Subject: Inviting quotations for the fabrication of Tesla transformer based pulse power system as per the annexure-1

You are requested to quote for fabrication and installation of high voltage disc, perspex disc and other assembly as per the details given in annexure I.

1) For details wiring, layout or any other clarifications the supplier can contact Sh. Vishnu Sharma, SO/E, APPD on any working day (Monday to Friday) on telephone Nos. 255920172 or email: vishnu@barc.gov.in.

2) Since the goods to be supplied against this work order are meant for research purpose of a research institution under the department of Atomic Energy of Government of India, CGST and SGST at the rate of 2.5% each is payable as per notification number 47/2017 integrated Tax (Rate) dated 4.11.2017 issue by ministry of finance. The indenter shall make available the GST exemption certificate for it.

3) Payment for the above work will be made after satisfactory completion of job and on production of bill & advanced stamped receipt along with the copy of registration. No advance payment will be made for this work. Income-tax @2% & surcharge on Income-tax @15% will be deducted from the bill and a TDS (tax deducted at source) certificate will be issued as per Income-tax rules. Suppliers should submit their offers along with the following information.

(a) period of validity, terms & conditions of the offer, (b) Approximate period of completion of the task and (c) copy of the registration and income-tax clearance certificate.

Additional Information:

Your sealed quotation (in your letter head) including all details, like taxes to be paid, transport charges etc., duly indicating our reference number mentioned above and due date may be sent by speed post to

“Head, APPD, BARC
Hall 4, BARC, Trombay, Mumbai-400085”.

on or before 13th March 2020. The quotations received after the due date & by FAX/email will not be considered.

Your's faithfully,

Archana Sharma
AD, BTDG, BARC

Copy to: A.P.O., GSS Section, Central Complex, BARC.
<table>
<thead>
<tr>
<th>S.no</th>
<th>Part description</th>
<th>Quantity</th>
<th>Drawing no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>F.R.P chamber</td>
<td>1</td>
<td>TESLA-A1-D1</td>
</tr>
<tr>
<td>2.</td>
<td>Perspex cylinder</td>
<td>1</td>
<td>TESLA-A1-D2</td>
</tr>
<tr>
<td>3.</td>
<td>Copper cylinder</td>
<td>1</td>
<td>TESLA-A1-D3</td>
</tr>
<tr>
<td>4.</td>
<td>Copper strips</td>
<td>1</td>
<td>TESLA-A1-D4</td>
</tr>
<tr>
<td>5.</td>
<td>Copper strips</td>
<td>1</td>
<td>TESLA-A1-D4</td>
</tr>
<tr>
<td>6.</td>
<td>Copper strips</td>
<td>1</td>
<td>TESLA-A1-D4</td>
</tr>
<tr>
<td>7.</td>
<td>Delrin cone</td>
<td>1</td>
<td>TESLA-A1-D5</td>
</tr>
<tr>
<td>8.</td>
<td>Perspex corrugated cylinder</td>
<td>1</td>
<td>TESLA-A1-D6</td>
</tr>
<tr>
<td>10.</td>
<td>S.S 304L Electrodes</td>
<td>1</td>
<td>TESLA-A1-D8</td>
</tr>
<tr>
<td>11.</td>
<td>S.S304L nuts</td>
<td>2</td>
<td>TESLA-A1-D8</td>
</tr>
<tr>
<td>12.</td>
<td>O' Ring ID 40.64 SEC(Nropren)ø5.33</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>S.S electrode(SS 304L)</td>
<td>2</td>
<td>TESLA-A1-D8</td>
</tr>
<tr>
<td>14.</td>
<td>S.S connector (SS304L)</td>
<td>1</td>
<td>TESLA-A1-D8</td>
</tr>
<tr>
<td>15.</td>
<td>Oil chamber (SS304L)</td>
<td>1</td>
<td>TESLA-A1-D9</td>
</tr>
<tr>
<td>16.</td>
<td>Electrode(SS304L)</td>
<td>1</td>
<td>TESLA-A1-D10</td>
</tr>
<tr>
<td>17.</td>
<td>S.S Oil chamber SS304L</td>
<td>1</td>
<td>TESLA-A1-D11</td>
</tr>
<tr>
<td>18.</td>
<td>Perspex corrugated cone</td>
<td>2</td>
<td>TESLA-A1-D12</td>
</tr>
<tr>
<td>19.</td>
<td>Oil viewing Chamber(SS304L)</td>
<td>1</td>
<td>TESLA-A1-D13</td>
</tr>
<tr>
<td>20.</td>
<td>Trolley (M.S)</td>
<td>1</td>
<td>TESLA-A1-D14</td>
</tr>
<tr>
<td>21.</td>
<td>M8×70Lg HEX BOLT,NUT&amp; Washer (SS304)</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>M8×30Lg HEX BOLT,NUT&amp; Washer (SS304)</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>M8×50Lg HEX HD SLOOtED HD BOLT(SS304)</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>CF 25 BALL VALVE (SS304)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>CF 25 GATE Valve (SS304)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>OD 646.0×ID614.0×3 thk</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fabrication details for metal plates, disc plates and other assemblies

All the parts should be fabricated as per drawings mentioned above and specifications given below. In case of doubt in understanding please ask for clarification.

