WELDING AND CUTTING AUTOMATION

The E.A.H.S is a standalone unit meaning it does not interface with the wire feeder. The arc activation trigger signal of the welding equipment that is used to start/stop the welding process must come from a separate piece of equipment, i.e. customer supplied control or other Gullco equipment. This advanced Electric Arc Height Sensor package uses Gullco's sophisticated, yet easy to use, E.A.H.S. remote pendant control, in conjunction with a 4" linear slide assembly and current sensing control box, to provide precision arc height control during the welding process.



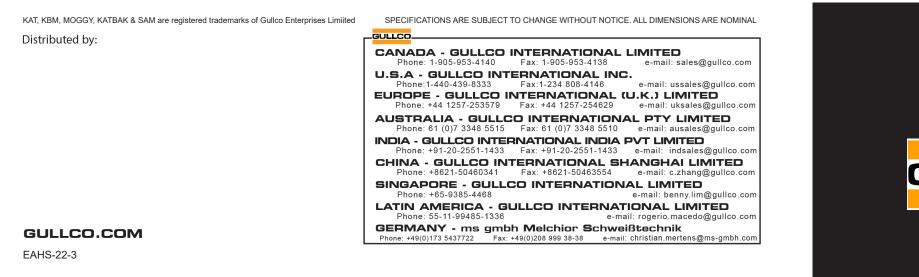
BENEFITS DERIVED FROM AUTOMATED TORCH HEIGHT CONTROL:

- Increased productivity and weld quality
- Pre-programmed control of key welding perameters
- Minimized material distortion
- Reduced consumable waste
- Improved weld aesthetic
- No bulky probes to install or maintain
- Independent control of all welding torch movements in the vertical plane
- Easy integration for automated applications
- Adaptable in confined areas
- The slide can be installed in any position using multiple mounting positions and optional brackets





TORCH HEIGHT CONTROL THROUGH VOLTAGE OR CURRENT DETECTION ACCURATE ARC DETECTION AND PRECISION CONTROL OVER WELD PARAMETERS





ELECTRONIC ARC HEIGHT SENSOR - E.A.H.S





KEY FEATURES

- Two modes allowing Constand Voltage and Constant Current to provide height tracking for both MIG, TIG and plasma applications
- Lightweight and durable components to reduce operator fatigue and increase torch height tracking automatically.
- Standard slide features engraved top, bottom and center marks for quick slide position reference to aid setup
- Easy setup and torch calibration
- Sensor control box design allows the operator to use their standard existing welding cables
- Extremely accurate arc detection
- Torch height adjustments with 0.001inch resolution
- Automatic torch retraction at the end of operation allows for easy cleaning and repositioning during repeatable applications

FEATURES:

EAHS Control

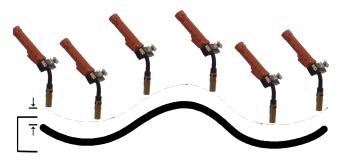
- **Compact and Lightweight**
- Can be stored up to 25 ft. away from the application
- Status LEDs, clear and visible during operation

Operator Pendant

- OLED graphics display for setup and programming
- Jog switch for simple and precise torch adjustment
- Program, Mode and Edit switch for quick perameter setup and adjusment

4`` Slide Assembly

- Find home function allows the EAHS to automatically detect the maximum slide adjustment prior to operation
- 12lbs of vertical and horizontal slide capacity
- 0.001 inch adjustment resolution



The E.A.H.S. works by measuring welding current and comparing it to a target value that has been set by the operator and automatically adjusting the height of the welding gun to maintain the target welding current or voltage.

This equipment is intended to precisely and automatically control the torch height throughout the process, by detecting small changes in either voltage or current and adjusting the torch holder mounted to the slide to maintain optimal torch tip to work piece distance.

