STEELBEAST®

JTS

AUTOMATIC JOINT TRACKING SYSTEM

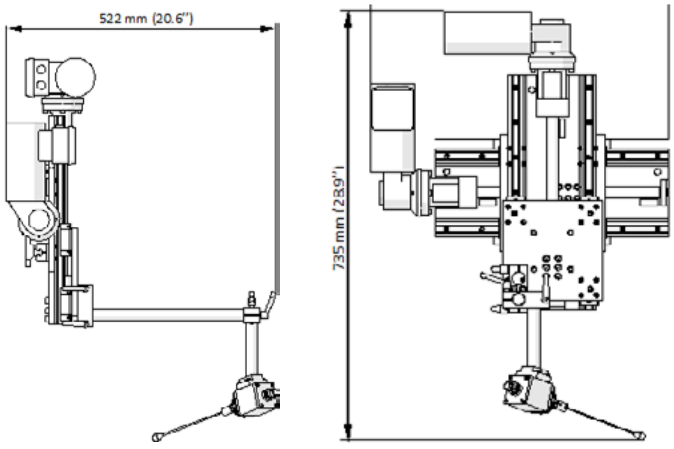
The **Joint Tracking System** automatically guides the welding torch along the weld joint on two axes. It is compatible with GMAW, GTAW, FCAW, and SAW processes and can be integrated with column and boom manipulators, gantry welding systems, or other custom setups.

This electro-mechanical seam tracking system maintains precise torch alignment with the weld groove set during initial calibration. Any change in the tracking sensor's angle generates an electrical signal that actively compensates the torch position, enabling movement of up to 200 mm on both axes within the standard motorised cross-slide system. The movement range can also be customised upon request.

Features and benefits:

- **Standard movement range:** 200 × 200 mm
- **High-precision electro-mechanical tracking:** Linear guides ensure smooth, accurate two-axis motion (up-down, right-left)
- **Real-time position compensation** relative to the welding groove
- **Reduced welding defects** and grinding through consistent torch alignment
- **Customisable cross-slide** tailored to customer requirements
- **User-friendly control pendant** for easy operation
- **Single-axis tracking option (Z-axis only)** ideal for butt welding
- **Compatible with welding oscillators** for enhanced performance
- **Versatile application:** Suitable for fillet and butt welding in tanks, vessels, and structural beams
- **Optional oscillation unit** available

JTS Dimensions:



JTS can be used with Oscillator

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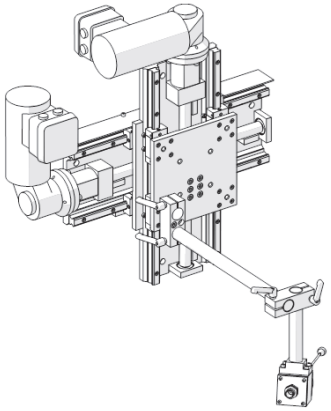
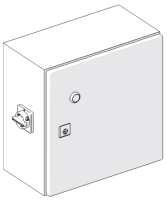
TECHNICAL SPECIFICATION FOR JTS - JOINT TRACKING SYSTEM 200 X 200	
Voltage	230 V, 50/60 Hz + PE
Power	500 W
Cross slide vertical movement range (up-down axis)*	200 mm (7.9'')
Cross slide horizontal movement range (right-left axis)*	200 mm (7.9'')
Cross slide vertical movement speed (up-down axis)	360 mm/min (14.2 in/min)
Cross slide horizontal movement speed (right-left axis)	360 mm/min (14.2 in/min)
Required ambient temperature	5–40°C (41–104°F)
Weight	45 kg (100 lbs)
Integration with external safety devices	YES

*** Movement range can be customized upon customer's request.**

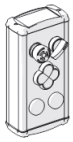
Main components of the JTS:



Control Cabinet

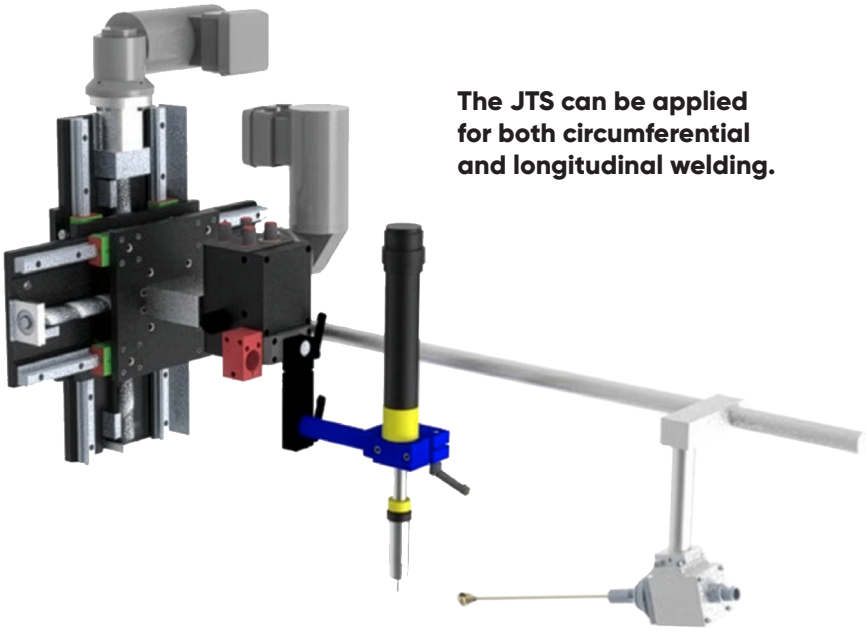


Control pendant



Set of tracking sensors

The JTS can be enriched with an oscillator and visual system.



The JTS can be applied for both circumferential and longitudinal welding.

Longitudinal welding (tanks, beams)

Circumferential welding (tanks, vessels)