1. General:

(a) No materials will be supplied by the indentor for fabrication.
(b) The fabricated parts should have super-finished surfaces as given in the drawings. The stainless steel plates/rods SS-304 should be used in fabrication and then the surfaces are to be polished.
(c) The fabricators must submit their own fabrication drawings. The fabrication drawings should be got approved before starting the job.
(d) The indenter reserves the right to make modifications and alterations in the drawings as well as to inspection at every stage of fabrication, testing and assembly. The fabricators should carry out minor modifications without extra cost.

2. Materials:

a) The surfaces are to be polished by buffing after fabrication. The fabricated parts should have super-finished surfaces as given in the drawings.
b) The perspex material should be of polycast fabricator.
c) The sharp corners are to be rounded off before polishing.
d) The FRP cylinder material should not have the porosity.

3. Fabrication:

a) The fabrication of components shall be in accordance with best quality shop practice and conform strictly to dimensions, tolerances and instruction given in the drawings & specifications. All the finished parts are true, flat, smooth, mirror polished, corners rounded off, free of weld spatter, etc. Exposed surface shall be protected from damage at all times.
b) All the fabricated parts should have super-finished surfaces as given in the drawings to RMS 0.8µm by grinding, machining, lapping with abrasives and electro-polishing if necessary.
c) A general tolerance of ±0.1% on all fabricated parts and 0.05% on machined parts shall be provided unless otherwise specified. Similarly a general tolerance of ±0° 30’ shall be provided on all angles. All gasket surfaces should be super-finished to RMS 0.8µm.

4. Welding:

a) All the welding shall be electric arc. The root pass of all welding shall be made using TIG welding with continuous inert gas like argon gas backing followed by shielded, metallic arc welding.
b) The welding procedures shall be qualified and approved under section ix of ASME Boiler and Pressure Vessel code and shall also be submitted to and approved by Indenter before commencing fabrication.
c) All the welds are to be inspected and shall be ground smooth. Completed welds shall be smooth and free from any drop-through spatter, cracks undercut or lack of penetration.
5. **Cleaning:**

   a) All inside surfaces shall be degreased and then flushed with clean water. The degreasing agent shall not contain halogens. Final cleaning shall be performed with hot water wash using a commercial detergent followed by hot water rinse. Surfaces shall be completely cleaned and degreased.

6. **Assembly of modules**

   Assembly drawing has been attached. Please prefer to that.
NOTE 2 :- 1) USE ADVANI MAKE ELECTRODE 7018 FOR RIGID WELDING OF TROLLEY.
2) SHARP CORNERS SHOULD BE REMOVED.
3) AFTER FABRICATION OF TROLLEYSHOUlD BE PAINTED WITH TWO COATS OF PRIMER RED OXIDE. AFTER THIS IT SHOULD BE DOUBLE COATED WITH EPOXY PAINT OF ASIAN PAINTS MAKE.
# Bill of Material

<table>
<thead>
<tr>
<th>SR NO</th>
<th>PART NO</th>
<th>DESCRIPTION</th>
<th>MATL</th>
<th>QTY</th>
<th>REMARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>KF 50 FLANGE</td>
<td>S.S 304L</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>8&quot;N.B SCH 10 SEAMLESS PIPE x 206 Lg</td>
<td>S.S 304L</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>PLATE Ø300 x 12 THK.</td>
<td>S.S 304L</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>PLATE Ø300 x 12 THK.</td>
<td>PERXPX</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>O' RING LD 215.26 SECO® 6.98</td>
<td>NEOPREN</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>M8 x 15 Lg HEX HD BOLT</td>
<td>SS304</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

