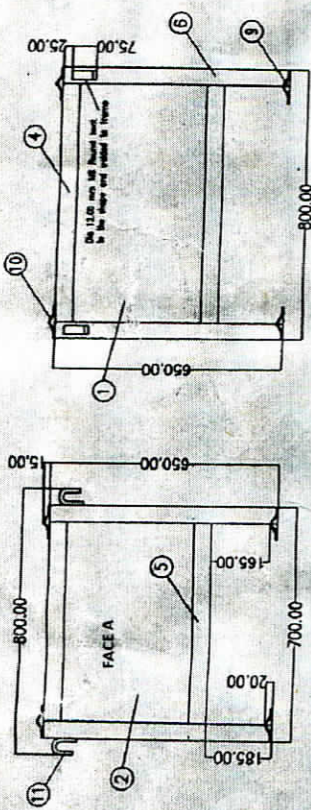


1097

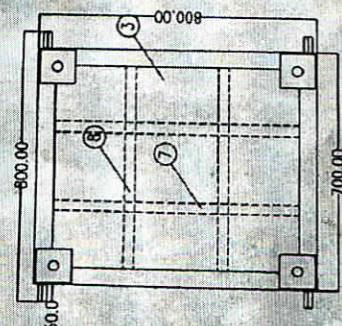
ALL DIMENSIONS ARE IN MM

Storage Bin for Automated Storage and Retrieval System



Side View

Front View



Plan View

| ITEM | DESCRIPTION | QTY |
|------|---|-------|
| 1 | M 8 SHEET 2.0 THK X 788 WIDE X 450 HIGH (SIDE SHEET) | 2 NOS |
| 2 | M 9 SHEET 2.0 THK X 688 WIDE X 450 HIGH (SIDE SHEET) | 2 NOS |
| 3 | M 5 SHEET 2.0 THK X 788 WIDE X 688 LONG (BOTTOM SHEET) WITH HOLES | 1 NO |
| 4 | M 5 ANGLE 80 X 50 X 5 - 800 LONG TOP & BOTTOM FLANGE | 4 NOS |
| 5 | M 5 ANGLE 80 X 50 X 5 - 700 LONG TOP & BOTTOM FLANGE | 4 NOS |
| 6 | M 5 ANGLE 80 X 60 X 5 - 660 LONG VERTICAL MEMBERS | 4 NOS |
| 7 | M 5 Flat 25 x 3 - 800 long | 2 NOS |
| 8 | M 5 Flat 25 x 3 - 700 long | 2 NOS |
| 9 | M 5 PLATE 100 X 100 X 5 - WITH R20 SPHERE FORMED (BOTTOM) | 4 NOS |
| 10 | M 5 PLATE 100 X 100 X 5 - WITH R15 SPHERE FORMED (TOP) | 4 NOS |
| 11 | 20C15 FLAT 35 X 6 X 150 MM LONG BENT TO THE SHAPE | 4 NOS |

FOR DETAILS OF HOOPS AND LOCATORS (ITEM NOS 9,10,11) REFER SHEET NO. 02
 FOR DETAILS OF DRAIN HOLES IN THE BOTTOM SHEET REFER SHEET NO. 03

Signature

Copyright and Confidential. The information on the document is the property of BHARAT HEAVY ELECTRICALS LIMITED and must not be used directly or indirectly in any way detrimental to the interest of the company.

TECHNICAL REQUIREMENTS:

- CHARTE LINE OF ALL FLATS SHOULD BE WITH SPHERE FORMED (BOTTOM) AND ALL PLATE DIMENSIONS WITH BELL SPHERE FORMED (TOP) SHOULD BE SAME FOR EACH CORNER TO ACCOMMODATE VERTICAL STIFFENERS OF SOME OTHER ANOTHER.
- ALL DIMENSIONS ARE IN MM
- ALL THE 4 SIDE SHEETS & BOTTOM SHEET ARE TO BE STITCH WELDED BY ARC WELDING 3 (WELD LENGTH 50MM, EQUALLY SPACED WELD ELEMENTS) TO THE FULL LENGTH.
- ALL OTHER WELDINGS/ARCS - FULL WELDING. ALL WELDING DIMENSIONS DENOTE LEG LENGTH. ELECTRODE TO BE USED - ER70D3
- ALL THE RESTING SURFACES SHOULD BE IN ONE PLANE.
- THE BINS ARE TO BE COATED WITH RED OXIDE AND TWO COATS OF SATIN BLUE COLOUR.
- THE BINS SHOULD BE ABLE TO CARRY LOAD OF MINIMUM 800 KG AND AS THE TRANSPORTATION SHALL BE DONE WITH OVERHEAD CRANES, THE LOADING SHALL BE IMPACT LOADING.
- SHARP EDGES ARE TO BE ROUNDED OFF.

