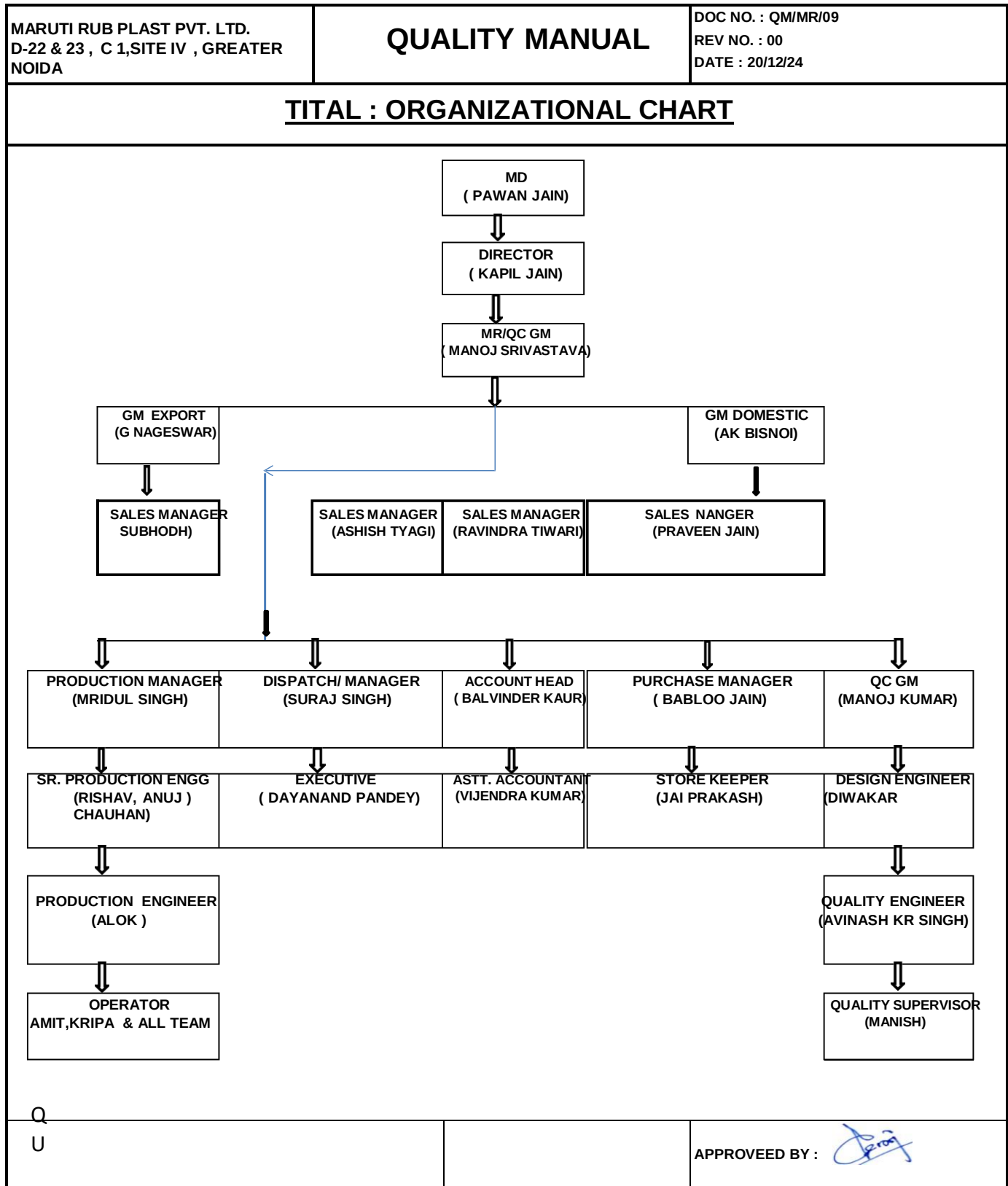


- A. ORGANISATION CHART- Organisational Chart, clearly indicating the Quality Control Set-up, role and responsibilities of key personal.

