

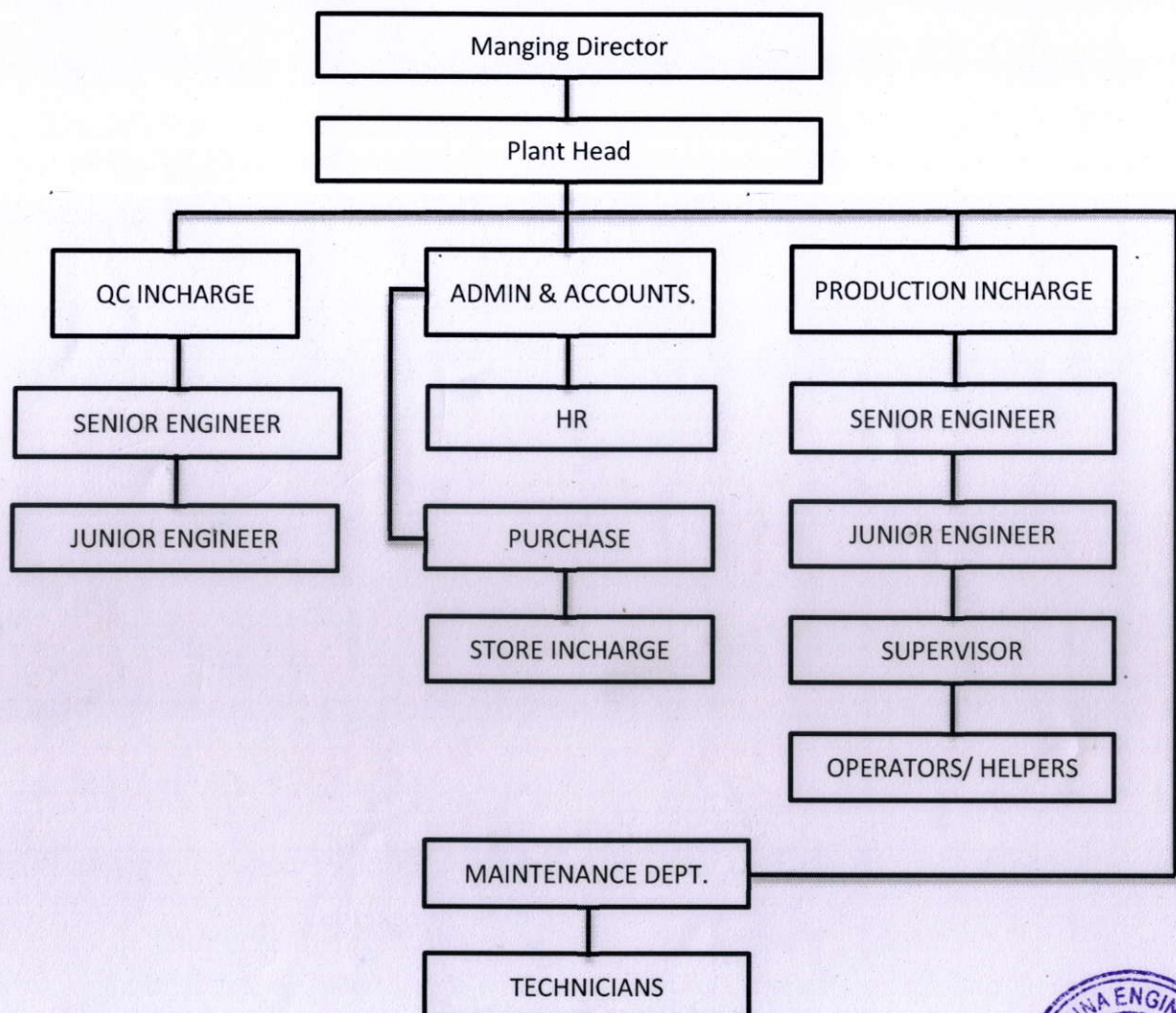
Annexure-A7

QAP FORMAT AS PER FOLLOWING –

0. Revision Sheet

QAP is a dynamic document which undergoes modifications due to system improvement, any production or quality process change, machinery and plant change etc. and hence requires clear documentation regarding revision particulars of the document. It aids in keeping track of various changes made by the firm regarding quality assurance procedures. Hence, status and reason for amendment/ revision must be part of QAP. Therefore, it is proposed to have a revision status sheet as Section '0' as a part of standard QAP format.