1. THE FACE 'A' IS THE OPPOSITE FACE OF THE BOX SHALL BE PAINTED WITH A 4 DIGIT RED COLOUR NUMBER (CHARACTER SIZE 60MMX100MM). THE NUMBERS SHALL BE INFLATED AT THE TIME OF PRE DISPATCH INSPECTION CALL BY THE VENDOR TO BHEL.

| DRG. NO | INVENTORY NO. | DATE | DESCRIPTION | BY | APPD. | DATE |
|-----------------|---------------|------|-------------|----|-------|------|
| IS-3-350-105292 | | | | | | |

| DESIGNED | DRAWN | CHECKED | APPROVED | DATE |
|----------|------------|---------|----------|------------|
| R.Dos | Padmarabhi | Ramesh | R.Dos | 20.02.2008 |

| NAME | SIGN. | DATE |
|------------|--------------------|------------|
| R.Dos | <i>[Signature]</i> | 20.02.2008 |
| Padmarabhi | <i>[Signature]</i> | 20.02.2008 |
| Ramesh | <i>[Signature]</i> | 20.02.2008 |
| R.Dos | <i>[Signature]</i> | 20.02.2008 |

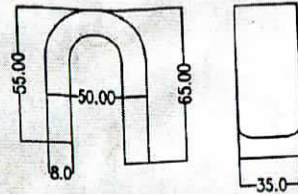
| DIR | ASRS | FILE NO. |
|-----|------|----------|
| | | 10529201 |

CUSTOMER/PROJECT : NEW BLADE SHOP - BHEL, HARIDWAR
 AUTOMATIC STORAGE AND RETRIEVAL SYSTEM
 BHARAT HEAVY ELECTRICALS LIMITED
 INDUSTRIAL SYSTEMS GROUP, BANGALORE
 TITLE : GENERAL ARRANGEMENT DRAWING OF BIG BIN
 MTS : JOB NO. IS-1-01-2020
 DRG. NO. IS-3-350-105292

| NO. OF SHEETS | SHEET NO. | REV. | REV. NO. |
|---------------|-----------|------|----------|
| 3 | | 01 | 00 |

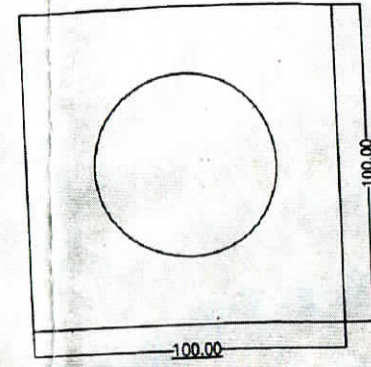
Storage Bin for Automated Storage and Retrieval System

DETAILS OF LIFTING HOOK



35X8X150 MM Long MS Flat bent to the shape and welded to frame

DETAILS OF LOCATOR



COPYRIGHT AND CONFIDENTIAL
The information on the document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the company.

IS-3-350-105292

Relajar

NOTE: 1. AS MENTIONED IN POINT TECHNICAL REQUIREMENTS IN SHEET 1, LIFTING HOOK AND LOCATOR BEAR LOAD OF MINIMUM 3000 KG AND ALSO WORK UNDER IMPACT LOADING CONDITION WHILE BEING LIFTED BY OVERHEAD CRANE.

