



LEGEND	DESCRIPTION
	MAIN EARTHING CONDUCTOR HDGI STRIP/CABLE
	EARTHING CONDUCTOR FOR EQUIPMENT HDGI STRIP/CABLE
	AIR TERMINATION/DOWN CONDUCTOR FOR LIGHTNING
	CONNECTOR
	EARTHING PIT
	EEP : ELECTRICAL EARTHING PIT
	IEP : INSTRUMENT EARTHING PIT
	NEP : NEUTRAL EARTHING PIT
	LEP: LIGHTNING EARTHING PIT
	EARTH BUS
	CONNECTION TO EQUIPMENT
	TEST LINK
	LIGHTNING ARRESTOR

- NOTES:-
- THIS DRAWING IS FOR CONCEPTUAL PURPOSE ONLY.
  - THE TANKS, VESSELS AND VERTICAL COLUMNS SHALL BE CONNECTED TO EARTHING NETWORK ATLEAST AT TWO DIAGONALLY OPPOSITE POINTS. THE QUANTITY OF EARTHING CONNECTIONS SHALL DEPEND UPON LENGTH/DIAMETER AS FOLLOWS.
- | TANK, VESSELS & VERTICAL COLUMNS | NO. OF EARTHING CONNECTIONS |
|----------------------------------|-----------------------------|
| LENGTH/DIAMETER < 20m            | 2                           |
| 20m ≤ LENGTH/DIAMETER < 30m      | 3                           |
| LENGTH/DIAMETER ≥ 30m            | 4                           |
- NGR BODY EARTHING SHALL NOT BE DONE.
  - TWO EARTHING CONNECTIONS EACH FOR TRANSFORMER RAIL, MARSHALLING BOX, OLTG PANEL, FAN CONTROL PANEL AND HV/LV TERMINAL BOX SHALL BE PROVIDED.
  - TWO EARTHING CONNECTIONS EACH FOR AMF PANEL, LV TERMINAL BOX & FUEL OIL TANK.
  - FOR HV MOTORS, MAIN TERMINAL BOX SHALL BE EARTHED AT TWO POINTS.
  - FOR BUILDING HAVING A NUMBER OF FLOORS AND NUMBER OF ELECTRICAL EQUIPMENT ON EACH FLOOR SEPARATE EARTH RINGS SHALL BE PROVIDED FOR EACH FLOOR.

<b>HALCO India / Owner/Client</b> <input type="checkbox"/> 1 For Approval <input type="checkbox"/> 2 For Review / Comments <input type="checkbox"/> 3 For Information <input type="checkbox"/> 4 For Engineering <input type="checkbox"/> 5 For Enquiry <input type="checkbox"/> 6 For Order Placement <input type="checkbox"/> 7 Final & Approved <input type="checkbox"/> 8 Released for Construction		<b>HALCO India / Owner/Client</b> <input type="checkbox"/> 1 Approved <input type="checkbox"/> 2 Approved for Manufacturing/Fabrication With Comments as Noted <input type="checkbox"/> 3 Not Approved/Resubmit <input type="checkbox"/> 4 Retained for Information/Records <input type="checkbox"/> 5 Reviewed <input type="checkbox"/> 6 Reviewed as Noted/Resubmit	
Contract No. <b>66-6695</b> Store Location: Server/Share Store Location: Folder Store Name Prc. Unit Con. Unit TON Group Order No. Type of Document (Sheet)		Document ID: <b>6695-ELT-600-FA-0002</b> Part: <b>00</b> Date: / / Name:	
Drawn: 12/10/2017 ROK Prepared: 12/10/2017 ROK Checked: 12/10/2017 POW Approved: 12/10/2017 LKS		Issued For Engineering Scale: N.T.S. Acc. Code: 4 Status:	

1.0 MTPA ALUMINA REFINERY STREAM-5 DAMANJODI, ODISHA  
 thysenkruupp  
 BLOCK DIAGRAM FOR EARTHING AND LIGHTNING PROTECTION CONCEPT  
 Rev. Date Name Date Name Date Name Description  
 00 12.10.17 ROK ROK 12.10.17 POW 12.10.17 MSD ISSUED FOR ENGINEERING  
 Scale: N.T.S. 4 Status: