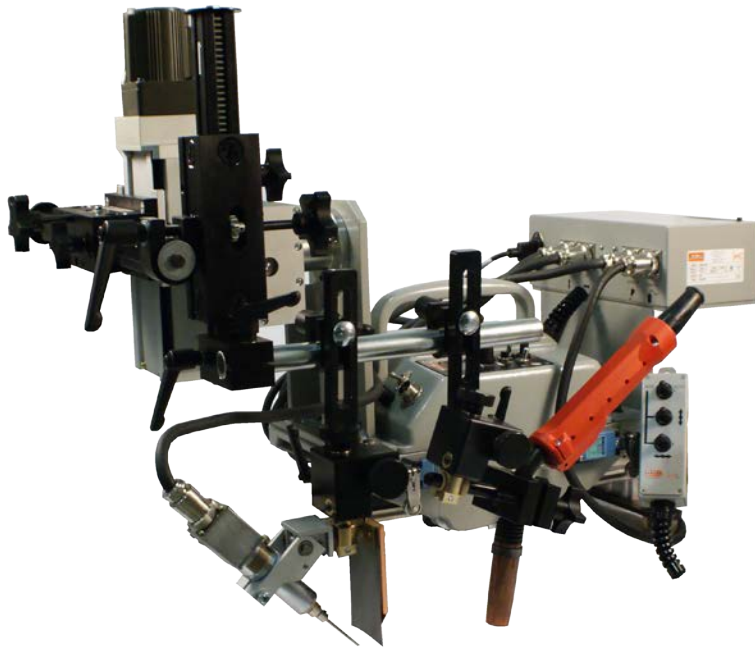




## ELECTRONIC SEAM TRACKING SYSTEM - KAT®



\* Carriage sold separately

KAT® Tracker weld seam tracking models WSG-1200 & WSG-2200 offer practical solutions to weld seam tracking and torch positioning in the automation of welding, where a constant torch position, both vertically and horizontally, is required in relation to the joint being welded.

The WSG-1200 is best suited for standard applications such as the positioning of a regular Mig welding gun, and provides a tracking accuracy of +/- 0.012" [0.3 mm]. Whereas, the WSG-2200 is typically used for heavier duty applications, such as SAW, and provides a tracking accuracy of +/- 0.019" [0.5 mm].

Both systems are compact and light in weight. The WSG-1200 is ready for quick and easy installation to a Gullco "Kat®" travel carriage. Each system consists of the following main components:

1. Control box.
2. Remote control pendant.
3. Motorized cross slide assembly.
4. Sensing probe and micro cross slide.

### *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.

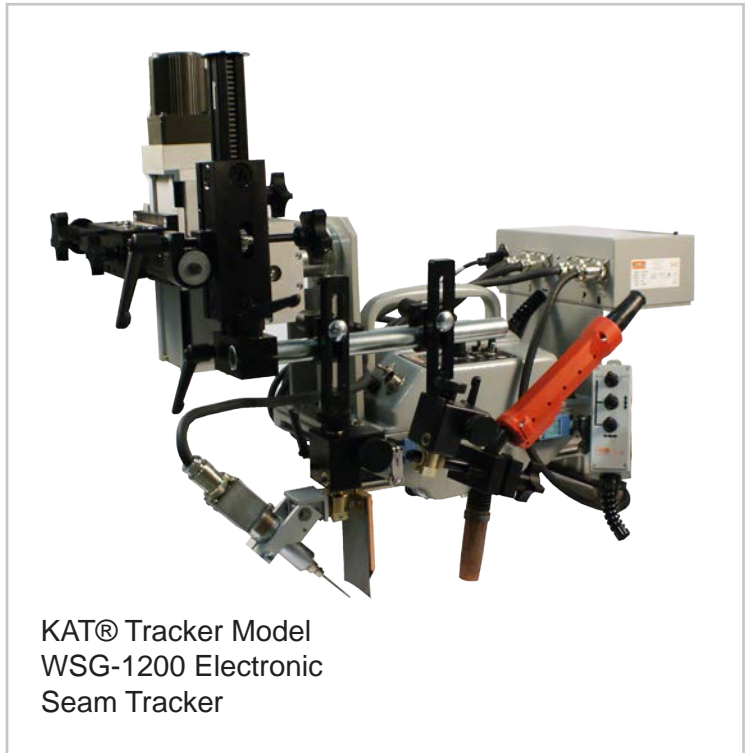
#### **MODEL WSG-1200:**

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.



KAT® Tracker Model  
WSG-1200 Electronic  
Seam Tracker

**KAT® Trackers are precise, dependable and highly versatile. They can be used with a wide range of Gullco accessories/ systems such as oscillators, bridge units, multiple torch assemblies etc. Contact Gullco with your requirement.**



Model WSG-2200 Mounted  
on a side beam carriage  
equipped with a submerged  
arc head

## 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)

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:

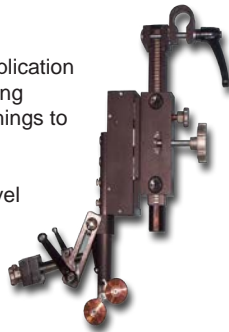
Designed for use with the Gullco KAT® Travel Carriage to accurately maintain the required, pre-set distance between the gun or torch and the workpiece in automated welding and cutting operations.

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.



