seam. This provides improved quality and efficiency in a wide variety of welding operations.

* Carriage sold separately

**High Precision Weld Tracking System**

MAINTAIN THE TORCH IN OPTIMUM OPERATING POSITION TO PRODUCE THE HIGHEST QUALITY WELDS
The quality and efficiency achieved with today’s automated welding systems can be impaired by material warpage, misalignment, irregular edge fit-up, different material thickness and other conditions that cause variations in the weld seam. Gullco KAT® Trackers restore optimum performance when these conditions are encountered. They continually sense the slightest variation across the weld seam and automatically correct the position of the weld torch.

The trackers are designed for incorporation and use with the Gullco KAT® travel carriage system but can readily be used with other travelling and rotating devices employed in automated welding operations.

The systems are effectively employed to cut costs and increase productivity in a wide range of applications such as tank, pressure vessel, pipe and structural component fabrication and deep groove welding operations.

Gullco KAT® Trackers are available in standard or heavy duty models to meet virtually all requirements. A brief description of each is provided below.

**GULLCO KAT® TRACKERS**
These Trackers provide precise vertical and horizontal tracking plus...

**ELECTRONIC “END OF PLATE DETECTION”**
- puts the tracking system on “hold”... Preventing the torch from driving into the plate and allowing welding to continue to the plate edge.

**ELECTRONIC “TACK DETECTION”**
- interrupts the automatic tracking action when a tack-weld is encountered preventing the torch from rising prematurely...and returns the system to normal action when it reaches the end of the tack weld.

**MODEL WSG-1200:**
This model has up to 55 lb. (25kg) vertical load capacity at 4” (100mm) extension from the face plate. The standard stroke is 4” x 4” (100x100mm).

**MODEL WSG-2200:**
The heavy duty version of model WSG-2200 with a vertical load capacity up to 100 lbs. (45 kg) at 6” (150mm) extension from the face plate. The standard stroke is 6”x6” (150x150mm).

Note: The above data applies to standard slide assemblies. Other slide lengths, speed and higher capacities are available.
SPECIFICATIONS

GULLCO MODEL WSG-1200 KAT® TRACKER
SYSTEM COMPONENTS
Main Control Box, Pendant Remote Control Box, Probe, Probe Micro Cross-Slide, Motorized Cross-Slide Assembly, Probe-To-Torch Mounting Bracket, Control Cables from Probe and Cross-Slide to Main Control Box, Torch Holder with vertical/ horizontal adjustment, Brackets for mounting Cross-Slide and Main Control Box on KAT® Travel Carriage.

MAIN CONTROL BOX
Incorporates main power switch, On/Off pilot light, signal lights indicating sensing function and fuse. Electronic circuit components incorporated in modular system with circuit boards for easy maintenance.
Size: (H) 5-1/2" (W) 2" (D) 1-1/2" (140 x 50 x 38mm.)
Weight: 2 lbs. (900 grams)

PENDANT REMOTE CONTROL BOX
Incorporates manual/automatic changeover switch and inching switch -vertical up/down and horizontal left/right.
Size: (H) 5-1/2" (W) 2" (D) 1-1/2" (140 x 50 x 38mm.)
Weight: 2 lbs. (900 grams)

PROBE
Supplied complete with replaceable 1/8" dia. Probe tip. The assembly incorporates a Shock Protector that protects the system’s electronics by breaking when heavy shock is encountered.