- LOCATORS WITH R18 SPHERE ARE TO BE WELDED AT THE FOUR TOP CORNERS OF THE BIN
- LOCATORS WITH R25 SPHERE ARE TO BE WELDED AT THE FOUR BOTTOM CORNERS OF THE BIN

| | | |
|---|---|--------------------------|
| CUSTOMER/ PROJECT : | NEW BLADE SHOP - BHEL, HARIDWAR AUTOMATIC STORAGE AND RETRIVAL SYSTEM-II | |
| BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP, BANGALORE | | |
| TITLE : | DETAILS OF COVER, LIFTING HOOK & LOCATOR FOR BIG BIN (GENERAL ARRANGEMENT DRAWING FOR BIG BIN) | |
| NTS | JOB NO. IS-1-07-2020 | DRG. NO. IS-3-350-105292 |
| NO. OF SHEETS | 3 | REV. 00 |

| REV. | DESCRIPTION | BY | APPD. | APPROVED | NAME | SIGN. | DATE |
|------|-------------|----|-------|----------|-----------|-----------|------------|
| 07 | | | | DESIGNED | R.Das | <i>RD</i> | 20.02.2008 |
| 06 | | | | DRAWN | Padmanabh | <i>P</i> | 20.02.2008 |
| 05 | | | | CHECKED | Ratnesh | <i>R</i> | 20.02.2008 |
| 04 | | | | APPROVED | R.Das | <i>RD</i> | 20.02.2008 |

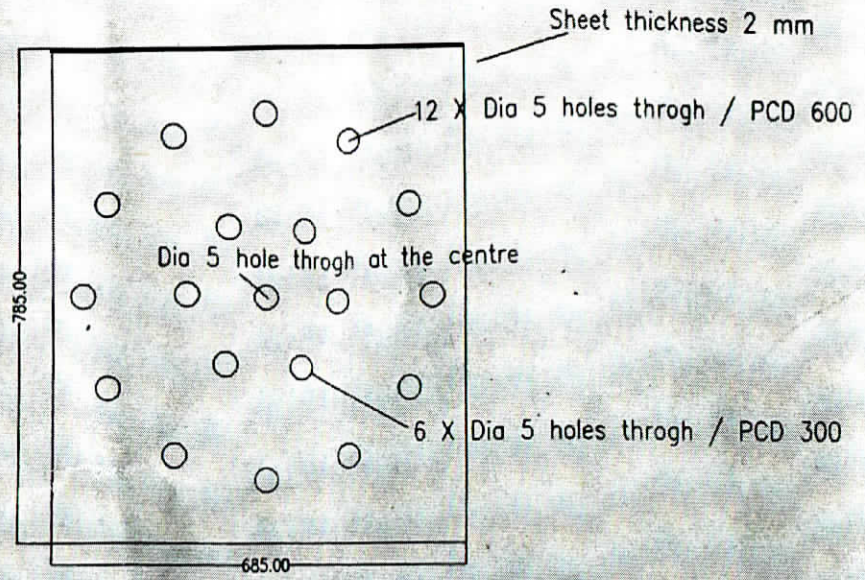


DIR : ASRS
FILE NO.: 10529201

COPYRIGHT AND CONFIDENTIAL
 Information on the document is the property of BHARAT HEAVY ELECTRICALS LIMITED
 It must not be used directly or indirectly in any way detrimental to the interest of the company

DRG. NO. IS-3-350-105292

BOTTOM SHEET



NOTE:
The holes in the bottom sheet are provided for draining the Oil

Handwritten signature

CUSTOMER/ NEW BLADE SHOP - BHEL, HARIDWAR

| | | |
|--|---|--|
| BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP, BANGALORE | | |
| TITLE : DETAILS OF BOTTOM SHEET FOR BIG BIN (GENERAL ARRANGEMENT DRAWING FOR BIG BIN) | | |
| NO. OF SHEETS | 3 | |
| SHEET NO. | 3 | |
| REV. | | |

| REV. NO. | DATE | DESCRIPTION | BY | APPD. | DATE | NAME | SIGN. | DATE |
|----------|------|-------------|-----------|-------|------------|------|-------|------|
| 07 | | | | | | | | |
| 06 | | | | | | | | |
| 05 | | | | | | | | |
| 04 | | DESIGNED | R.Dos | | 20.02.2008 | | | |
| 03 | | DRAWN | Padmanabh | | 20.02.2008 | | | |
| 02 | | CHECKED | Ratnesh | | 20.02.2008 | | | |
| 01 | | | | | | | | |



DIR ASRS