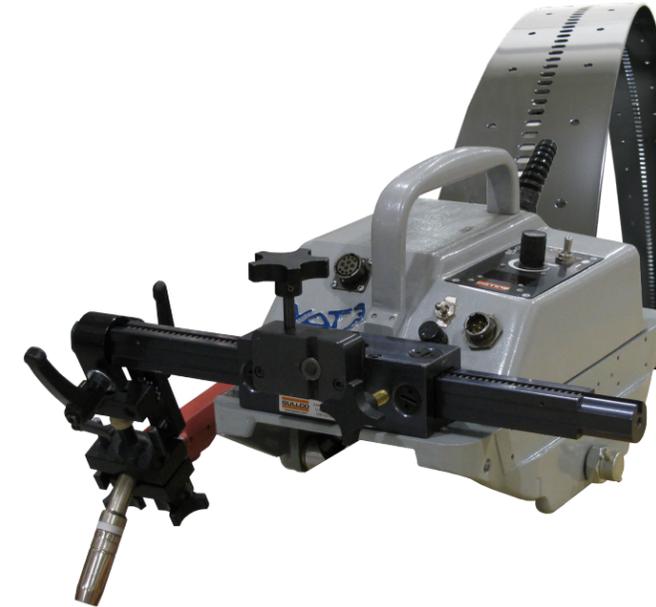




WELDING AND CUTTING CARRIAGE - KAT® FOR FLEXIBLE TRACK



The Gullco Flexible KAT® is used throughout the world to automate a wide variety of welding and cutting operations.

It is a durable, reliable precision travel carriage designed for use on flexible track which enables it to operate on straight or curved surfaces along any position.

Gullco manufactures several systems and accessories designed for use with the Flex KAT® making it one of the most versatile pieces of welding/cutting automation equipment available.



MULTI-PASS WELDS



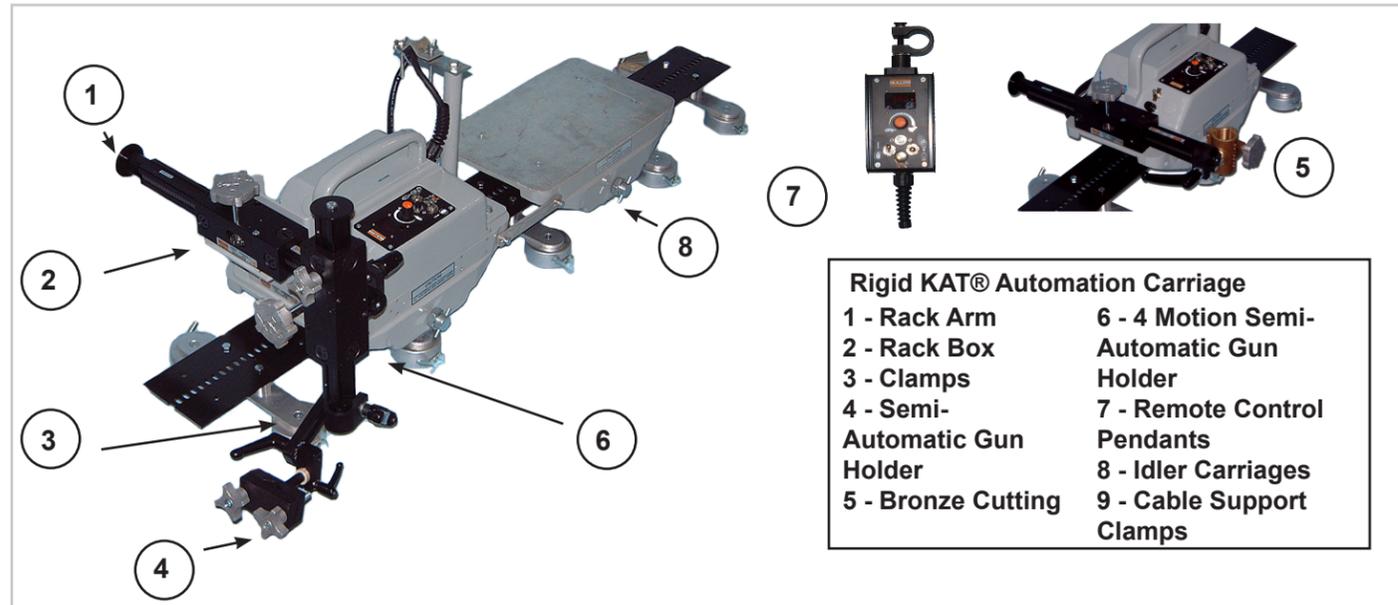
CLADDING OVERLAY



ALL POSITION

Reliable automation that improves quality and reduces costs in welding and cutting operations

