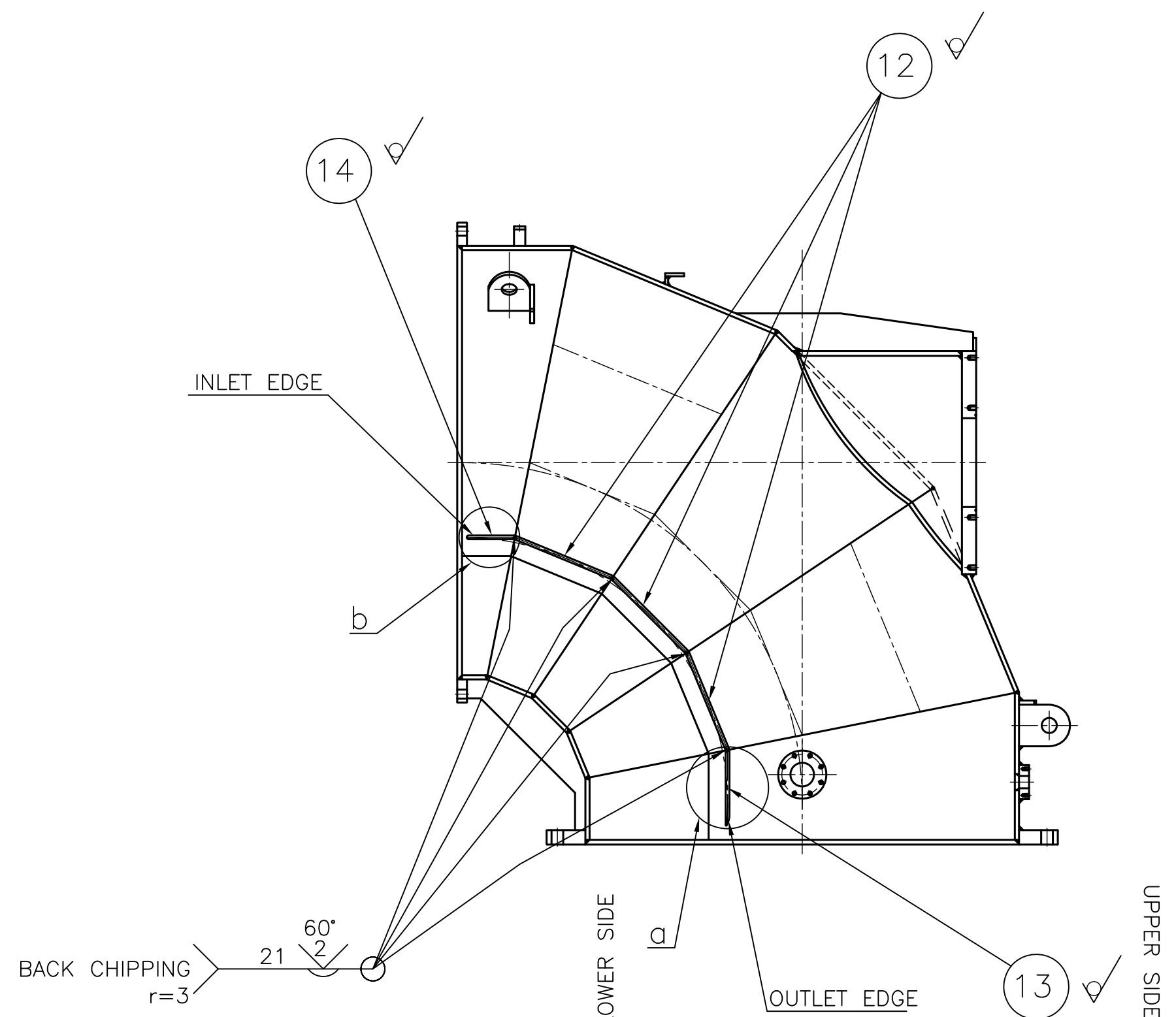
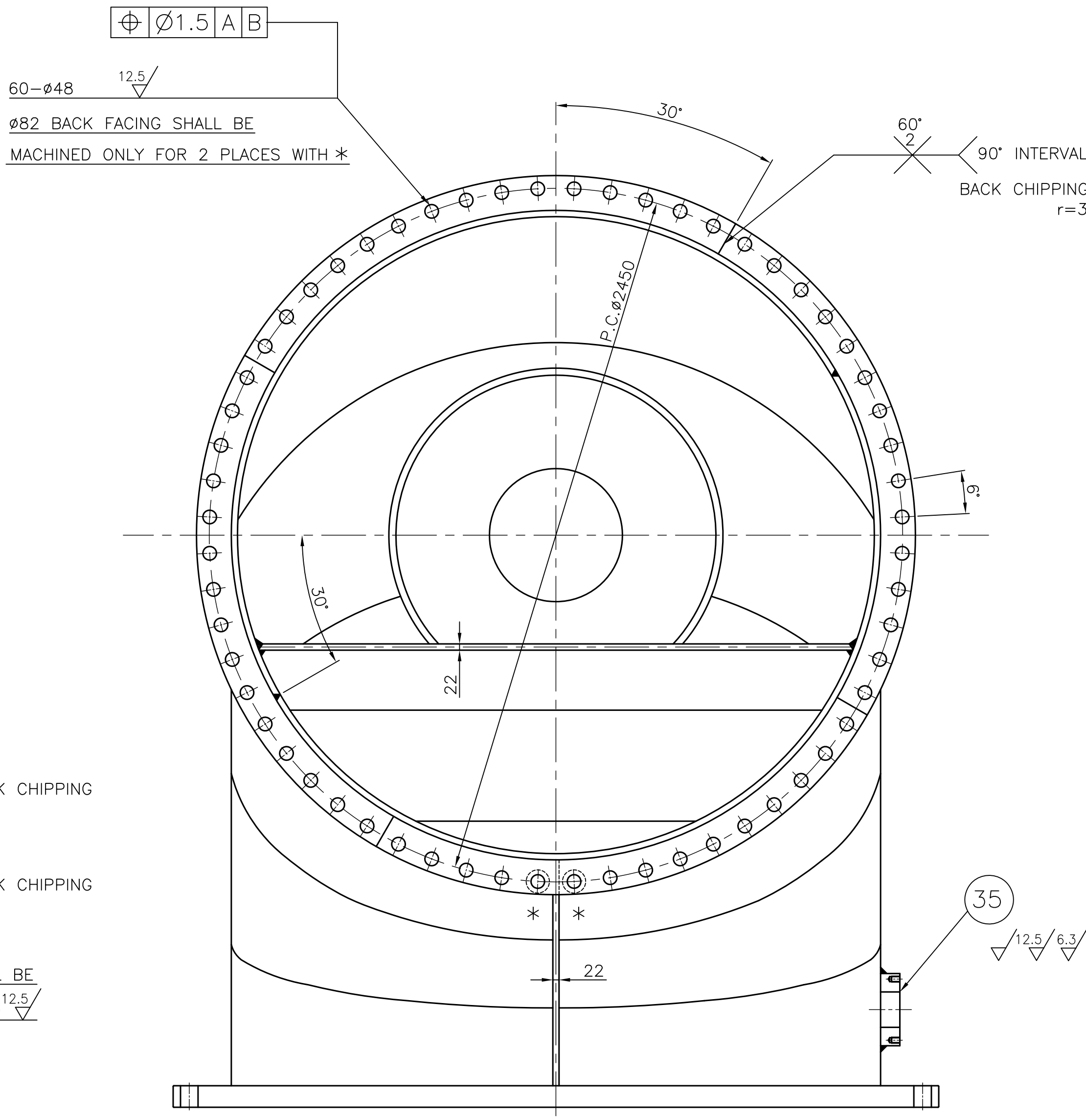