### MARUTI RUB PLAST PVT LTD



#### 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                          | Dsgn.   | Technical Qualification | Experience | Brief scope of responsibilities   |
|    | STR/S pec                     | Para |                                        |                                     |                               |         |                         |            |                                   |
| 1  |                               |      |                                        |                                     | Manoj Kumar                   | Head QA | Rubber Technologist     | 27         | All activities of quality related |
| 2  |                               |      |                                        |                                     | Avinash kumar Singh           | Engg QA | B TECH                  | 10         | In process & final testing        |
| 3  |                               |      |                                        |                                     | Manish                        | Engg QA | B TECH                  | 12         | Raw material and final testing    |

- (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. / STR/IS | Experience Specified in Spec. / STR/IS | Name                          | Dsgn.           | Technical Qualification | Experience | Brief scope of responsibilities                         |
|    | STR/Spec./IS                     | Para |                                           |                                        |                               |                 |                         |            |                                                         |
| 1  |                                  |      |                                           |                                        | A K Bishnoi                   | GM SALES        | M TECH                  | 30         | Bearing pad & expansion joint sales & technical support |
| 2  |                                  |      |                                           |                                        | SurajSingh                    | Despatch / Head | B tech                  | 12         | Plannind & Despatch                                     |
| 3  |                                  |      |                                           |                                        | Mridul Singh                  | Production Head | B tech                  | 10         | Plannind & production                                   |
| 4  |                                  |      |                                           |                                        | Bablu Jain                    | Purchase head   | Graduate                | 32         | Purchase                                                |

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

| SN | Name            | Desig.       | Tech. Qualification | Experience | Brief scope of responsibilities               |
|----|-----------------|--------------|---------------------|------------|-----------------------------------------------|
| 1  | Diwakar Chauhan | Desgin Engg. | B TECH              | 12         | Auto cad (drawing) and tool & die development |
| 2  | Subhash Chand   | Supervisor   | Graduate            | 8          | Expansion joint installation                  |

#### 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:*

- 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 chart for each item.

| MARUTI RUB PLAST PVT LTD |                                        |                                   | QUALITY ASSURANCE PLAN          |                                                    |           |           |                        |            | DOC NO                     | FM/QC/06                        |
|--------------------------|----------------------------------------|-----------------------------------|---------------------------------|----------------------------------------------------|-----------|-----------|------------------------|------------|----------------------------|---------------------------------|
|                          |                                        |                                   |                                 |                                                    |           |           |                        |            | REVISION NO                | 00                              |
|                          |                                        |                                   |                                 |                                                    |           |           |                        |            | REV. DATE                  | 24.01.2025                      |
| PART NO                  | BS -S-7.5.3.1-11                       |                                   | TEAM MEMBERS                    | CORE TEAM : MANOJ KUMAR, A K BISHNOI,SUBHASH CHAND |           |           |                        |            | TEAM LEADER                |                                 |
| PART NAME                | BRIDGE EXPANSION JOINT                 |                                   |                                 |                                                    |           |           |                        |            | MANOJ KUMAR                |                                 |
| OPERATION NUMBER         | DESCRIPTION                            | EQUIPMENT AND FACILITY            | INCOMING SOURCE VARIATION       | STORAGE                                            | TRANSPORT | OPERATION | OPERATION & INSPECTION | INSPECTION | PRODUCT CHARACTERISTICS    | PROCESS CHARACTERISTICS         |
| 1                        | RAW MATERIAL PROCUREMENT               | VISUAL                            | MATERIAL DEFECT                 | △                                                  |           |           |                        |            | WEIGHT & SIZE              | WEIGHT SLIP                     |
| 2                        | RAW MATERIAL INSPECTION                | UTM & SPECTROGRAPY                | MATERIAL DEFECT                 |                                                    |           |           |                        |            | MECHANICAL & CHEMICAL TEST | MTC                             |
| 3                        | ANGLE , ROD CUTTING                    | BAND SAW                          | CUTTING VARIATION               |                                                    |           |           |                        |            | CUTTING DIMENSION          | ANGLE SETTING                   |
| 4                        | DRILLING                               | RADIAL DRILL MACHINE              | DRILL SIZE VARIATION            |                                                    |           |           |                        |            | DRILLING DIMENSION         | DRILL SIZE TEMPLTE              |
| 5                        | STUD WELDING                           | MIG WELDING MACHINE               | WIRE SIZE & GRADE               |                                                    |           |           |                        |            | WELD VISUAL                | WELDING SIZE ,PINHOLE, DPT TEST |
| 6                        | ASSEMBLY STRAIGHTENING                 | JACJ MACHINE                      | BEND VARIATION                  |                                                    |           |           |                        |            | PERPENDICULAR FROM BASE    | FLATE                           |
| 7                        | VISUAL INSPECTION BEFORE SAND BLASTING | GRINDING M/C                      | BURR , CHAMFER                  |                                                    |           |           |                        |            | VISUAL                     | WELDING VISUAL CHECK            |
| 8                        | SAND BLASTNG                           | SAND BLASTNG MACHINE              | NO RUST AND OIL                 |                                                    |           |           |                        |            | VISUAL                     | RUST FREE SURFACE               |
| 9                        | PAINTING                               | PRESSURE SPREY GUN M/C, ELCOMETER | MILL SCALE FOUND ON SURFACE     |                                                    |           |           |                        |            | COATING THICKNESS          | COATAING AS REQUIRED            |
| 10                       | FINAL INSPECTION OF ASSEMBLY           | PULLOUT , CYCLIC DEBRIS , PONDING | AS PER ITP                      |                                                    |           |           |                        |            | REQUIRED VALUE ACHEIVED    | FINAL TEST REPORT               |
| 11                       | PACKING & DESPACH                      | PACKING MACHINE                   | MISS ARRANGEME NT FOR TRANSPORT |                                                    |           |           |                        |            | GOOOD DELIVERD SAFELY      | MAINTAINE RECORD OF RECEIVING   |