- A. ORGANISATION CHART- Organizational Chart, clearly indicating the Quality Control Set-up, role and responsibilities of key personnel.



B. QUALIFICATION/EXPERIENCE OF PERSONNEL:

(a) Details of qualification/experience of the quality control personnel specified in the STR/Specification of RDSO of the items applied for approval/renewal

SN	Requirements as per STR/Spec.				Details of personnel employed				
	STR/Spec. Para No.		Qualification Specified in Spec. / STR	Experience Specified in Spec. / STR	Name	Designation	Technical Qualification	Experience	Brief scope of responsibilities
	STR/Spec	Para							
					M. Shesha Rao	Quality Head	B.E., M.B.A	20 Years	Quality assurance, Quality Control
					K.Srinivas	Sr. Quality Engineer	B.Tech Mechanical	15 Years	Inspection of Fit-up & welding
					G. Praneeth	Quality Technician	B Tech in Mechanical	3 Years	In process Inspection

(b) Details of Manpower requirements other than quality control section as per Spec. /STR/IS

SN	Requirements as per STR/Spec./IS				Details of personnel employed				
	STR/Spec. Para No.		Qualification Specified in Spec. /	Experience Specified in Spec. /	Name	Designation	Technical Qualification	Experience	Brief scope of responsibilities
	STR/Spec./IS	Para							
1	7.5.3.1-4	4			Ramesh Krishna G	Managing Director	Graduate	27 Years	MD
2	7.5.3.1-4	4.1			Sri Vidya G	Director	Graduate	20 Years	Operations-Director
3	7.5.3.1-4	4.2			Vathsav Krishna G	Marketing & Technical Head	M.S.	3 Years	Marketing & Technical Head
4	7.5.3.1-4	5.11 5.13 5.14			M. Shesha Rao	Quality Head	B. E., M.B.A	20 Years	Quality assurance, Quality Control
5	7.5.3.1-4	5.12			Srinivas.K	Sr. Quality Engineer	B Tech in Mechanical	15 Years	In process Inspection
6	7.5.3.1-4	5.15			G . Praneeth	Quality Technician	B Tech in Mechanical	3 Years	In process Inspection
7	7.5.3.1-4	5.17 4.2			M. Eswara Rao	Plant head	B. Tech Mechanical	13 years	Plant operations
8	7.5.3.1-4	4.12			M. Shiva Kumar	Design Head	B Tech-Mechanical	11 Years	Design & Detailing
9	7.5.3.1-4	4.12			M Mahendra Kumar	Sr. Design Engineer	B Tech-Mechanical	8 Years	Design & Detailing
10	7.5.3.1-4	4.12			Karthik M	Detailer	M Tech-Mechanical	2 Years	Detailing
11	7.5.3.1-4	4.1			K. Shiva Krishna	Production Head	B Tech in Mechanical	12 years	Productions & Planning
12	7.5.3.1-4	5.15			A. Rambabu	Sr Engineer	B.Tech-Mech	10 Years	Production



13	7.5.3.1-4	5.2			U. Laxman	Production Engineer	B.Tech-Mech	8 Years	In process operations
14	7.5.3.1-4	4.2			Linga swamy	CNC Programmer	Diploma-Mech	15 Years	
15	7.5.3.1-4	4.2			Gopala Krishna	Site In-charge	Diploma-Mech	30 Years	
16	7.5.3.1-4	4.2			Y. Narsimha Swamy	Site In-charge	Diploma-Mech	10 Years	
17	7.5.3.1-4	4.4			S. Nageshwar Rao	Purchase Head	Graduate	13 Years	
18	7.5.3.1-4	4.11			Rajasekhar Reddy. K	Head-Stores	Graduate	9 Years	
19	7.5.3.1-4	4.4			Murali.M	Logistic	Graduate	25 years	
20	7.5.3.1-4	4.4			Srinivas. T	Maintenance In Charee	Graduate	30 Years	P&M
21	7.5.3.1-4	4.4			Swarna Latha	Sr. Accountant	B. Com	13 Years	

