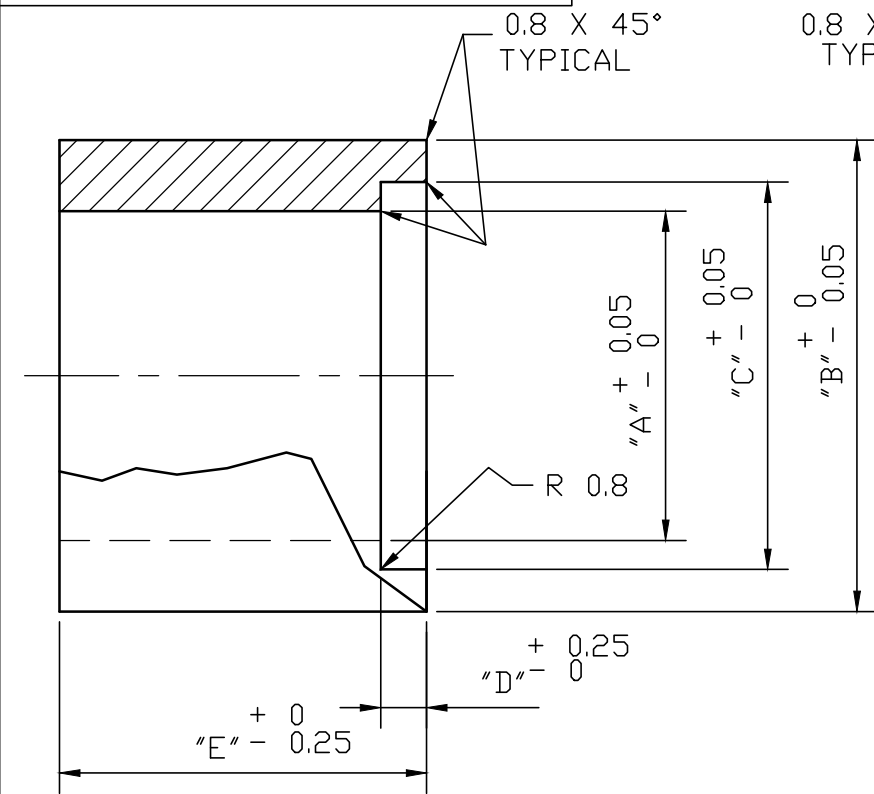
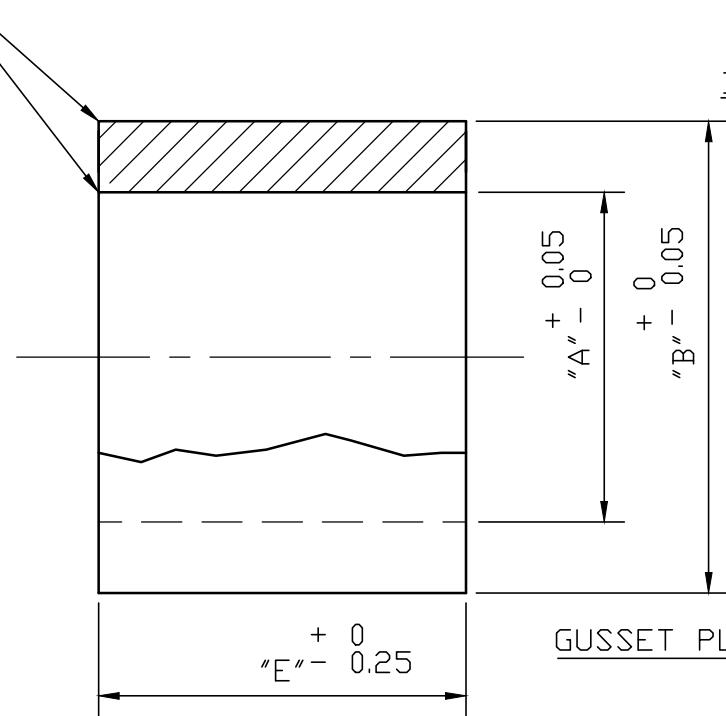


