GMH

Automatic joint tracking system for most joint types

The GMH joint tracking controller together with ESAB servo slides and a sensor unit forms a robust and easy to use joint tracking system for automatic welding.

GMH

The GMH system minimizes repair welding and adjustments after welding with the arc always in the optimal position. The general quality will be kept on an even level and the operator does not need to focus on the weld head and its position.

The operator can then keep an eye on the entire installation and contribute to a non-interrupted welding production by adding flux and prepare for changing the wire spool well in advance.

System contents

The welding head is mounted on a motorized double servo slide where the head can be moved up-down and left-right. The sensor is the most vital part in the system which gives information to the control system how to adjust the slides to keep the arc in the optimal position. There are a number of different mechanical sense fingers for different applications. Inductive sensors can also be used.

Operation

The operator uses the joystick to guide the welding head and mechanical sensor finger into correct position. No programming is required. The unit is set in track mode and the welding can start.

Curved details can be welded fully automatic with GMH as the guiding tool, as long as they are within the working range of the servo slides.

Applications

- Shipbuilding (panels, sub-components)
- Power generation (wind towers, boilers, vessels)
- Infrastructural components (beams, bridges)
- Off-road vehicles (excavators, dump trucks)

GMH is available in two versions:

With control panel on the front
Suitable for ESAB's A2 / A6 tractor automats and A2 / A6 beam travelling carriage. Automatic solutions with short distance between welding head and GMH control box and where the operator has a good overview of weld joint and welding head without moving around.

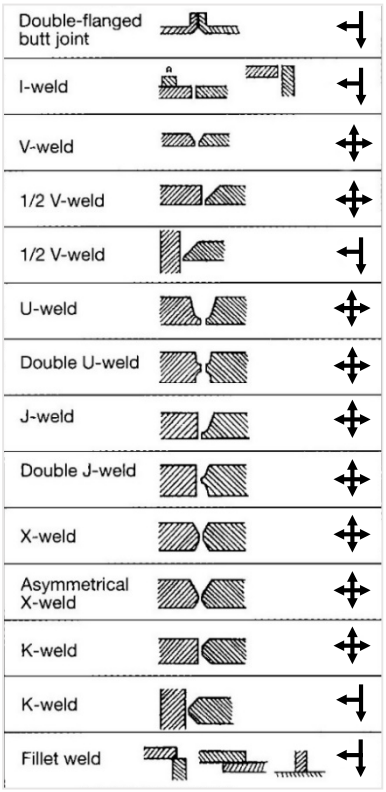
With remote control (no control panel on the front)
Suitable for Column & Booms and large automatic installations with long distance between welding head and GMH control box and when the operator must move around in order to get a good view of the welding joint.

- **Easy to use, no programming required**
- **Robust**
- **Flexible with a remote control**
- **Very short set-up times**
- **Gives a less stressful environment for the operator**
- **Minimize operator errors**

Technical data

Control voltage	42V AC, 60 Hz
Fuse, supply voltage	10A (slow)
Max motor current	6A 100%
Armature voltage	40V DC
Field voltage	60V DC
Current limit	15A
Dimensions lxwxh, mm	9.6"(246mm)x9.25"(235mm)x10.7"(273m)
Weight, kg	13.2 lbs (6.0 kg)
Enclosure class	IP 23
Remote control	
Dimensions lxwxh, mm	205x135x118
Weight, kg	2.7
Enclosure class	IP 23
Sensor (Standard)	
Sensitivity	±0.1 mm
Weight, kg	13.2 lbs (0.6)
Mini Cross saddle and support for the saddle	
Setting length	80 mm
Weight, kg	1.6
Intermediate transformer	
Input voltage	110V 60Hz
Output voltage	42V 660VA
Dimensions lxwxh, mm	12.1"(308mm)x8.7"(223mm)x5.23"(133mm)
Weight, kg	34.3 lbs (15.6 kg)

Types of weld



Ordering information

GMH System, complete	0460 884 880
consisting of	
GMH with remote control (0460 698 880)	
Sensor with finger (0416 688 881)	
Sensor cable L = 5.0 m (0416 749 988)	
Mini cross saddle + sensor support (0416 739 880)	
GMH System, complete	0460 884 881
consisting of	
GMH with control panel (0460 503 881)	
Sensor with finger (0416 688 881)	
Sensor cable L = 5.0 m (0416 749 988)	
Mini cross saddle + sensor support (0416 739 880)	

Components & Accessories

GMH without control panel	0460 503 880
GMH with control panel	0460 503 881
GMH with remote control	0460 698 880
Sensor with finger (Requires cable 0416 749 9xx)	0416 688 881
Mini Cross saddle + sensor support	0416 739 880
Remote control	0460 570 880
Protective rubber boot for sensor	0412 013 001
Standard finger	0146 586 001
Finger with ball	0416 719 001
Intermediate transformer	0561 006 829
Sensor cables for sensor 0416 749 881 (post June 2019)	
Sensor cable, L = 5.0 m	0416 749 988
Sensor cable, L = 9.0 m	0416 749 989
Sensor cable, L = 19.0 m	0416 749 980
Sensor cables for sensor 0416 749 880 (pre June 2019)	
Sensor cable, L = 5.0 m	0416 749 888
Sensor cable, L = 9.0 m	0416 749 889
Sensor cable, L = 19.0 m	0416 749 880
Motor cable, L = 5.0 m	0460 745 881
Motor cable, L = 10.0 m	0460 745 882
Motor cable, L = 19.0 m	0460 745 884
Servo slides See separate fact sheet	0334 333 xxx

Types of fingers for different applications

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