# General Tolerances

- **Linear Dimensions**
  - UP TO 6: ±0.1
  - 6 - 30: ±0.2
  - 30 - 120: ±0.3
  - 120 - 315: ±0.5
  - 315 - 1000: ±0.8
  - 1000 - 2000: ±1.2
  - 2000 - 4000: ±2.0
- **Surface Finish**
  - 1. ALL DIMENSIONS ARE IN MILLIMETERS.
  - 2. REMOVE SHARP CORNERS AND BURRS.
- **Length of Shorter Side of Angle**
  - 1 - 6: ±1°
  - 6 - 12: ±1°
  - 12 - 20: ±1°
  - 20 - 40: ±1°
  - 40 - 100: ±1°

# Diagram Details

- **Front View**
- **Item No.: 3**
- **Item No.: 4**
- **Item No.: 5**
- **Detail at 'B'**
NOTE:- 1) ALL SHARP CORNER SHOULD BE ROUNDED TO R2

2) ALL SURFACE SHOULD BE 0.4 MICRON

GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED

LENGTH OF SHORTER SIDE OF ANGLE

IN METER

CHAMFER 1 x 45°

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. REMOVE SHARP CORNERS AND BURRS.
NOTE:- 1) ALL SHARP CORNER SHOULD BE ROUNDED TO R2
2) ALL SURFACE SHOULD BE 0.4 MICRON

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. REMOVE SHARP CORNERS AND BURRS.

LinAx 315 - 1000 ± 0.8
30 - 120 ± 0.3
120 - 315 ± 0.5
6 - 30 ± 0.2
6 ± 0.1

Surface Finish
3.15 CLA
1 x 1\(^\circ\)

Length of Shorter Side of Angle
1 - 6 ± 1°
6 - 30 ± 30°
30 - 120 ± 20°
120 - 400 ± 10°

Further notes:
- 24.0 ± 0.2
- ø600.0 ± 0.8
- ø606.0 ± 0.8
- ø646.0 ± 0.8
- ø20.0 ± 0.1
- ø25.0 ± 0.1
- 1085.0 ± 1.2
- 24.0 ± 0.8

Front View

NOTE:

1. ALL SHARP CORNERS SHOULD BE ROUNDED TO R2
2. ALL SURFACE SHOULD BE 0.4 MICRON

General Tolerance Unless Otherwise Specified

Linear Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 6</td>
<td>± 0.1</td>
</tr>
<tr>
<td>6 - 30</td>
<td>± 0.2</td>
</tr>
<tr>
<td>30 - 120</td>
<td>± 0.3</td>
</tr>
<tr>
<td>120 - 315</td>
<td>± 0.5</td>
</tr>
<tr>
<td>315 - 1000</td>
<td>± 0.8</td>
</tr>
<tr>
<td>1000 - 2000</td>
<td>± 1.2</td>
</tr>
<tr>
<td>2000 - 4000</td>
<td>± 2.0</td>
</tr>
</tbody>
</table>

Surface Finish

- 3.15 CLA
- 1 x 1\(^\circ\)

Length of Shorter Side of Angle

- 1 - 6 ± 1°
- 6 - 30 ± 30°
- 30 - 120 ± 20°
- 120 - 400 ± 10°

Rev. 4

App'd.

Date

Dr'n/Date

Drg. CHK'd.: S.R. Ghodke

Dr. A. Sharma

Design: A. Patel

Accelerator & Pulse Power Division

Bhabha Atomic Research Centre

Government of India
THIS DESIGN AND DRAWING IS THE PROPERTY OF BHABHA ATOMIC RESEARCH CENTRE
IT MUST BE RETURNED WITH QUOTATION OR UPON DELIVERY OF MATERIAL AND
EQUIPMENT MUST NOT BE USED EXCEPT BY PERMISSION OF THE OWNER.

GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED

<table>
<thead>
<tr>
<th>LINEAR DIMENSIONS</th>
<th>UPTO</th>
<th>6 - 30</th>
<th>30 - 120</th>
<th>120 - 315</th>
<th>315 - 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>±0.1, ±0.2, ±0.3</td>
<td>±0.5</td>
<td>±0.8</td>
<td>±1.0</td>
<td>±1.2</td>
<td>±2.0</td>
</tr>
<tr>
<td>6 - 30 - 120 - 315 - 1000</td>
<td>1.2</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td></td>
</tr>
</tbody>
</table>

LENGTH OF SHORTER SIDE OF ANGLE

<table>
<thead>
<tr>
<th>SIDE OF ANGLE</th>
<th>1 - 6</th>
<th>6 - 20</th>
<th>20 - 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>±1°, ±30°</td>
<td>±30°</td>
<td>±20°</td>
<td>±10°</td>
</tr>
</tbody>
</table>

SURFACE FINISH IN MICRONS

<table>
<thead>
<tr>
<th>CHAMFER</th>
<th>1 x 45°</th>
</tr>
</thead>
<tbody>
<tr>
<td>±3.15</td>
<td>±CLA</td>
</tr>
</tbody>
</table>

LENGTH OF SHORTER SIDE OF ANGLE

<table>
<thead>
<tr>
<th>6 - 30 - 120 - 315 - 1000</th>
<th>±1°, ±30°, ±20°, ±10°</th>
</tr>
</thead>
</table>

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. REMOVE SHARP CORNERS AND BURRS.