b) Part II: Brief description of different manufacturing process 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 vendor                                 |
| 2  | 6.1               | Testing of raw material                                    | Approved testing agency                         |
| 3  | 6.2.7             | Angle cutting                                              | Cutting length through bandsaw machine          |
| 4  | 6.2.              | Straightening of angle                                     | Angle straight through hydraulic jack           |
| 5  | 6.3.2             | Drilling                                                   | Drilling machine                                |
| 6  | 6.3.4             | Welding                                                    | Mig welding machine                             |
| 7  | 6.2.11            | Sand blasting and Painting                                 | Sand blasting and Painting by machine           |
| 8  | 6.4.1             | Cyclic Motion test                                         | Automatic Cyclic Motion test                    |
| 9  | 6.4.2             | Ponding test                                               | Ponding testing fixture                         |
| 10 | 6.4.3             | Debris Expelling test                                      | Automatic Cyclic Motion test                    |
| 11 | 6.4.4             | Pullout Testing                                            | Hydraulic pullout testing machine               |
| 12 | 6.4.5             | Opening movement vibration test                            | Automatic opening vibration machine             |

ii) Brief details of the other manufacturing process.

| SN | Name of manufacturing process | Brief description                     |
|----|-------------------------------|---------------------------------------|
| 1  | Extrusion of rubber seal      | On line curing machine for strip seal |

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

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

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 |
|----|-------|---------|-----------------------------------------------|-------------------------------|------------------------|
|    |       | NA      | NA                                            | NA                            | NA                     |

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

a) P

| SN | a | Item Name | Drawing No. |
|----|---|-----------|-------------|
| NA | r | NA        | NA          |
|    | t |           |             |

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

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 |
|----|-----------|-------------|---------------------------------------------------|--------------------------------------------------|--------------------|
|    | NA        | NA          | NA                                                | NA                                               | NA                 |

- 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 |
|----|-----------|-------------|--------------------|---------------------------------------------------------|
|    | NA        | NA          | NA                 | NA                                                      |

**(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<br>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      | Mild Steel For Steel Plates, Angles, Plates, St | 1                                           | Mechanical & Chemical     | NABL LBA                           | As per standard                            | Scrap/rework              | Lab report                |

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

| S<br>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                | 100%                                        | As per drawing            | As per ITP                         | As per drawing                             | Scrap/rework        | training                         | Inspection report         |
| 2      | Welding                | 100%                                        | As per drawing            | As per ITP                         | As per drawing                             | Scrap/rework        | training                         | Inspection report         |
| 3      | straightening          | 100%                                        | As per drawing            | As per ITP                         | As per drawing                             | Scrap/rework        | training                         | Inspection report         |
| 4      | Sandblasting/ Painting | 100%                                        | As per drawing            | As per ITP                         | As per drawing                             | rework              | training                         | Inspection report         |

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

| S<br>N | Name the test/ process | Sample size and 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      | DPT                    | 10%                                     | As per drawing            | As per ITP                         | As per drawing                             | /rework               | Inspection report         |
| 2      | Ponding test           | 1 mtr                                   | As per drawing            | As per ITP                         | As per standard                            | rework                | Inspection report         |
| 3      | Pullout test           | 1 mtr                                   | As per drawing            | As per ITP                         | As per standard                            | rework                | Inspection report         |
| 4      | Debris test            | 1 mtr                                   | As per drawing            | As per ITP                         | As per standard                            | rework                | Inspection report         |
| 5      | Cyclic motion test     | 1 mtr                                   | As per drawing            | As per ITP                         | As per standard                            | rework                | 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 |
|----|----------------|------|-------|--------------------------|-----------------------------------|
|    | NA             | NA   | NA    | NA                       | NA                                |