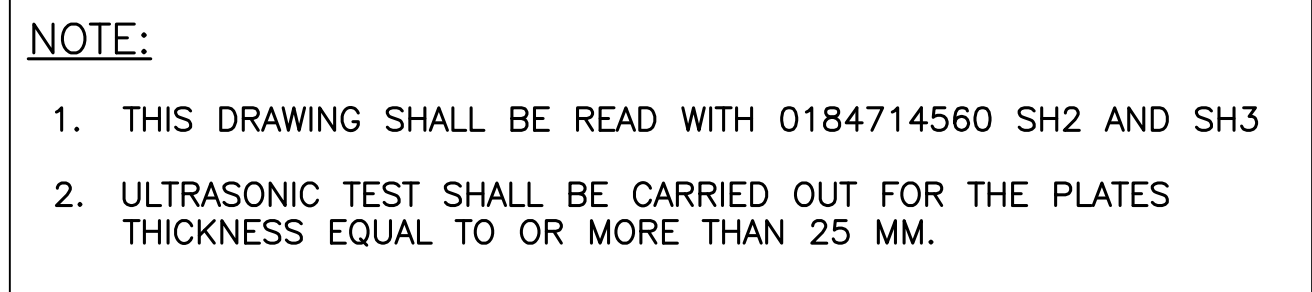




