	VEDANTA LIMITED – VALUE ADDED BUSINESS	Format No.:	VL/IMS/PP2/MECH/WI/8
	INTEGRATED MANAGEMENT SYSTEM	Revision Date:	05.04.2021
	<u>Work instruction for Welder certification</u>	Revision No.:	02
		Page No.:	1 of 2

Objective :- Certification of welder to ensure quality job
Scope :- power plant & Accessories
Responsibility :- Engineer In charge
PPE –s to be used: Helmet, Safety shoes, Cotton cloth, hand gloves, apron and goggles,

Aspect – impact:

Scrap generation Resource Depletion
 Fumes Health

Hazards identified :

Electrical Hazard

- Shock While welding the plates

Mechanical hazard

- Fall of test plates

Physical hazard

- Fall of DP spray in eyes
- inhaling fumes

Human behavior

- No usage of PPE
- Alcoholism
- Over confidence
- Negligence

Safety precautions:


- Avoid using mobile phone while working.
- Use appropriate tools required for the job.
- After job always do proper housekeeping.
- Always prevent body from line of action of force.
- Perform proper communication verbal and non-verbal as required.

Work No 1 : Certification of welder (Internal Procedure)

- Check knowledge of the welder by asking questions related to welding quality, machines and safety.
- Check the Experience and the competency of the welder for carrying out the welding activity
- Weld the V notch plate and double V notch plate in all three directions i.e. in 3G & 4G positions with filler material of 3.15 mm with welding progression from downward for 4G and vertically upward for 3G.
- Check the welding quality of welding by guidelines given below:

GUIDELINE FOR POINTING SCHEME FOR WLEDERS QULAIFICATION:

Prepared & Reviewed:	Approved:	Issued:
HOD – Mech – PP	Head – MetCoke & Power	MR
05.04.2021	05.04.2021	05.04.2021

	VEDANTA LIMITED – VALUE ADDED BUSINESS	Format No.:	VL/IMS/PP2/MECH/WI/8
	INTEGRATED MANAGEMENT SYSTEM	Revision Date:	05.04.2021
	<u>Work instruction for Welder certification</u>	Revision No.:	02
		Page No.:	2 of 2

- Question & Answer session (Oral coordination) - Max 10 Points
- Safety care taken by welder - Max 10 Points
- Environmental care being taken - Max 10 Points
- Parameter selected/taken for welding - Max 10 Points
 - Current selection
 - Fixture selected etc
 - Time taken for welding
- **DP test clearance** - Max 10 Points

GUIDELINES FOR WELDING & TESTING:

- Current range selected by welder (Recommended 80-140 A)
- Travel Speed of welding (Recommended 50 mm/min)
- Length of continuity of welding (Recommended 5 cm)
- Check for the Quality of the Job carried out visually for any spits of welding
- Check the welding using Dry penetrate test for root welding & access the quality of welding.
- Welder can be Approved if the welder get min 30 points out of 50 as per below pointing scheme & should get a score of min 5 in DP test
- VALIDITY OF CERTIFICATION 1 YEAR. ALL NEW ENTRANTS TO PASS WELDING TEST.

Prepared & Reviewed:	Approved:	Issued:
HOD – Mech – PP	Head – MetCoke & Power	MR
05.04.2021	05.04.2021	05.04.2021

Soft copy does not require signature. This document is controlled by distribution through Sesa intranet portal. If hard copy is to be used, it shall be stamped with seal of **Controlled Copy** in Red.