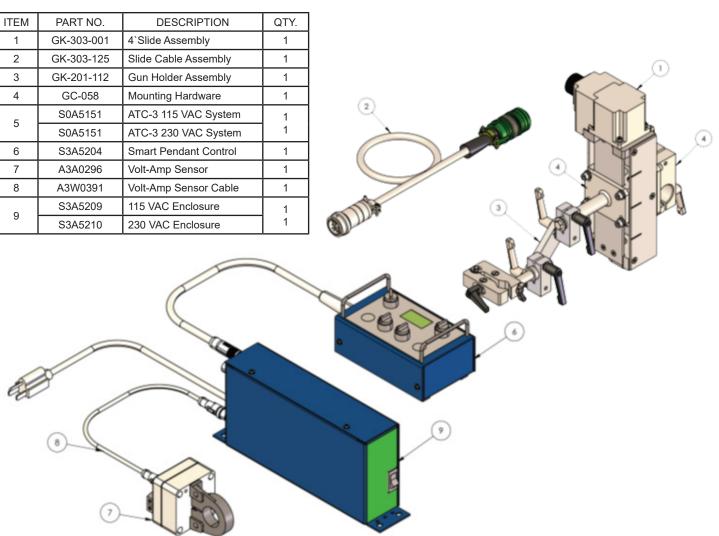
The longitudinal movement can be obtained from either the work piece traveling while the linear remains stationary, or, by a KAT® carriage carrying the E.A.H.S. equipment down the length of the work piece.

Combining the welding gun height control with the precision controlled travel speed of the KAT® carriage will ensure high quality welds are produced.

	ATC-3 Control Enclosure Specifications				
Enclosure Dimensions		4.75"H X 2.25"W X 11.00"L (121 mm x 57 mm x 279 mm)			
	Mounting Dimensions	1.25" W x 10.25" L, four 0.25" diameter hole			
	Weight	4 lbs (1.8 kg)			
	Operating Temperature	-10°F (-23°C) to +140°F (+60°c)			
	Dwell Time	0.02 to 2.0 seconds (left and right)			
	Velocity	100 – 6700 steps/sec			
	Peak Motor Current / Phase	2.0 – 6.0 amps			
	Two Remote I/O Outputs	Isolated Solid State Relay (SSR) 28VDC max @ 100 ma			
	Two Remote I/O Inputs	Isolated 28 VDC input @ 10 ma.			

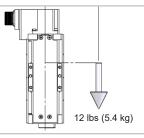
ATC-	ATC-3 Operator Pendant Specications		
Enclosure Dimensions	2.0"H x 3.5"W x 5.75"L (50mm x 89mm x 147 mm)		
Mounting Dimensions	Hand held		
Weight	3 lbs (1.4 kg)		
Operating Temperature	-10°F (-23°C) to +140°F (+60°c)		
Power Requirements	24 VDC @ 0.2 amps		

	ITEM	PART NO.	DESCRIPTION	QTY.
	1	GK-303-001	4`Slide Assembly	1
	2	GK-303-125	Slide Cable Assembly	1
	3	GK-201-112	Gun Holder Assembly	1
	4	GC-058	Mounting Hardware	1
	5	S0A5151	ATC-3 115 VAC System	1
		S0A5151	ATC-3 230 VAC System	1
	6	S3A5204	Smart Pendant Control	1
	7	A3A0296	Volt-Amp Sensor	1
	8	A3W0391	Volt-Amp Sensor Cable	1
	9 .	S3A5209	115 VAC Enclosure	1
		S3A5210	230 VAC Enclosure	1



	4" S
Slide Dimensions	10.25"H
Mounting Dimensions	4.75"H >
	1/4" (6.3
Weight	5.5 lbs (
Slide Capacity	12lbs (5
Max Travel Distance	4" (101.
Travel Speed	Progran

12LB VERTICAL SLIDE CAPACITY*

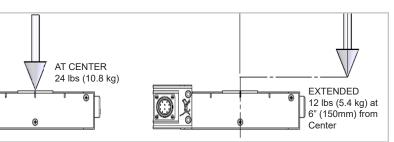




Slide Assembly

H x 5.1"W x 2.375"L (260.3mm x 129.5mm x 60.3 mm) x 2.375"W (120.6 mm x 60.3 mm) .3 mm) hole x 10 @ 1.888" (47.9 mm) TYP (2.49 kg) 5.44 kg) .6 mm) mmable 1 IPM (254 mm/min) to 45 IPM (1114 mm/min

12LB HORIZONTAL SLIDE CAPACITY*



* For other configuration capacities, please consult your Gullco sales representative or request info at www.gullco.com