(c) Qualification of other key personnel and the officials deployed in quality control cell

SN	Name	Designation	Tech. Qualification	Experience	Brief scope of responsibilities
1	M . Shesha Rao	Quality Head	B.E., M.B.A	20 Years	Overall Quality assurance, Quality Control
2	K.Srinivas	Sr. Quality Engineer	B.Tech Mechanical	15 Years	Inspection of Individual Components Fit-up and Welding
3	G. Praneeth	Engineer QA/QC	B.Tech Mechanical	3Years	In process Inspection
4	ch. Tirumalesh	Engineer QA/QC	Diploma Mechanical	4 Years	Blasting and Painting Inspection

C. **PROCESS FLOW CHART/DESCRIPTION OF MANUFACTURING PROCESS:**

- a) Part I: Process Flow Chart indicating process of manufacture for an individual product, with quality control points.

Note:

- The process flow chart shall indicate all the operation involving manufacturing & testing of product from raw material to finish product, including RDSO/RITES/Consignee inspection/dispatch.
- There should be separate flow charts for each item.



b) Part II: Brief description of different manufacturing processes mentioned in flow chart:

i) Details of the manufacturing & testing process specially mentioned in the specification

SN	Para No. of Spec.	Requirement of Manufacturing/ Testing Process as per Spec.	Details of the process being installed/ follows
1	4.2	Procurement of Raw Material	Approved RDSO Vendors
2	5.13	Testing of Raw Material	Approved Testing Agency
3	5.1	Plate Cutting	CNC-Oxy Fuel Plasma Cutting Machine up to 80mm Thickness
4	5.2	Fit up & Welding	Semi Auto Vertical Beam Welding Machine
5	5.9	Straightening	Semi-Automatic Straightening Machine
6	5.3	Drilling	CNC-Drilling Machine
7	5.4	Blasting & Painting	Blasting Painting Booth

ii) Brief details of the other manufacturing process.

SN	Name of manufacturing process	Brief description
1	Conventional Manufacturing Process	CNC- Drilling Machine Semi-Automatic Straightening Machine
2	Non-Conventional Manufacturing Process	CNC Oxy-Fuel Plasma Cutting Machine
3	Joining Manufacturing Process	Semi-Automatic Vertical Beam Welding Machine SAW -Welding Machine

c) Brief description of ancillaries & additional units (if any):

i. Whether all the facilities are available at a single location (or) multiple location –

ii. In case of multiple locations give details in following formats:

SN	units	Address	Whether unit is covered under factory license	Whether unit is ISO certified	Mfg. processes details
N/A	N/A	N/A	N/A	N/A	N/A

(D) DETAILS OF SUB-ASSEMBLIES / COMPONENTS MANUFACTURED IN- HOUSE AND OUTSOURCED:

a) Part I: Details of in-house manufactured (Components/sub-assemblies)

SN	Item Name	Drawing No.
N/A	N/A	N/A



- b) Part II: Details of components/Sub-assemblies purchased from vendors approved by any vendor approving unit of IR

SN	Item Name	Drawing No.	Is it a primary item of any vendor approving unit	Is it a sublet item of any vendor approving unit	Name of the source
N/A	N/A	N/A	N/A	N/A	N/A

- a) Part III: Details of items outsourced from vendors other than approved by any vendor approving unit of IR

SN	Item Name	Drawing No.	Name of the source	Frequency of review of the performance of sublet source
N/A	N/A	N/A	N/A	N/A

(E) **INCOMING RAW MATERIAL & INPROCESS/FINAL INSPECTION:** Stage inspection detailing inspection procedure, inspection parameters, method of testing/test procedure including sample sizes for destructive and non- destructive testing etc.

