

CUSTOMER INFORMATION FORM

TOPIC: How to Overcome Arc Oscillation During Welding (Uneven Burning)

If the electrode burns unevenly and arc wandering occurs during welding, the following solutions should be applied:

- 1- There is arc blowing or one of the eccentric problems in the electrode as the source of the problem in question. To understand which one is the issue, turn the electrode 180° and weld again. If the arc direction changes according to rotation direction, there is an eccentric defect in the electrode; but if the arc direction remains the same, there is arc blow .
- 2- To solve arc blow issue:
 - a. Welding towards or against the grounding connection (switching of the grounding connection)

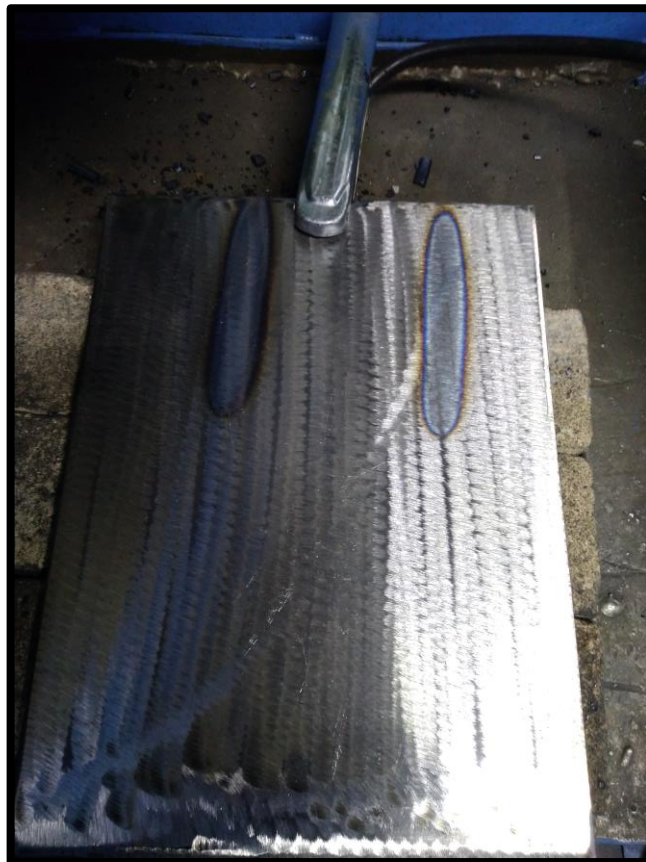


Figure 1: Connection style

- b. Using short arc length
- c. Proper angle to electrode usage
- d. Creating an extern field that exerts a force in the opposite direction to the force that causes arc blow.
- e. Demagnetizing the magnetized workpiece. Placing ferromagnetic masses in certain regions in the weld environment.
- f. Installing two chassis; close to the point where the chassis will end of the welding or at the beginning and the end of welding, generally to be applied in submerged arc welding.
- g. Using AC instead of DC, in case of other methods given above do not provide a solution.

3- Checking the grounding.

4- The electrode holding angle should be steeper than rutile (65°-70), between 75°-85°.

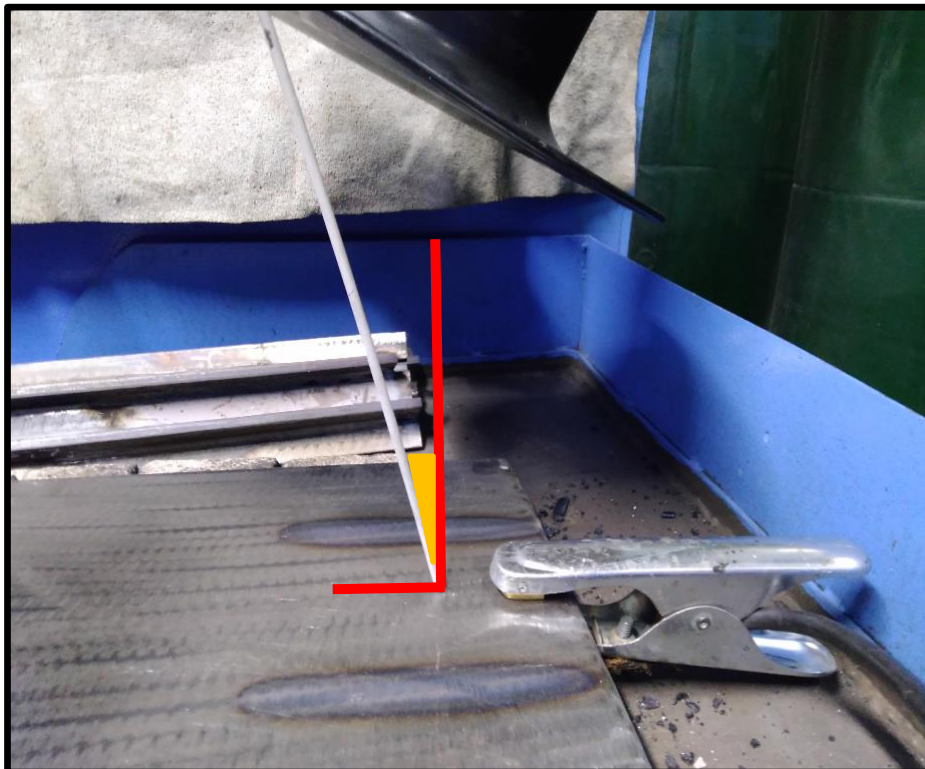


Figure 2: Proper Electrode Angle

5- Arc length should be kept very short for basic electrodes.