TITLE: ELECTRODE
PROJECT OR SECTION: TESLA TRANSFORMER

T.S.
Dr. A SHARMA

GOVERNMENT OF INDIA
Bhabha Atomic Research Centre
Accelerator & Pulse Power Division

AutoCAD FILE No.: W.O. NO.: CODE NO.:
24-Ø8.3 CLEAR HOLES EQUI SPACED ON Ø606.0 P.C.D

FRONT VIEW

SECTION A'-A'
SIDE VIEW

NVR NON RETURN VALVE
NOTE:- 1) ALL SHARP CORNER SHOULD BE ROUNDED TO R2

2) ALL SURFACE SHOULD BE 0.4 MICRON

GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED

LINEAR DIMENSIONS

<table>
<thead>
<tr>
<th>UPTO</th>
<th>±</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 - 30</td>
<td>0.1</td>
</tr>
<tr>
<td>30 - 120</td>
<td>0.3</td>
</tr>
<tr>
<td>120 - 315</td>
<td>0.5</td>
</tr>
<tr>
<td>315 - 1000</td>
<td>0.8</td>
</tr>
<tr>
<td>1000 - 2000</td>
<td>1.2</td>
</tr>
<tr>
<td>2000 - 4000</td>
<td>2.0</td>
</tr>
</tbody>
</table>

LENGTH OF SHORTER SIDE OF ANGLE

| 1 - 6 | 1°    |
| 6 - 12 | 2°    |
| 12 - 30 | 3°    |
| 30 - 60 | 4°    |
| 60 - 120| 5°    |

SURFACE FINISH IN MICRONS

| 1.1CLA CHAMFER 1 x 45° |

PART NO:-10

M26

Ø80.0

R20.0

45.0 59.1

PART NO:-13

M40

Ø5.0

M26

R20.0

40.0

PART NO:-11

M26

Ø80.0

PART NO:-14

M26

ø70.0

38.0

Thk. 0.4

768.0

10.0

9.0

ø16.0

38.0

32.0

Thk. 0.4

5.0

Dr.A SHARMA

DRG CHK'D: S.R.GHODKE

DES'D: A PATEL

S.R.B

BHABHA ATOMIC RESEARCH CENTRE

ACCELERATOR & PULSE POWER DIVISION

TESLA TRANSFORMER

S.S ELECTRODES

PROJECT OR SECTION

APP'D:

W.O. NO.:

CODE NO.:

GOVERNMENT OF INDIA

SHEET NO. OF SHEETS:

SCALE:

PROJ:

DRG NO.:

REV.:
NOTE:- 1) ALL SHARP CORNER SHOULD BE ROUNDED TO R2

2) ALL SURFACE SHOULD BE 0.4 MICRON
NOTE:- 1) ALL SHARP CORNER SHOULD BE ROUNDED TO R2
2) ALL SURFACE SHOULD BE 0.4 MICRON
NOTE:- 1) ALL SHARP CORNER SHOULD BE ROUNDED TO R2
2) ALL SURFACE SHOULD BE 0.4 MICRON
NOTE:- 1) ALL SHARP CORNER SHOULD BE ROUNDED TO R2
2) ALL SURFACE SHOULD BE 0.4 MICRON
NOTE:  1) ALL SHARP CORNER SHOULD BE ROUNDED TO R2
2) ALL SURFACE SHOULD BE 0.4 MICRON

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. REMOVE SHARP CORNERS AND BURRS.
3. CHAMFER 1 x 45°
4. REMOVE SHARP CORNERS AND BURRS.
5. SURFACE FINISH 3.15 CLA
NOTE: 1) ALL SHARP CORNER SHOULD BE ROUNDED TO R2