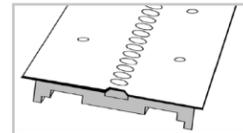
ALL POSITION - PRECISE CONTROL - VARIABLE



- Rigid KAT® Automation Carriage**
- |                               |  |
|-------------------------------|--|
| 1 - Rack Arm                  | 6 - 4 Motion Semi-Automatic Gun Holder |
| 2 - Rack Box                  | 7 - Remote Control Pendants            |
| 3 - Clamps                    | 8 - Idler Carriages                    |
| 4 - Semi-Automatic Gun Holder | 9 - Cable Support Clamps               |
| 5 - Bronze Cutting            |  |

**FLEX KAT® TRACK AND MOUNTING DEVICES**

Gullco Heavy Duty Flexible Track is specifically designed for use with Gullco Flexible KAT® all position travel carriages. Flexible Track is made from specialty tempered spring steel and can be easily mounted to conform with curved surfaces. This Flexible Track can be used in applications involving curved surfaces 60" (1524 mm) diameter and greater. The track is securely mounted on ferrous materials using round or square magnet assemblies and vacuum mount assemblies for non-ferrous materials.



Flexible-Track Stiffener  
Extruded aluminum for attachment to Gullco Flexible Track sections for "rigid track" applications. Supplied in 8 ft. sections



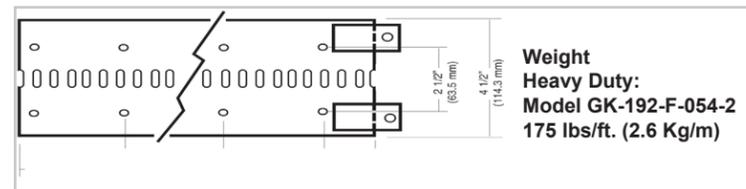
**KAT® FLEXIBLE-TRACK HEAVY DUTY FLEX-TRACK**  
Model GK-192-F-054-2  
Supplied in 8 ft. (2438 mm) lengths. Also available in custom lengths up to 8 ft. (2438 mm) with interlocking ends to facilitate complete circles for diameter 60" (1524 mm), O.D. & I.D. and over. Tracks are easily joined for continuous runs. Other lengths available on request.



Rare Earth On/Off Track Magnet



Vacuum Track Mounting Device



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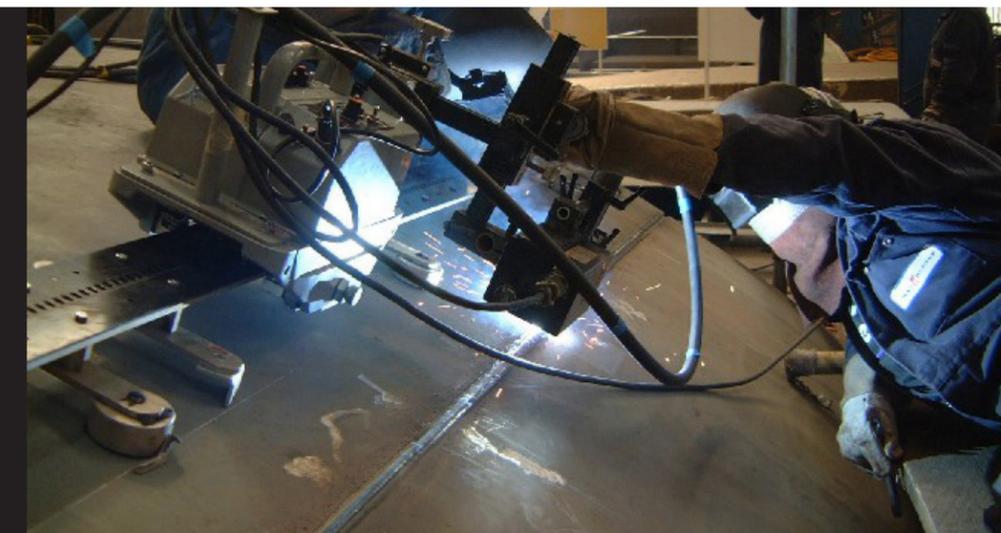
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## AUTOMATED WELDING SYSTEM