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

| SN | Name | Qualification | Experience |
|----|------|---------------|------------|
| NA | NA   | NA            | NA         |

**(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                          | out sourced           | Neno calibration service & Super calibration |

**d) Part IV : Calibration plan for other measuring equipment**

| SN | Measuring Equipment      | Range/Accuracy          | Frequency | In house/Outsourced | Name of calibration agency        |
|----|--------------------------|-------------------------|-----------|---------------------|-----------------------------------|
| 1  | UTM                      | 0-500 kg/0.01           | 1 Year    | Outsourced          | Super Calibration Service Pvt Ltd |
| 2  | AIR OVEN                 | 0- 300°C/ 1°C           | 1 Year    | Outsourced          | Neno calibration service          |
| 3  | MUFFLE FURNACE           | 0-1200°C/1°C            | 1 Year    | Outsourced          | Neno calibration service          |
| 4  | HUMIDITY CHAMBER         | 0-60°C& 10 -99 RH/0.1°C | 1 Year    | Outsourced          | Neno calibration service          |
| 5  | DIGITAL VERNIER CALIPER  | 0-150/0.01 mm           | 1 Year    | Outsourced          | Neno calibration service          |
| 6  | MEASURING TAP            | 0-5000/1 mm             | 1 Year    | Outsourced          | Neno calibration service          |
| 7  | RUBBER HARDNESS TESTER   | 0-100/1 Shore A         | 1 Year    | Outsourced          | Neno calibration service          |
| 8  | MELTING PPOINT APPARATUS | 0- 350°C/ 1°C           | 1 Year    | Outsourced          | Neno calibration service          |
| 9  | SPECIFIC GRAVITY BALANCE | 0-220gm/0.001           | 1 Year    | Outsourced          | Neno calibration service          |
| 10 | COATING THICKNESS GAUGE  | 0-1250µ/1µ              | 1 Year    | Outsourced          | Neno calibration service          |
| 12 | DIAL GAUGE FOR PARALLISM | 0-25 MM                 | 1 Year    | Outsourced          | Neno calibration service          |

**(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 |                                                   |                          |                                       |                                        |                  |
| NA | NA                          | NA         | NA                      | NA                         | NA                                                                                                       | NA                                                | NA                       | NA                                    | NA                                     | NA               |

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

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

| Sl. No. | IS/STR/ Specification para no | Requirement 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 M&P/T&P | Name of M&P/T&P                        | Model | Make        | Machine no. | Year of Built | Range/ Capacity                                 |
|---|----------|--------------|---------------|----------------------------------------|-------|-------------|-------------|---------------|-------------------------------------------------|
| 1 | 6.2.II   | M&P          | 75 MM         | RUBBER EXTRUSION MC                    | EX750 |             | MRPPL/EX/01 | 2004          | 3-200 MM                                        |
| 2 | 6.2.III  | M&P          | 1X1 MTR       | AUTOMATIC THERMIC MOULDIND             | MU100 | JANTA ENGG. | MRPPL/EX/01 | 2004          | 800 X800 MM                                     |
| 3 | 6.1.I    | M&P          | Outsourced    | SPECTROGRAPHY FOR RUBBER IDENT         | NA    | NA          | NA          | NA            | Outsourced, MOU with Poineer Testing Laboratory |
| 4 | 6.2.VI   | M&P          | Outsourced    | PRESS FOR CUUTING DIES FOR STEEL PLATE | NA    | NA          | NA          | NA            | Outsourced, MOU with Narendra Steels            |
| 5 | 6.2 XIII | T&P          | 1000 KG       | AUTOMATIC WEIGHING MC                  | EPF   | ECNOT ECH   | MRPPL/EP/01 | 2024          | 0.1 -1000KG                                     |
| 6 | 6.2.X    | M&P          | 200 LTR       | ADEHESIVE STIRRER MIXTURE              | TWZ20 | IMPRESION   | MRPPL/AD/01 | 2022          | UPTO 200 LTR                                    |
| 7 | 6.3      | M&P          | Outsourced    | HOT DIP GALVANIZATI ON                 | NA    | NA          | NA          | NA            | Outsourced, MOU with Indo Pumps P ltd.          |
| 8 | 6.3      | M&P          | 75 MM         | OXY ACETYLENE GAS PROFILE CUTING MC    | OX125 | EGALE       | MRPPL/OX/01 | 2010          | 3-75 MM                                         |