3-45-000-01283A

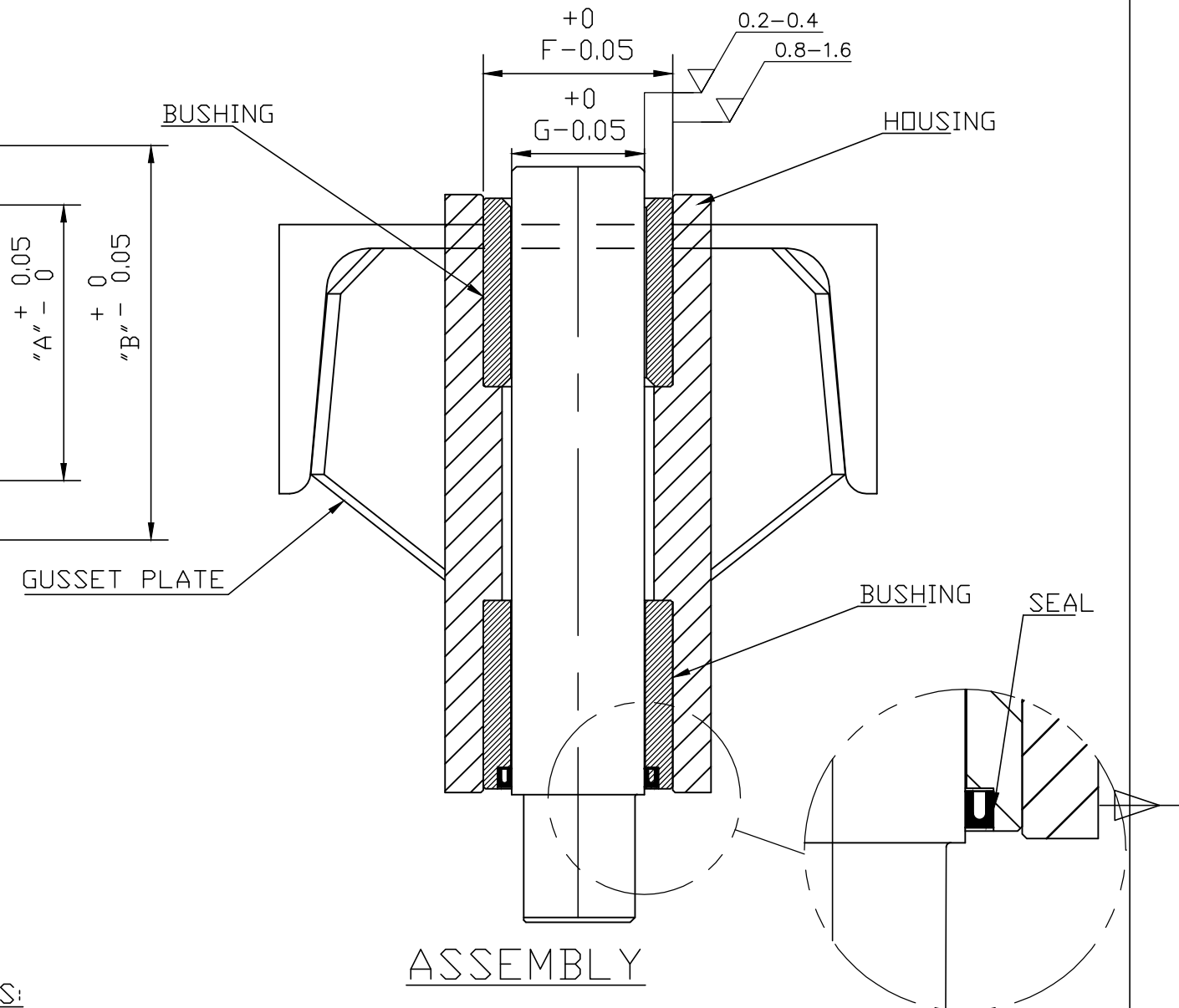
DRAWING NO:



