

### Quality Assurance Plan (QAP)

**Item:** Oxygen Analyser Protection Probe

**Purpose:** To ensure the product meets all design, performance, and safety requirements.

Sl.No.	Component / Activity	Characteristics / Parameters to be Checked	Type of Check	Reference Document / Standard Record	Acceptance Criteria	Inspection by
1.	Raw Material Inspection	Material grade, Mill test certificate	Verification	ASTM / ASME / EN standards	MTC compliance	Supplier / QA
2.	Probe Body Machining	Dimensions, surface finish	Dimensional check	Approved drawing	within tolerance	QA
3.	Welding / Assembly	Weld joint type, electrode, visual & NDT	Visual & NDT (DPT / RT if required)	WPS / PQR	As per ASME Sec IX	QA
4.	Thermo-well / Housing	Dimensions, concentricity	Dimensional & visual	Drawing	± tolerance	QA
5.	Sensor Mounting Arrangement	Fitment & alignment	Visual & fit check	Assembly drawing	Proper fit	QA
6.	Leak Test (if applicable)	Leak tightness	Pressure / soap solution test	Internal procedure	No leakage	QA
7.	Final Inspection	Overall dimension, marking, tag number	Visual / dimensional	GA drawing	As per spec	QA
8.	Documentation	Test reports, QAP, data sheet	Verification	QAP / PO requirement	All docs verified	QA

*Anugraha Pandey*