WELDING PROCEDURE FOR GUIDE PLATE

**NOTE:**

1. FOR FLANGES POS.Nos 2&3 SEGMENTAL WELDING IS PERMITTED (MAXIMUM 4 SEGMENTS).
2. DIMENSIONS SHOWN ARE FINISH MACHINED DIMENSIONS.
3. WELDING AS PER BHEL WELD PROCEDURE SPECN NO. WE-001.
4. RAW MATERIAL PROCUREMENT SHALL BE AS PER AA01119. UT TESTED PLATES SHALL BE PROCURED FOR PLATES HAVING MORE THAN OR EQUAL TO 25 MM THICK
5. D.P.T SHALL BE DONE ON 100 % OF WELDS AS PER AA0850131 ACCEPTANCE AS PER AA0850129.
7. SPOT RT TO BE CARRIED OUT ON 10 % OF BUTT WELDS FOR PLATES UP TO 25 MM AS PER THE QUALIFICATION PROCEDURE-ASME SECTION VIII DIV I. UW 52.
8. RT TO BE CARRIED OUT ON 100% BUTT WELD JOINT FOR MORE THAN 25 MM THICK PLATES PER THE QUALIFICATION PROCEDURE-ASME SECTION VIII DIV I. UW 51.
9. UT TO BE CARRIED OUT ON 100% BUTT WELD JOINT FOR MORE THAN 25 MM IF UT IS TO BE DONE IN PLACE OF RT PER THE MANUFACTURER STANDARD PRACTICE.
10. STRESS RELIEVING TO BE DONE AS PER HY0640763
11. SHOT BLASTING TO BE DONE TO REMOVE SCALES, AFTER SHORT BLASTING ONE COAT OF PRIMER TO BE APPLIED WITHIN 2 HOURS
12. WHEREVER NOT SPECIFIED, ALL SHARP EDGES TO BE CHAMFERED TO 2x45°.
13. WHEREVER NOT SPECIFIED TOLERANCE ON MACHINED DIMENSIONS SHALL BE AS PER AA0230208 MEDIUM CLAS
14. THIS COMPONENT IS TO BE MATCHED WITH MATING COMPONENTS ON EITHER SIDE BEFORE DESPATCH.
15. COMPONENT SHALL BE PRESSURE TESTED AT 9.4 Kg/Sq. Cm. FOR 30 MINUTES DURATION
16. TEMPLATE TO BE MADE FOR CHECKING THE NO. OF HOLES & PCD FOR BOTTOM SIDE FLANGE AND SHALL BE WITNESSED BY BHEL
17. VISUAL EXAMINATION AS PER MSS SP 55. 100% CHECKING TO BE DONE.

PAINTING:

1. ALL SURFACES SHALL BE PAINTED WITH TWO COATS (EACH 50 MICRONS THICK) OF CHEMICAL RESISTANT EPOXIDE PRIMER PAINT AS PER AAS6105. EXCEPT MACHINED SURFACES.
2. FINISH PAINTING FOR ALL INTERNAL SHALL BE DONE WITH THREE COATS (EACH 50 MICRONS THICK) OF HIGH BUILD COAL TAR EPOXIDE FINISHING PAINT AS PER AAS6135 PROCESS STANDARD NO. AA0674104. TOTAL DFT SHALL BE 150
3. FINISH PAINTING FOR ALL SURFACE, FINISH PAINTING FOR ALL EXTERNAL SURFACE, A COAT OF A COAT OF RED LEAD PRIMER OF MINIMUM THICKNESS OF 50 MICRONS FOLLOWED BY UNDERCOAT OF SYNTHETIC ENAMEL PAINT OF MINIMUM THICKNESS OF 50 MICRONS SHALL BE APPLIED. THE TOP COAT SHALL CONSIST OF TWO COATS EACH OF MINIMUM THICKNESS OF 50 MICRONS OF SYNTHETIC ENAMEL PAINT AND THUS TOTAL THICKNESS SHALL BE MINIMUM 200 MICRONS. PAINT GRADE G3 OF IS-5
4. MACHINED SURFACES SHALL BE COATED WITH SUITABLE RUST PREVENTIVE COAT AS PER HY409563, CATEGORY 'B'
5. MACHINED SURFACES SHALL NOT BE PAINTED