STYLE NO. B



STYLE NO. A



| VARIANT NO. | STY. NO. | DIM. "A" | DIM. "B" | DIM. "C" | DIM. "D" | DIM. "E" | DIM. "F" | DIM. "G" |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 01          | A        | 36.7     | 52.7     | ----     | ----     | 50.3     | 52.4     | 35.76    |
| 02          | A        | 51.3     | 73.4     | ----     | ----     | 50.8     | 70       | 50.76    |
| 03          | B        | 51.3     | 73.4     | 60.2     | 7.1      | 57.1     | 70       | 50.76    |
| 04          | A        | 25.3     | 35.1     | ----     | ----     | 44.5     | 34.8     | 24.36    |
| 05          | A        | 38.6     | 60.7     | ----     | ----     | 50.3     | 60.4     | 37.66    |
| 06          | B        | 38.6     | 60.7     | 47.5     | 7.1      | 50.3     | 60.4     | 37.66    |
| 07          | A        | 38.6     | 60.7     | ----     | ----     | 69.3     | 60.4     | 37.66    |
| 08          | A        | 45       | 63.8     | ----     | ----     | 63.5     | 63.5     | 44.42    |
| 09          | B        | 45       | 63.8     | 53.9     | 7.1      | 63.5     | 63.5     | 44.42    |

MATERIAL SPECIFICATION

GRAPHITE IMPREGNATED WITH METAL ALLOY

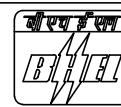
|        |                              |                   |
|--------|------------------------------|-------------------|
| REV 01 | DATE 06.11.14                | ALTERED : DHEERAJ |
| ZONE   | ASSEMBLY VIEW ADDED          | CHD & APPD: GSK   |
|        | DIMENSIONS "F",AND "G" ADDED |                   |

NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. UNSPECIFIED TOLERANCES: DIMS  $\pm 0.8$ ; ANGLES  $\pm 0^\circ-15'$

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TYPE OF PRODUCT  
OR NAME OF  
CUSTOMER/PROJECT



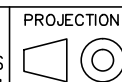
355-055

Bharat Heavy Electricals Ltd  
UNIT: HIGH PRESSURE BOILER PLANT  
TIRUCHIRAPALLI - 620014

DEPT FS

CODE 129

ALL  
DIMENSIONS  
ARE IN MM



SCALE  
NTS

WEIGHT (Kg)  
---

REF TO ASSY / OLD DWG

TITLE

**BUSHING**  
(GRAPHITE ALLOY)

DRAWING NO :

**3-45-000-01283A**

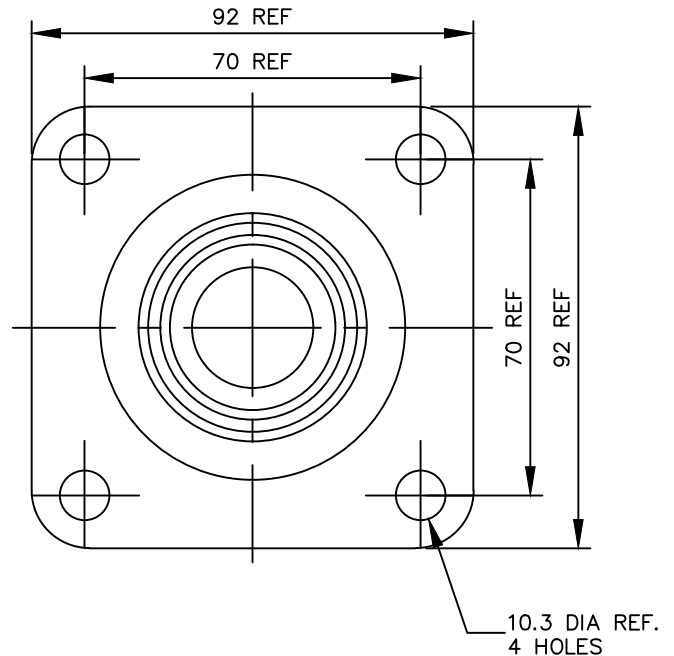
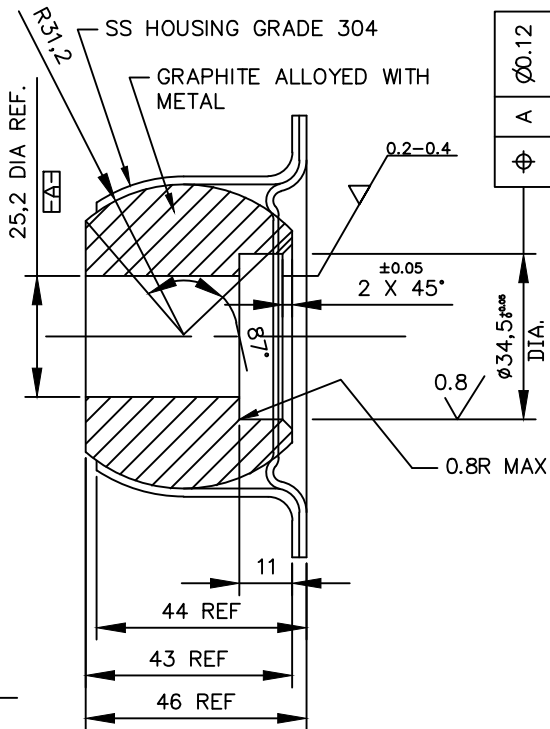
REV