- a) Part I: Incoming raw materials/parts/sub-assemblies

S N	Incoming product/ assembly	Sample size and its frequency of inspection	Parameters for inspection	Mode of inspection/ equipment used	Acceptance limit/criteria/ Specified value	Rejection and disposal	Traceability register no.
						Re-processed and Scrapped	
1	MS Plate	As per QAP	Mechanical & Chemical	NABL Lab	As per IS Standards	As per customer requirement	Lab Report

- b) Part II: In process inspection (of the product)

S N	Name the process	Sample size and its frequency of inspection	Parameters for inspection	Mode of inspection/ equipment used	Acceptance limit/criteria/ Specified value	Rejection/ disposal	Corrective and preventive action	Traceability register no.
1	Cutting	10%	As per Drawing	As per ITP	As per Drawing	Scrap/ Re-Work	Training	Inspection Report
2	Fit up & Welding	100%	As per Drawing	As per ITP	As per Drawing	Scrap/ Re-Work	Training	Inspection Report
3	Straightening	100%	As per Drawing	As per ITP	As per Drawing	Scrap/ Re-Work	Training	Inspection Report
4	Drilling	100%	As per Drawing	As per ITP	As per Drawing	Scrap/ Re-Work	Training	Inspection Report
5	Blasting & Painting	100%	As per Drawing	As per ITP	As per Drawing	Scrap/ Re-Work	Training	Inspection Report



c) Part III: Final internal inspection of the product by the firm

S N	Name the test/ process	Sample size and its frequency of inspection	Parameters for inspection	Mode of inspection /Equipment used	Acceptance limit/criteria/ Specified value	Rejection/ disposal	Traceability register no.
						Re-processed/Scrapped	
1	Trail Assembly	100%	As per Drawing	As per ITP	As per Drawing	Re-Work	Inspection Report

(F) CALIBRATION OF TESTING MEASURING EQUIPMENT:

a) Part I: In-house Testing facilities available for calibration with the firm

SN	Name of Master	Make	Range	Frequency of calibration	Traceability to national standard
N/A	N/A	N/A	N/A	N/A	N/A

b) Part II: Personnel trained for in-house calibration

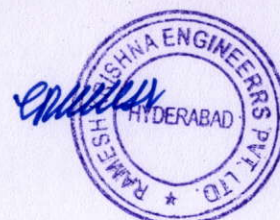
SN	Name	Qualification	Experience
N/A	N/A	N/A	N/A

(c) Part III: Calibration plan for the items identified for specified calibration in STR/Specification

SN	Measuring Equipment	Ref. Para of STR/Spec.	Range/Accuracy	Frequency specified in STR/Spec	In house/ out sourced	Name of Agency if outsourced
		STR/Spec./Para no.				
1	As per Master list of calibration		As per Master list of calibration	1 Year	Outsourced	Simco Calibration & Testing Pvt Ltd& others

d) Part IV: Calibration plan for other measuring equipment

Measuring Instruments					
SN	Measuring Equipment	Range/Accuracy	Frequency	In house/Outsourced	Name of calibration agency
1	Digital Caliper	0-300 mm	1 year	Outsourced	Simco Calibration & Testing Pvt Ltd
2	Vernier Caliper	0-200 mm	1 year	Outsourced	
3	Dip Measuring Tap	0-30 M	1 year	Outsourced	
4	Engineer's square	180 X 110 mm	1 year	Outsourced	
5	Feeler Gauge set	0.03 – 1.00 mm	1 year	Outsourced	
6	Outside Micrometr	0 – 50 MM	1 year	Outsourced	
7	Try Square	300 * 150 mm	1 year	Outsourced	Perfect Calibration Centre Pvt Ltd
8	Measuring Tape	0-50 M	1 year	Outsourced	
9	Measuring Tape	0-5 M	1 year	Outsourced	
10	Laser Distance Meter	0.05 m – 60 m	1 year	Outsourced	Transcal Technologies LLP