IMPORTANT NOTE:

1. THE BOTTOM SIDE OF DISCHARGE ELBOW SHALL BE MATCHED WITH THE TOP SIDE OF LIFTING COLUMN PIPE AND TOP SIDE OF THE DISCHARGE ELBOW TOP SIDE SHALL BE MATCHED WITH THE THRUST BEARING PEDESTAL BOTTOM SIDE FOR EACH SET. THE MATCHING SHALL BE PCD AND NO. OF HOLES. MATCHING MARKS SHALL BE PROVIDED FOR EASY IDENTIFICATION AT SITE.

|    |                 |  |  |  |  |  |  |              |       |
|----|-----------------|--|--|--|--|--|--|--------------|-------|
| 35 | BOSS            |  |  |  |  |  |  | 20.7         | 20.7  |
|    |                 |  |  |  |  |  |  | 1            |       |
| 34 | PLATE           |  |  |  |  |  |  | 0.7          | 0.7   |
|    |                 |  |  |  |  |  |  | 2            |       |
| 33 | PLATE           |  |  |  |  |  |  | 2.3          | 2.3   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 32 | PLATE           |  |  |  |  |  |  | 1.5          | 1.5   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 31 | PLATE           |  |  |  |  |  |  | 1.5          | 1.5   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 30 | RIB             |  |  |  |  |  |  | 4.2          | 4.2   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 29 | RIB             |  |  |  |  |  |  | 4.2          | 4.2   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 28 | RIB             |  |  |  |  |  |  | 5.6          | 5.6   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 27 | RIB             |  |  |  |  |  |  | 5.6          | 5.6   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 26 | PLATE           |  |  |  |  |  |  | 6.2          | 6.2   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 25 | PLATE           |  |  |  |  |  |  | 6.2          | 6.2   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 24 | PLATE           |  |  |  |  |  |  | 7.8          | 7.8   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 23 | PLATE           |  |  |  |  |  |  | 7.8          | 7.8   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 22 | RIB             |  |  |  |  |  |  | 3.1          | 3.1   |
|    |                 |  |  |  |  |  |  | 3            |       |
| 21 | EYE PLATE       |  |  |  |  |  |  | 8.5          | 8.5   |
|    |                 |  |  |  |  |  |  | 3            |       |
| 20 | PLATE           |  |  |  |  |  |  | 1.2          | 1.2   |
|    |                 |  |  |  |  |  |  | 3            |       |
| 19 | PLATE           |  |  |  |  |  |  | 9.2          | 9.2   |
|    |                 |  |  |  |  |  |  | 2            |       |
| 18 | PLATE           |  |  |  |  |  |  | 17.6         | 17.6  |
|    |                 |  |  |  |  |  |  | 2            |       |
| 17 | PLATE           |  |  |  |  |  |  | 28.0         | 28.0  |
|    |                 |  |  |  |  |  |  | 2            |       |
| 16 | PLATE           |  |  |  |  |  |  | 30.5         | 30.5  |
|    |                 |  |  |  |  |  |  | 1            |       |
| 15 | PLATE           |  |  |  |  |  |  | 24.0         | 24.0  |
|    |                 |  |  |  |  |  |  | 1            |       |
| 14 | PLATE           |  |  |  |  |  |  | 93.4         | 93.4  |
|    |                 |  |  |  |  |  |  | 1            |       |
| 13 | PLATE           |  |  |  |  |  |  | 146.4        | 146.4 |
|    |                 |  |  |  |  |  |  | 1            |       |
| 12 | PLATE           |  |  |  |  |  |  | 204.9        | 204.9 |
|    |                 |  |  |  |  |  |  | 3            |       |
| 11 | BOSS            |  |  |  |  |  |  | 9.2          | 9.2   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 10 | SHELL PLATE     |  |  |  |  |  |  | 550.6        | 550.6 |
|    |                 |  |  |  |  |  |  | 1            |       |
| 09 | SHELL PLATE     |  |  |  |  |  |  | 682.7        | 682.7 |
|    |                 |  |  |  |  |  |  | 1            |       |
| 08 | SHELL PLATE     |  |  |  |  |  |  | 814.3        | 814.3 |
|    |                 |  |  |  |  |  |  | 1            |       |
| 07 | SHELL PLATE     |  |  |  |  |  |  | 694.9        | 694.9 |
|    |                 |  |  |  |  |  |  | 1            |       |
| 06 | SHELL PLATE     |  |  |  |  |  |  | 882.7        | 882.7 |
|    |                 |  |  |  |  |  |  | 1            |       |
| 05 | SHELL PLATE     |  |  |  |  |  |  | 441.4        | 441.4 |
|    |                 |  |  |  |  |  |  | 1            |       |
| 04 | FLANGE          |  |  |  |  |  |  | 541.7        | 541.7 |
|    |                 |  |  |  |  |  |  | 1            |       |
| 03 | FLANGE          |  |  |  |  |  |  | 838          | 838   |
|    |                 |  |  |  |  |  |  | 1            |       |
| 02 | FLANGE          |  |  |  |  |  |  | 327.4        | 327.4 |
|    |                 |  |  |  |  |  |  | 1            |       |
| 01 | DISCHARGE ELBOW |  |  |  |  |  |  | 7010         | 7010  |
|    |                 |  |  |  |  |  |  | FP9712010147 |       |
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THE FOLLOWING CONDITIONS APPLY  
EXCEPT OTHERWISE STATED...