2) ALL SURFACE SHOULD BE 0.4 MICRON
NOTE:- 1) ALL SHARP CORNER SHOULD BE ROUNDED TO R2

2) ALL SURFACE SHOULD BE 0.4 MICRON
## BILL OF MATERIAL

<table>
<thead>
<tr>
<th>SR.NO</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>MATL.</th>
<th>QTY</th>
<th>REMARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>F.R.P CHAMBER</td>
<td>F.R.P</td>
<td>1</td>
<td>TESLA-A1-D1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>PERXPPEX CYLINDER</td>
<td>PERXPPEX</td>
<td>1</td>
<td>TESLA-A1-D2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>COPPER CYLINDER</td>
<td>COPPER</td>
<td>1</td>
<td>TESLA-A1-D3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>COPPER STRIPS</td>
<td>COPPER</td>
<td>1</td>
<td>TESLA-A1-D4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>COPPER STRIPS</td>
<td>COPPER</td>
<td>1</td>
<td>TESLA-A1-D4</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>COPPER STRIPS</td>
<td>COPPER</td>
<td>1</td>
<td>TESLA-A1-D4</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>DELRIN CONE</td>
<td>DELRIN</td>
<td>1</td>
<td>TESLA-A1-D5</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>1-PERXPPEX COROGATATED CYLINDER</td>
<td>PERXPPEX</td>
<td>1</td>
<td>TESLA-A1-D6</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>PERXPPEX COROGATATED CONE</td>
<td>PERXPPEX</td>
<td>1</td>
<td>TESLA-A1-D7</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>S.S ELECTRODES</td>
<td>S304L</td>
<td>1</td>
<td>TESLA-A1-D8</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
<td>S.S NUT</td>
<td>S304L</td>
<td>2</td>
<td>TESLA-A1-D8</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>O' RING ID 40.64 SEC.05.33</td>
<td>NEOPREN</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>13</td>
<td>S.S ELECTRODE</td>
<td>S304L</td>
<td>2</td>
<td>TESLA-A1-D8</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
<td>S.S CONNECTOR</td>
<td>S304L</td>
<td>1</td>
<td>TESLA-A1-D8</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td>OIL CHAMBER</td>
<td>S304L</td>
<td>1</td>
<td>TESLA-A1-D9</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
<td>ELECTRODE</td>
<td>S304L</td>
<td>1</td>
<td>TESLA-A1-D8</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
<td>S.S OIL CHAMBER</td>
<td>S304L</td>
<td>1</td>
<td>TESLA-A1-D1</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
<td>2-PERXPPEX COROGATATED CONE</td>
<td>PERXPPEX</td>
<td>1</td>
<td>TESLA-A1-D2</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
<td>OIL VIEWING CHAMBER</td>
<td>S304L</td>
<td>1</td>
<td>TESLA-A1-D3</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
<td>TROLLEY</td>
<td>M.S</td>
<td>1</td>
<td>TESLA-A1-D4</td>
</tr>
<tr>
<td>21</td>
<td>21</td>
<td>M8 x 70 Lg HEX HD BOLT, NUT &amp; WASHER</td>
<td>S304</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>22</td>
<td>M8 x 30 Lg HEX HD BOLT, NUT &amp; WASHER</td>
<td>S304</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>23</td>
<td>M10 x 50 Lg HEX HD SLOOTED HD BOLT</td>
<td>S304</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>24</td>
<td>CF 25 BALL VALVE</td>
<td>S304</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>25</td>
<td>CF 25 GATE VALVE</td>
<td>S304</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>26</td>
<td>OD 646.0 x ID 614.0 x 3 Thk.</td>
<td>NEOPREN</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

### GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED

- **LINEAR DIMENSIONS**:
  - L: ± 0.1 mm
  - 6 - 30: ± 0.2 mm
  - 30 - 120: ± 0.3 mm
  - 120 - 315: ± 0.5 mm
  - 315 - 1000: ± 0.8 mm
  - 1000 - 2000: ± 1.2 mm
  - 2000 - 4000: ± 2.0 mm

- **LENGTH OF SHORTER SIDE OF ANGLE**:
  - 1.6 - 6°: ± 0.1°
  - 6 - 20°: ± 0.2°
  - 20 - 60°: ± 0.3°
  - 60 - 120°: ± 0.5°

- **SURFACE FINISH**:
  - CHAMFER: 1 x 45°
  - FILLET: 1 x 45°

- **PROJECT OR SECTION**:
  - TESLA TRANSFORMER

- **W.O. NO.**:
  - BHABHA ATOMIC RESEARCH CENTRE

- **CODE NO.**:
  - TESLA-A1

- **APP'D.:** Dr.A SHARMA

- **DRG. CHKD.:** S.R.GHODE

- **DES`:** A PATEL

- **DRG NO.**:
  - ACCELERATOR & PULSE POWER DIVISION

- **BILL OF MATERIAL**

- **SCALE**: N-T-S

- **APP'D DATE**: S.R.B