SN	Measuring Equipment	Range/Accuracy	Frequency	In house/Outsourced	Name of calibration agency
11	Coating Thickness Gauge with Foils	0-1250 Microns	1 year	Outsourced	Simco Calibration & Testing Pvt Ltd
12	Digital Dial Gauge (Surface Profile Gauge)	0-12.7 mm	1 year	Outsourced	Future Tech Calibration Lab
13	Auto Level	40Meters distance	1 year	Outsourced	Bosch (Manufacturers Certificate)
14	Torque Wrench	475-1015 Nm	1 year	Outsourced	Perfect Calibration Centre Pvt Ltd
15	Digital Clamp Meter	1000V, 1000A	1 year	Outsourced	Simco Calibration
16	Surface Roughness Comparator	SA 2, SA 2.5 & SA 3	1 year	Outsourced	Perfect Calibration Centre Pvt Ltd
17	Weld gauge	Bridge Cam Gauge	1 year	Outsourced	
18	Wet Film Thickness Gauge	25-3000μ	1 year	Outsourced	Simco Calibration & Testins Pvt Ltd

(G) SYSTEM OF MAINTAINING THE DATA OF CUSTOMER COMPLAINTS / WARRANTY FAILURES

Warranty failures/In-service failures reported from customers:

SN	Date of report of complaint	Letter no.	Complaint received from	Brief details of complaint	Classification of failure	Whether any person deputed for collecting samples	Date of joint inspection	Failure analysis and cause of failure	Date of compliance in case of warranty	C&P action taken
					Warranty failure/in service failure/Call for joint inspection/Consignee end rejection/General complaints					
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* The firm shall maintain a complaint register in the above format and the summary required is to be given during renewal

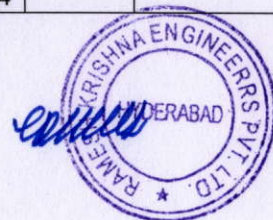


(H) REQUIREMENT OF M&P/T&P AS PER SPECIFICATION /STR/IS:

Sl. No.	IS/STR/ Specification para no	Requirements of M&P/T&P as per IS/STR/Specification		Details of the M&P/T&P available with the firm					
		M&P/T&P name	Range/ Capacity of M&P/T&P	Name of M&P/T&P	Model	Make	Machine no.	Year of Built	Range/ Capacity
1	5.1	M & P	400 Amps	CNC Cutting m/c	RRE-400	RR Enterprises	CNC/0003	2025	15Mx4Mx0.15M
2	5.2	M & P	1000 Amps	Vertical beam Welding machine	HZJ2510	System Engineer	VBM/0001	2025	12Mx1Mx2.5M
3	5.3	M & P	80 mm	CNC Drilling M/C (VMC)	EUMACH MC 2600 VMC	Eumach	DM /0001	2024	40 mm Dia Holes
4	5.4	M & P	SA 3	6 Wheels Automatic Shot Blasting Machine	SPT 1.5W *0.75 H Capacity	SPT Surface Preparation	BM/0001	2019	12Mx1Mx2M
5	5.5	M & P	20 Ton	EOT	EOT-20	Rucha Industries	EOT/0014	2025	15 M span
6	5.6	M & P	25HP-1, 20HP-1	Air Compressors	ELGI-25, ELGI-20	Elgi Equipmen t's Ltd	COMP/0008	2024	Screw Type
7	5.7	M & P	100 mm	Radial Drilling Machine	RDM-100	Batliboi	RDM/001	2020	16 to 1200 RPM
8	5.8	M & P	2500 mm length	H-beam End milling machine	KMH-125	Karam	EM/001	2026	200 Dia Bore CUTTER
9	5.9	M & P	60 mm	Flange Straightening machine	SHYS-60B H	SNS CNC Equipments	FSM/00085	2026	Max width 1200
10	5.10	M & P	AG7, AG4	Grinding Machines- 5 Nos	GSW2200 GSW600	Bosch	GM/025, 028, 036	2025	7 inch & 4 inch grinding machine
11	5.10	M & P	100mm	Drilling Machines- 4 Nos	KBM-50P, KBM-38, Broach Super XL	Eibenstock , Broach	DM/011, 015, 018	2025	12-50 mm cutter dia
12	5.10	M & P	Air Flux Chipper	Chipping Machine- 3 Nos	-	Bosch, Sumake	CH/001, 002,003	2024, 2025	35mm flat chisel
13	5.10	M & P	475-1015NM	Mechanical Torque wrench-3 Nos	TW750	Macmaster	30-D-8	2026	
14	5.10	M & P	upto 1250 Microns	Elcometer-3 Nos	-	Metrix	N1056102	2025,2026	0-1250 Microns DFT