|    |         |     |           |                                               |        |               |              |      |            |
|----|---------|-----|-----------|-----------------------------------------------|--------|---------------|--------------|------|------------|
| 9  | 6.3     | M&P | 15MX2M    | SURFACE<br>PREPARATION<br>SAND<br>BLASTING MC | JN15   | JANTA<br>ENGG | MRPPL/SB/01  | 2015 | 15MX2MX4M  |
| 10 | 6.3     | M&P | 15MX2M    | SPREY<br>PAINTING MC                          | JN15   | JANTA<br>ENGG | MRPPL/PA/01  | 2015 | 15MX2MX4M  |
| 11 | 6.3     | M&P | 40 MM     | RADIAL<br>DRILL MC                            | RDM21  | RATNA         | MRPPL/RA/01  | 2015 | UPTO 40 MM |
| 12 | 6.4.V   | M&P | 300 MM    | OPENING<br>MOVEMENT<br>VIBRATION MC           | VV45   | VEER          | MRPPL/VV/01  | 2017 | UPTO 300   |
| 13 | 6.4.XI  | T&P | 25 MM     | PARALLISM<br>DIAL METER                       | INZ215 | INSIZE        | MRPPL/INZ/01 | 2015 | 0TO 25 MMM |
| 14 | 6.4.XIV | T&P | 50 ML     | VISOMETER                                     | B4     | ASIAN         | MRPPL/INZ/01 | 2015 | 100 ML     |
| 15 | 6.3     | M&P | 20MM      | WIRE<br>BRUSHES&<br>DESLAGGING<br>HAMMER      | EL12   | ELECT<br>RA   | MRPPL/INZ/01 | 2015 | 2-20MM     |
| 16 | 6.2 IX  | M&P | 600TON    | HYDRAULLIC<br>PRESS                           | HYD51  | JANTA         | MRPPL/JN/02  | 2010 | 600TON     |
| 17 | 6.2.IV  | M&P | 600TON    | MOULDING<br>PRESS                             | HYD41  | JANTA         | MRPPL/JN/03  | 2010 | 300,400TON |
| 18 | 6.3     | M&P | 0-100 AMP | WELDING<br>MANIPULATOR<br>FOR<br>ASSEMBLY     | IMP25  | IMERSI<br>ON  | MRPPL/MG/01  | 2018 | 0-100 AMP  |

**(I) Any additional information firm wish to submit.**

**Note:**

1. "QAP covering all the information as asked above under section'0' to 'I' must be given in the form of single document indicating name and works 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.

**ANNEXURE-1****PARTICULARS OF (SOLE PROPRIETERS/ PARTNERS/ DIRECTORS)** – *Tick any one*

| <b>Sr.<br/>No.</b> | <b>Name</b> | <b>Father's name</b> | <b>Age</b> | <b>Address</b> | <b>Profit sharing Ratio//<br/>Percentage share</b> |
|--------------------|-------------|----------------------|------------|----------------|----------------------------------------------------|
| 1.                 |             |                      |            |                |                                                    |
| 2.                 |             |                      |            |                |                                                    |
| 3.                 |             |                      |            |                |                                                    |
| 4.                 |             |                      |            |                |                                                    |
| 5.                 |             |                      |            |                |                                                    |
| 6.                 |             |                      |            |                |                                                    |
| 7.                 |             |                      |            |                |                                                    |
| 8.                 |             |                      |            |                |                                                    |
| 9.                 |             |                      |            |                |                                                    |
| 10.                |             |                      |            |                |                                                    |

DEPONENT

**ANNEXURE-2**

**DETAILS OF SISTER/ALLIED CONCERN**

| <b>Sr.<br/>No.</b> | <b>Name of the firm<br/>along with type of<br/>firm i.e.<br/><i>(partnership/registered<br/>company etc.)</i></b> | <b>Address</b> | <b>Work place</b> | <b>Ownership<br/>details ie. Name<br/>&amp; percentage<br/>share</b> | <b>Business details</b> |
|--------------------|-------------------------------------------------------------------------------------------------------------------|----------------|-------------------|----------------------------------------------------------------------|-------------------------|
|                    |                                                                                                                   |                |                   |                                                                      |                         |
|                    |                                                                                                                   |                |                   |                                                                      |                         |
|                    |                                                                                                                   |                |                   |                                                                      |                         |
|                    |                                                                                                                   |                |                   |                                                                      |                         |
|                    |                                                                                                                   |                |                   |                                                                      |                         |

DEPONENT