**01**

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|                         |            |                            |
|-------------------------|------------|----------------------------|
| REV                     | DATE       | ALTERED :DHEERAJ KUMAR     |
| 01                      | 12.11.2014 | CHD & APPD:G SARAVANAKUMAR |
| RADIUS OF BEARING ADDED |            |                            |

FOR TOLERANCES OF UNTOLERANCED  
DIMENSIONS DURING MANUFACTURE  
REFER PLANT STD. NO TP 023 0299



**NOTE:**

1. ALL DIMENSIONS ARE MILLIMETERS
2. UNSPECIFIED TOLS : DIMS ±0.8
3. REFER ASSLY DRAWING NO 2-45-000-01392A
4. TECHNICAL SPECIFICATION REFER TFS:1001A

|                   |                |     |                |       |      |             |
|-------------------|----------------|-----|----------------|-------|------|-------------|
|                   | DAMPER BEARING |     | SUBDELIVERY    |       |      | 0.500       |
|                   |                |     |                |       |      |             |
| VARIANT<br>NUMBER | DESCRIPTION    | STD | MATERIAL CODE  | A/C/P | UNIT | UNIT WEIGHT |
|                   |                |     | MATERIAL SPECN |       |      | QUANTITY    |

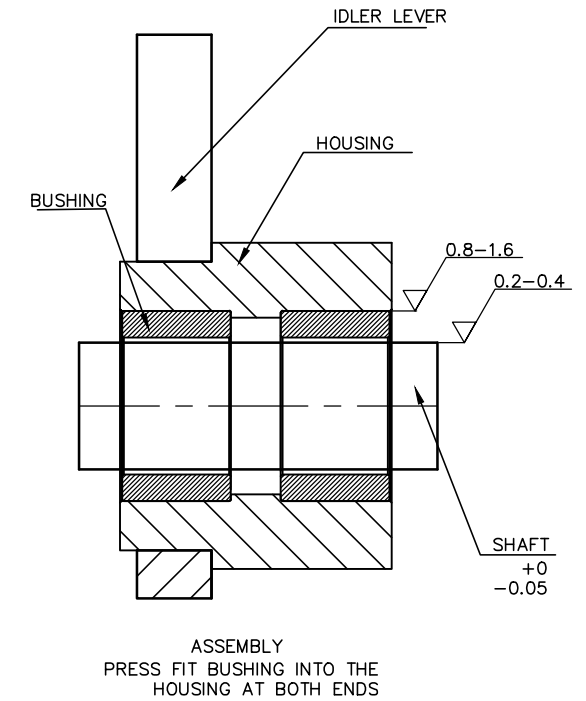


355-056

Bharat Heavy Electricals Ltd  
UNIT: HIGH PRESSURE BOILER PLANT  
TIRUCHIRAPALLI - 620014

|      |         |           |            |
|------|---------|-----------|------------|
| DRN  | NAME    | SIGNATURE | DATE       |
| CHD  | BIMAL.C | -sd-      | 15-03-2011 |
| APPD | GSK     | -sd-      | 15-03-2011 |
|      | MTP     | -sd-      | 15-03-2011 |