|                                                   |      |
|---------------------------------------------------|------|
| TYPE OF PRODUCT<br>OR<br>NAME OF CUSTOMER/PROJECT | 90MN |
|---------------------------------------------------|------|

| NS    |  |  | भारत हवी इलेक्ट्रिकल्स लिमिटेड<br>HYDERABAD | <table> <tr> <th></th><th>NAME</th><th>SIGN.</th><th>DATE</th></tr> <tr> <td>DRN.</td><td>SATISH</td><td>SATISH</td><td>01.07.20</td></tr> <tr> <td>CHD.</td><td>MSRAM</td><td>MSRAM</td><td>01.07.20</td></tr> <tr> <td>APPD.</td><td>KHRK</td><td>KHRK</td><td>01.07.20</td></tr> </table> |    | NAME | SIGN. | DATE | DRN. | SATISH | SATISH | 01.07.20 | CHD. | MSRAM | MSRAM | 01.07.20 | APPD. | KHRK | KHRK | 01.07.20 | NO. OF<br>VAR. |
|-------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|-------|------|------|--------|--------|----------|------|-------|-------|----------|-------|------|------|----------|----------------|
|       | NAME                                                                                  | SIGN.                                                                                 | DATE                                        |                                                                                                                                                                                                                                                                                              |    |      |       |      |      |        |        |          |      |       |       |          |       |      |      |          |                |
| DRN.  | SATISH                                                                                | SATISH                                                                                | 01.07.20                                    |                                                                                                                                                                                                                                                                                              |    |      |       |      |      |        |        |          |      |       |       |          |       |      |      |          |                |
| CHD.  | MSRAM                                                                                 | MSRAM                                                                                 | 01.07.20                                    |                                                                                                                                                                                                                                                                                              |    |      |       |      |      |        |        |          |      |       |       |          |       |      |      |          |                |
| APPD. | KHRK                                                                                  | KHRK                                                                                  | 01.07.20                                    |                                                                                                                                                                                                                                                                                              |    |      |       |      |      |        |        |          |      |       |       |          |       |      |      |          |                |
| DGA   |                                                                                       |                                                                                       |                                             |                                                                                                                                                                                                                                                                                              | NA |      |       |      |      |        |        |          |      |       |       |          |       |      |      |          |                |

3. INTERNAL M/CD CORNER RADII  
1 TO 0.7.

4. THE SURFACE ROUGHNESS WHEREVER NOT SHOWN  
SHALL BE TAKEN FROM THE SURFACE ROUGHNESS  
SHOWN OUT SIDE BACK SLASHES GIVEN AT THE  
TOP MOST RIGHT CORNER OF THE DRG.

|                          |                                                                                       |       |             |                   |                  |              |
|--------------------------|---------------------------------------------------------------------------------------|-------|-------------|-------------------|------------------|--------------|
| DEPT. PUMPS              |  | SCALE | WEIGHT (KG) | REF. TO ASSY DRG. | ITEM NO.         | NO. OF ITEMS |
| CODE 410                 |                                                                                       | NTS   | 7010        | NA                | NA               | NA           |
| TITLE<br>DISCHARGE ELBOW |                                                                                       |       |             | DRAWING NO.       |                  | REV.         |
|                          |                                                                                       |       |             | 0 182 47 1 4560   |                  | 01           |
|                          |                                                                                       |       |             | SHEET NO. 01      | NO. OF SHEETS 03 |              |