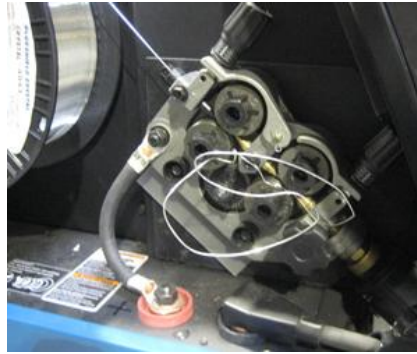




WIRE NESTING PROBLEMS article by Shri. Ajay Goel - Welding Consultant - Technical

This problem generally occurs when using soft wire consumable especially Aluminium wires

When dealing with wire nesting in MIG welding (Metal Inert Gas welding), it typically refers to issues with the welding wire feed system. Here's how you can troubleshoot and solve wire nesting problems in MIG welding:



1. **Check the wire spool:** Ensure that the welding wire spool is properly mounted and secured. If the spool is not mounted correctly or if it's loose, it can cause the wire to feed irregularly and lead to nesting.
2. **Inspect the drive rolls:** The drive rolls are responsible for pulling the welding wire from the spool and feeding it through the welding gun. Make sure the drive rolls are clean and in good condition. Dirt, debris, or worn-out drive rolls can cause the wire to feed improperly, resulting in nesting.
3. **Verify the tension settings:** Adjust the tension on the wire feeder according to the manufacturer's recommendations. Too much or too little tension can cause the wire to feed erratically and contribute to nesting issues.
4. **Check the liner:** The welding wire passes through a liner in the welding gun cable. Inspect the liner for any kinks, bends, or obstructions that could hinder the smooth feeding of the wire. Replace the liner if necessary.
5. **Trim the wire:** Sometimes, the welding wire can develop a sharp end or become flattened due to improper feeding, which can lead to nesting. Use wire cutters to trim the end of the wire to ensure a clean, smooth feed.
6. **Clear obstructions:** Occasionally, debris or spatter can accumulate in the wire feed mechanism or the welding gun, obstructing the smooth feeding of the wire. Clean out any obstructions and ensure the welding gun is clear before welding.
7. **Check for proper grounding:** A poor ground connection can sometimes cause erratic wire feeding behavior. Ensure that the workpiece and welding machine are properly grounded.
8. **Adjust the welding parameters:** Improper welding parameters such as wire feed speed and voltage can also contribute to wire nesting. Consult your welding machine's manual for recommended settings based on the material thickness and type of wire you are using.
9. **Practice good welding techniques:** Avoid abrupt starts and stops when welding, as this can contribute to wire nesting. Maintain a steady welding technique to ensure consistent wire feeding.
10. **Seek professional help if needed:** If you've tried troubleshooting and are still experiencing wire nesting issues, it may be helpful to consult a professional welder or contact the manufacturer of your welding equipment for further assistance.
11. By systematically checking these areas and ensuring proper setup and maintenance of your MIG welding equipment, you can effectively solve wire nesting issues and achieve smoother welding operations.