15	5.10	M & P	0-12.7mm	Surface Roughness Tester – 3 Nos	Aero-12.7	AERO	2239150, 4460, 4450	2025,2026	Upto SA3 Blasting check
16	5.10	M & P	50M	Calibrated Steel Measuring tapes-3 Nos	-	SYMRON-L, FREEMAN S	-	2026	
17	5.10	M & P	40M	Dip Measuring Tape	-	Freemans	-	2026	
18	5.10	M & P	50M	Laser Distance Meter	RT-50M	R-tek	-	2026	
19	5.11	M & P	40 Meters	Auto Level	Optical Level GOL 32D	Bosch	326001431	2026	
20	5.12	M & P	Wire Flame Jet	Metalizing Machine	SYS-SJ-88	Metalizing Equipment	MG/001	2026	
21	5.12	M & P	Airless Spray	Airless Paint Gun	CY-9527	Premier Airless	PA/001	2025	
22	5.13	M & P	-	Mechanical, Chemical & Microstructure	-	-	-	-	MOU with outsource 3 rd party lab
23	5.14	M & P	SP-10, SD-30, SC-20FD	Dye Penetrant Testing	Penetrant, Developer, Cleaner	MR Chemie	-	2026	DPT testing by ASNT NDT Level-2 operator
24	5.14	M & P	-	Macro Etching	Hydro Chloric Acid, Nitric Acid	-	-	2026	If Required MOU with 3 rd party lab testing also
25	5.14	M & P	-	PAUT testing	-	-	-	-	MOU with outsource 3 rd party lab
26	5.16 a	M & P	400 Amps	Manual Metal Arc Welding Machine – 5 Nos	ARC 400IJ	ADOR, Aotai, SR	ARC/016, 029, 035	2025	
27	5.16 b	M & P	400 Amps	MIG Welding machine Equipment set – 6 Nos	MIG 400IJ, MIG 400M	ADOR, Aotai, SR	MIG/013, 018 & 024	2025	
28	5.16 c	M & P	1250 Amps	Semi-Automatic Submerged Arc Welding machine	SAW 1250	SR, ADOR	SAW/003 & 005	2023, 2026	
29	5.16 d	M & P	12*3*1M	Welding Manipulator	-	-	MAN/001	2025	
30	5.16 e	M & P	2500 Amps	Stud welding machine	BSW 2500	BOIS Cutting & Welding	ST/001	2026	
31	5.16 f	M & P	Up-to 1000A	Tongue Tester	BEE-1000	Beetech	TT/001,002, 003	2026	
32	5.16 g	M & P	25mm	Cam Type Weld Gauge – 3 nos	-	Kristeel	WE/002, 003, 004	2025	



(I) Any additional information firm wish to submit.

Note:

1. "QAP covering all the information as asked above under section '0' to '1' must be given in the form of single document indicating name and word address of the firm and page no. 'x' of 'y' on each page. Each page should be signed by Quality Control in charge. The approved QAP must be a controlled document and a quality record of ISO Quality Control System of the vendor. A certificate to this effect shall be provided along with the QAP by the Vendor."
2. One copy of the QAP, after final approval will be given back to the vendor for implementation.

