TREGASKISS Robotic Welding System User Guide

Contents

A QUICK GUIDE

TO PREVENTING AND FIXING COMMON ROBOTIC WELDING SYSTEM FAILURES

Failures in robotic welding systems can lead to lost productivity and poor weld quality. Keep this reference handy to prevent problems

1 BURNBACK AND CONTACT TIP WEAR

- Trim the gun liner according to the manufacturer's recommendations.
- Use high-quality welding wire that feeds straight.
- Set the drive roll tension properly to prevent wire cast issues.
- Always use the proper welding parameters for the application.

2 BROKEN REAMER CUTTER BLADES

- Be certain the nozzle is concentric to the cutter blade during reaming and the insertion depth on the nozzle goes past the gas holes on the diffuser.
- Apply anti-spatter liquid and /or increase reaming frequency to prevent excessive spatter buildup in the nozzle (which can break cutter blades).
- Securely connect ground cables. Poor grounding can lead to excessive spatter in the nozzle.

3 LOSS OF TOOL CENTER POINT (TCP)

- Avoid cross-threading the contact tip, as this will cause it to be at an angle.
- Tighten consumables to the manufacturer's torque specifications.
  The general rule is one quarter turn past finger tight.
- Inspect the clutch for movement and replace if it's worn.
- Use an inspection fixture to adjust the tolerance of the neck to the TCP after an impact.

4 BROKEN DISCS ON ROBOTIC GUN

- Set the robot path correctly to avoid collisions.
- Follow the manufacturer's torque specifications to ensure the disc screws are tightened in the correct order and to the proper tension.

5 INCORRECT TOOL PATH

- Program the robot so the arm, robotic MIG gun and cable are clear of tooling and the weld cell wall –this prevents worn cables, disc breakage and bent necks.

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Documents / Resources

	TREGASKISS Robotic Welding System [pdf] User Guide Robotic Welding System, Robotic Welding, Welding System, Robotic, Welding

References

- User Manual