Robotic Welding Line
For Structural Steel

**Configurations**

---

**48” configuration**

---

**General Welding Specifications**

- Typical welding speed - Fillet welds (2P)
  - 17 inches/min for 1/4" weld
  - 22 inches/min for 3/16" weld

- Joint detection: Laser Touch Sensing

- Process and position: MCAW - Spray and pulse transfer - Horizontal (2T)

- Wire classification:
  - AWS A5.18, A5.18M, E70C-GM H4 / CSA W48B-06, E491C-6M-UH4
  - E5441-1, E5411, E71T-11

- Shielding gas: All parts and beam must be clean with low scale level

**Recommended Configuration**

- Weld types: Fillet welds

- Weld size product: 3/16” to 1/2" (4.8mm to 12.7mm)

- Welding path: Linear

- Welding preheating: Continuous and stitch (The weld strength variables must be defined in the 3D mode)

- Number of passes: 1-3 (single pass up to 8mm)

---

**Contact Us**

T: 819 693-9682
info@beam-master.com
www.beam-master.com
Why automate your plant?

The typical steel fabrication shop will spend up to 30% of the entire shop fabrication time on welding operations. Along with fitting, it’s the most labour intensive operation of the entire fabrication process.

Have you invested in automated equipment for beam and part preparation? It’s now time to bring your shop to the next phase: Robotic Welding.

**Increase Production**
Automated production flow from CAD to production.

**Consistent Quality**
Robotic brings high-quality and repetitive results.

**Automatic**
No more labour shortage. Reassign current welders to complex tasks.

**Easy Implementation**
Small footprint design with a modular design.

**Flexible**
Modular configurations. One- or two-zone operation. With or without rotators. Third and fourth station can be used for sub-assemblies.

**Adaptable**
Works with non-perfect parts. Welding program is offset to adjust to fitting tolerances. Joints are found by laser touch.

**Support**
On-Site technical support. Offline 24h technical support.

---

### Operation Mode: 3 Easy Steps

1. **Load Robot Sequence**
2. **Load Beam**
3. **Welding Execution**

---

### Highly Efficient Rotators

- Feeding
- Cutting
- Marking
- Drilling
- Fitting
- Welding
- QC
- Painting
- Mat. handling
- Maintenance

---

### Reliability Welding Robot

Robots were designed to work in harsh conditions for years with minimal maintenance.

---

### Safe Operations

Laser curtains ensure a safe working environment for the operators.

---

### Be in control

An easy-to-use interface is provided to build production lists and monitor the equipment performance.

---

### Productivity x2

While the robot is busy welding in one zone, an operator can safely fit, tack and flip in the other zone.

---

### Efficient Rotating Units

Automatic beam flippers ensure maximized productivity.