The Gullco Flex KAT® Carriage is used throughout the world to automate and improve the quality and efficiency of single or multiple "head" welding and cutting operations. Welding guns or cutting torches are mounted on the KAT® carriage as it moves along Gullco Flex Track at precisely controlled speeds along the desired path in forward or reverse direction. Gullco's Flex KAT® carriage enables welding guns or cutting torches to operate with precise motion from start to finish regardless of the number of passes or the work pieces involved. This improves the quality, efficiency and repeatability of the process. Poor or awkward accessibility, operator fatigue, or inconsistent workmanship are eliminated.

This unit is designed for operation on curved surfaces as the flexible track can be positioned to follow the contour of the work piece. The self-aligning wheel system of the carriage grips the top and bottom of the track, enabling it to travel along any plane. The adjustable wheel assembly keeps the carriage snug to the track, while allowing it to be easily mounted and removed from the track at any point. The positive drive of the KAT® is obtained from a uniquely designed sprocket that engages with slots in the track, driven by a low voltage permanent magnet motor and gear-head power unit assembly.

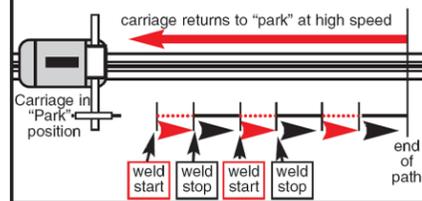


### AUTO-WELD CARRIAGE SYSTEM

The KAT® Auto-Weld Carriage option enables a wide variety of automated welding and cutting overlay cycles that can be repeatedly performed. The GSP control in this unit controls travel direction and speed and length of travel path and synchronizes them with precise weld start and weld stop settings. This travel carriage is pre-drilled for mounting



#### Typical Use - Stitch Welding

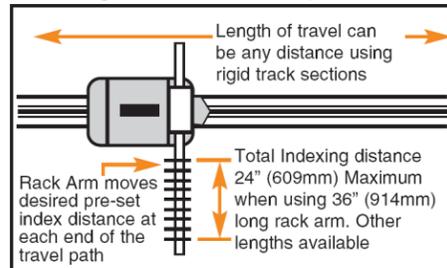


Auto-Weld accessories (sold separately). It is ideal for stitch welding and seam welding applications where repeatability is desired. The reliability and precision of this automated welding and cutting system reduces cost, adds efficiency and improves quality.

**A**

### CLADDING / OVERLAY SYSTEM

The Indexing option Flex KAT® uses a GSP control that combines control of the carriage movement and start/stop parameters with precise indexing of the torch at the end of the path. This fully automates and increases the efficiency of overlay welding operations, flame spray work, hard facing etc. At the end of the path the travel carriage

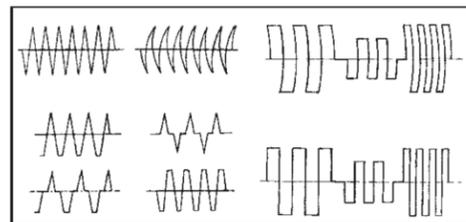


automatically stops and reverses direction while at the same time indexing the gun/torch. It can be programmed to weld or not weld during indexing. Carriage is pre-drilled for quick mounting of the indexing unit (sold separately).