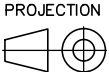
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|----------------------------------------|-----|--------------------------------|------------|-------|-------------|---------------------------------|
| DEPT                                   | FS  | ALL<br>DIMENSIONS<br>ARE IN MM | PROJECTION | SCALE | WEIGHT (Kg) | REF TO ASSY / OLD DWG           |
| CODE                                   | 129 |                                |            | N.T.S |             |                                 |
| TITLE                                  |     |                                |            |       |             | DRAWING NO :<br>4-45-320-01618A |
| SELF ALIGNING FLANGE<br>DAMPER BEARING |     |                                |            |       |             | REV<br>01                       |



|                   | 03             | GRAPHITE ALLOY BUSHING;<br>OD89.3 / ID64         |     |                |         |                |       | 0.003 |             |    |
|-------------------|----------------|--------------------------------------------------|-----|----------------|---------|----------------|-------|-------|-------------|----|
|                   | 02             | GRAPHITE ALLOY BUSHING;<br>OD57.4 / ID38.5       |     |                |         |                |       | 0.002 |             |    |
|                   | 01             | GRAPHITE ALLOY BUSHING;<br>W/SEAL; OD57.4/ID38.5 |     |                |         |                |       | 0.002 |             |    |
| VARIANT<br>NUMBER | ITEM<br>NUMBER | DESCRIPTION                                      | STD | DRAWING NUMBER | ITEM NO | MATERIAL CODE  | A/C/P | UNIT  | UNIT WEIGHT | CS |
|                   |                |                                                  |     |                | VAR NO  | MATERIAL SPECN | A/C/P | DI    | QUANTITY    |    |

|           |                                                                       |                   |
|-----------|-----------------------------------------------------------------------|-------------------|
| REV<br>01 | DATE                                                                  | ALTERED : DHEERAJ |
|           | 06.11.14                                                              | CHD & APPD: GSK   |
| ZONE      | HOUSING AND ASSEMBLY VIEWS ADDED<br>DIMENSIONS "F", "G" AND "H" ADDED |                   |

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|                                                                                                                                                                                   |                                |                                                                                                     |                |                                                                                                      |                                 |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------------------------|---------------------------------|--|--|--|--|
| TYPE OF PRODUCT<br>OR NAME OF<br>CUSTOMER/PROJECT                                                                                                                                 |                                |                                                                                                     |                |                                                                                                      |                                 |  |  |  |  |
|  Bharat Heavy Electricals Ltd<br>UNIT: HIGH PRESSURE BOILER PLANT<br>TIRUCHIRAPALLI – 620014 |                                | DRN                                                                                                 | NAME<br>G S K  | SIGNATURE<br>—sd—                                                                                    | DATE<br>31.12.2010              |  |  |  |  |
|                                                                                                                                                                                   |                                | CHD                                                                                                 | G S K          | —sd—                                                                                                 | 31.12.2010                      |  |  |  |  |
|                                                                                                                                                                                   |                                | APPD                                                                                                | M T P          | —sd—                                                                                                 | 31.12.2010                      |  |  |  |  |
| DEPT<br>FS                                                                                                                                                                        | ALL<br>DIMENSIONS<br>ARE IN MM | PROJECTION<br> | SCALE<br>N T S | WEIGHT (Kg)<br> | REF TO ASSY / OLD DWG           |  |  |  |  |
| CODE<br>129                                                                                                                                                                       |                                |                                                                                                     |                |                                                                                                      |                                 |  |  |  |  |
| TITLE<br>IDLER BUSHING                                                                                                                                                            |                                |                                                                                                     |                |                                                                                                      | DRAWING NO :<br>3-45-000-01273A |  |  |  |  |
|                                                                                                                                                                                   |                                |                                                                                                     |                |                                                                                                      | REV<br>01                       |  |  |  |  |