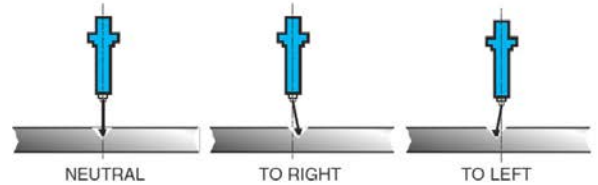
\*Other float distances available on request.

## Sensing modes that cover virtually all tracking requirements

### GULLCO KAT® TRACKERS MODEL WSG-1200 & 2200 SINGLE DIRECTION SENSING

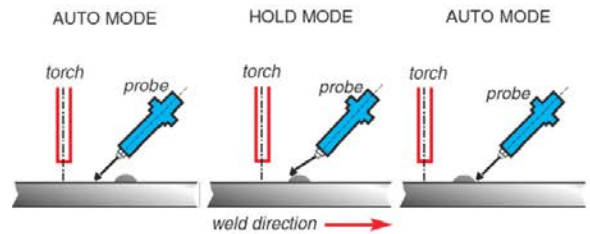


### TWO DIRECTIONAL RIGHT/LEFT SENSING



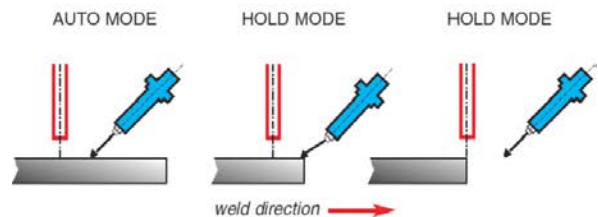
plus...

### WELD TACK DETECTION



plus...

### END OF PLATE DETECTION





## SEAM TRACKER SLIDES

<b>Part Number</b>	WS-250-100-S-4	WS-250-100-S-6
<b>Stroke</b>	4" (101 mm)	6" (152 mm)
<b>Capacity</b>	40 lbs (18 kg)	40 lbs (18 kg)
<b>Moment Load</b>	217 lbf.in (250 kgf.cm)	87 lbf.in (100 kgf.cm)

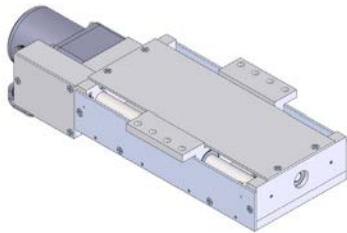
<b>Part Number</b>	WS-250-100-L-8	WS-250-100-S-6
<b>Stroke</b>	8" (203 mm)	12" (304 mm)
<b>Capacity</b>	40 lbs (18 kg)	40 lbs (18 kg)
<b>Moment Load</b>	868 lbf.in (1000 kgf.cm)	868 lbf.in (1000 kgf.cm)

<b>Part Number</b>	WS-250-100-L-8	WS-250-100-S-6
<b>Stroke</b>	8" (203 mm)	12" (304 mm)
<b>Capacity</b>	99 lbs (45 kg)	99 lbs (45 kg)
<b>Moment Load</b>	217 lbf.ft (3000 kgf.cm)	217 lbf.ft (3000 kgf.cm)

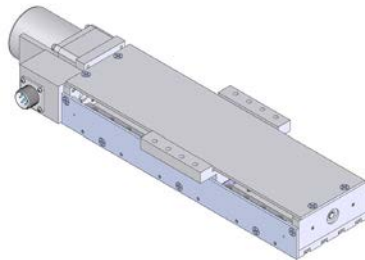
<b>Part Number</b>	WS-250-200-S-6
<b>Stroke</b>	6" (152 mm)
<b>Capacity</b>	99 lbs (45 kg)
<b>Moment Load</b>	694 lbf.in (800 kgf.cm)



**WSG-2200 Slide**



**WSG-1100 Slide**



KAT, KBM, MOGGY, KATBAK & SAM are registered trademarks of Gullco Enterprises Limited

Distributed by:

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL DIMENSIONS ARE NOMINAL

**GULLCO**

**CANADA - GULLCO INTERNATIONAL LIMITED**

Phone: 905-953-4140

Fax: 905-953-4138

e-mail: sales@gullco.com

**U.S.A - GULLCO INTERNATIONAL INC.**

Phone: 440-439-8333

Fax: 440-439-3634

e-mail: ussales@gullco.com

**EUROPE - GULLCO INTERNATIONAL (U.K.) LIMITED**

Phone: +44 1257-253579

Fax: +44 1257-254629

e-mail: uksales@gullco.com

**AUSTRALIA - GULLCO INTERNATIONAL PTY LIMITED**

Phone: 61 (0)7 3348 5515

Fax: 61 (0)7 3348 5510

e-mail: ausales@gullco.com

**INDIA - GULLCO INTERNATIONAL INDIA PVT LIMITED**

Phone: +91-20-2551-1433

Fax: +91-20-2551-1433

e-mail: indsales@gullco.com

**CHINA - GULLCO INTERNATIONAL SHANGHAI LIMITED**

Phone: +8621-50460341

Fax: +8621-50463554

e-mail: c.zhang@gullco.com

**SINGAPORE - GULLCO INTERNATIONAL LIMITED**

Phone: +65-9385-4468

e-mail: benny.lim@gullco.com

**LATIN AMERICA - GULLCO INTERNATIONAL LIMITED**

Phone: 55-11-99485-1336

e-mail: rogerio.macedo@gullco.com

**GERMANY - Stuch Schweißtechnik GmbH & Co. KG**

Phone: +49(0)203-729495

Fax: +49(0)203-729496 e-mail: info@stuch-schweisstechnik.de

**GULLCO.COM**

ST-13-01