**I**

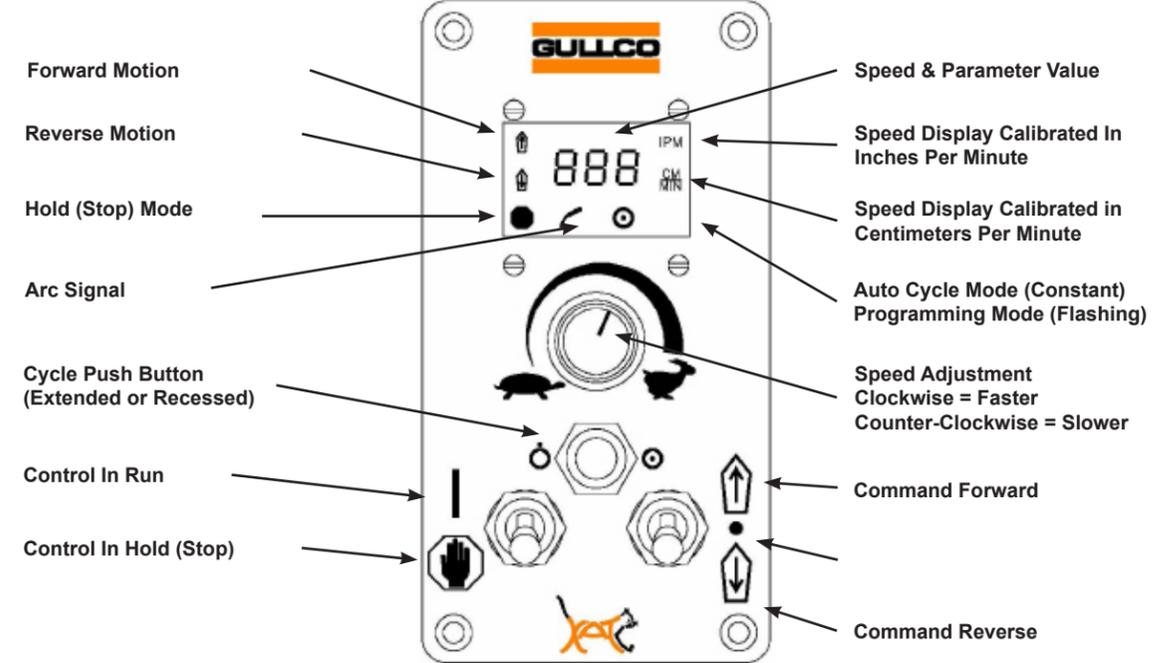
### OSCILLATION WELDING SYSTEM

The oscillator is available with a linear, pendulum, tangential or step (square pattern) motion to the welding gun with adjustable motorized stroke width, infinitely variable stroke speed adjustment, three independent position dwell times, motorized centre line positioning and automatic wire feed start and travel start/stop interface.



**O**

The Gullco Standard Platform range of controls have switching for forward / neutral / reverse, run / stop, Manual / Auto & program variable increment/decrement (where applicable) and a rotary encoder for speed control. This microprocessor based, 24 volt DC motor control can be supplied to provide a variety of "optional" functions such as indexing, weld oscillation and auto-weld. The selected "option" function and carriage travel speed/ direction are directed by a single GSP control. This ensures high levels of accuracy, quality and reliability.



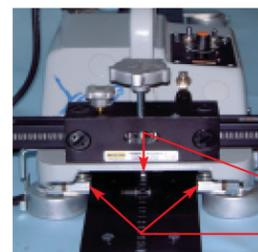
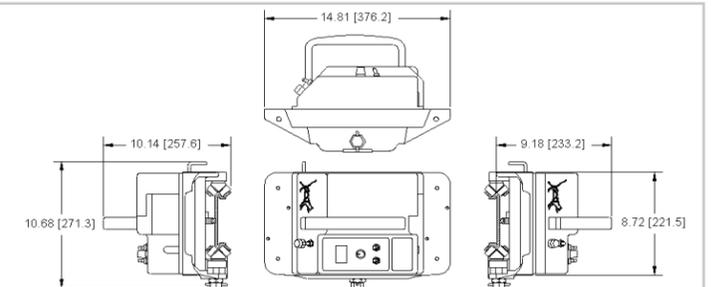
Select a speed, voltage and option to configure a KAT® specifically suited to your needs

**GK-200-** [ ] [ ] [ ] - [ ]

SPEED RANGES		VOLTAGES	
MODEL	SPEED RANGE	MODEL	INPUT SUPPLY
FL	0.8 to 25.8 IMP (2 to 65.4 cm/min)	A	42 VAC
FM	1.5 to 51.5 IPM (3.9 to 131 cm/min)	B	115 VAC
		C	230 VAC

### SPECIFICATIONS

**Weight: 29 lbs (13 kg)**  
**Vertical Load Capacity: 100 lbs (45 kgs)**  
**Drive Motor: 24 VDC permanent magnet gear motor**  
**Supply Voltage: 42, 115, 230 VAC, single phase 50/60 Hz., 200 Watts**  
**Complies With: CSA & CE Certification**



Unique Drive System and Wheel Assemblies Enable Travel in All Positions Including Overhead



Ball studded drive sprocket engages apertures in the track

Self-aligning wheel assemblies run on both top and bottom of the track... enabling operation on any plane.