PROBE MICRO CROSS SLIDE
Provides precise manual pre-positioning of probe relative to torch prior to automatic operations. Stroke plus or minus 3/4" (20mm).
Weight: 1-3/4 lbs. (900 grams)

MOTORIZED CROSS-SLIDE ASSEMBLY

<table>
<thead>
<tr>
<th>Model</th>
<th>WSG-1200</th>
<th>WSG-2200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Load Capacity:</td>
<td>up to 55 lbs. (25kg)</td>
<td>up to 100 lbs</td>
</tr>
<tr>
<td>Standard Stroke Length:</td>
<td>4&quot; (100mm)</td>
<td>6&quot; (150mm)</td>
</tr>
<tr>
<td>Standard Stroke Speed:</td>
<td>10.16 in/min</td>
<td>9.8 in/min</td>
</tr>
<tr>
<td>Height</td>
<td>14&quot; (355mm)</td>
<td>18 1/2&quot; (472mm)</td>
</tr>
<tr>
<td>Width</td>
<td>14&quot; (355mm)</td>
<td>18 1/2&quot; (472mm)</td>
</tr>
<tr>
<td>Depth</td>
<td>4 3/4&quot; (120mm)</td>
<td>6 1/2&quot; (170mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>22 lbs. (10kg)</td>
<td>50.6 lbs. (23kg)</td>
</tr>
</tbody>
</table>

Power Requirements: 110/115 Volt AC - Single phase 50/60 Hz
Longer slides, other speeds and higher capacity units available on request.
Gullco Mechanical Seam Trackers and Height Sensors are designed for use with the Gullco KAT® Travel Carriage to accurately maintain the required, pre-set distance between the gun or torch and the workpiece in automated welding and cutting operations.

Three models are available to effectively meet various application needs. All are constant velocity, spring-type sensors utilizing hardened and ground slide bars with recirculator ball bushings to provide 1-3/4” (44mm) of torch float.*

Model GK-190-600 Height Sensor has an adjustable swivel copper guide wheel to contact the work surface.

Model GK-190-602 Height Sensor has a stainless steel ball transfer that is particularly useful to maintain contact on curved surfaces or vertical applications.

Model GK-190-603 Seam Tracker is specifically designed for fillet welding applications.

*Other float distances available on request.

MODEL GK-190-600
Mechanical Height Sensor with constant velocity spring, hardened ground rods and circulator ball bushings to provide 1-3/4” (44mm) of torch float.
Supplied complete with adjustable, swivel copper guide wheel, 1-1/8” (29mm) sq. rack box, 12” (304mm) rack arm and swivel mounting clamp for attachment to KAT® Travel Carriage arm.

MODEL GK-190-602
Mechanical Height Sensor with constant velocity spring, hardened ground rods and circulator ball bushings to provide 1-3/4” (44mm) of torch float.
Supplied complete with hardened stainless steel ball assembly, 1-1/8” (29mm) sq. rack box, 12” (304mm) rack arm and 1-1/8” (29mm) swivel mounting clamp for attachment to KAT® Travel Carriage arm.

MODEL GK-190-603
Mechanical Seam Tracker with constant velocity spring, hardened ground rods and recirculator ball bushings to provide 1-3/4” (44mm) of 45˚ torch float and 1-1/4” (31.75mm) of weld seam misalignment in both the horizontal and vertical plane. The assembly includes a Micro Cross-slide with gun holder to provide 3/4” (19mm) of XY adjustment. Supplied as standard with single copper guide wheel, 1-1/8” (29mm) sq. rack box, 12” (304mm) rack arm and 1-1/8” (29mm) swivel mounting clamp for attachment to KAT® Carriage arm.

MODEL GK-190-604
Dual in-line guide wheels react independently when tack welds encountered on thin edge material, one always in contact with the weld seam.

MODEL GK-190-605
Dual, side-by-side guide wheels straddle tack weld line in general range of Fillet Weld applications.

SPECIAL SENSOR GUIDE WHEEL ASSEMBLIES
For Fillet Welding applications involving tack welds

(A) When the weld seam is below the carriages level, the sensor rack arm clamp is located below the sensor rack box.

(B) When the weld seam is above carriage level the sensor rack arm clamp is positioned above the sensor rack box. Additional height adjustment may be required. We recommend the use of our Rack Box Riser Assembly (below) to increase the carriage rack arm height by 2”, 4” or 6”.

ST-13-01

Specifications are subject to change without notice. All dimensions are nominal.

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