

GROUNDING CONDUCTOR SIZE FOR PROCESS EQUIPMENT


EQUIPMENT		No.OF GROUNDING POINTS	GROUNDING CONDUCTOR SIZE (sq.mm.)
TANK OR STORAGE	UP TO 10M IN DIA.	2	35
	MORE THAN 10M IN DIA.	(NOTE "2")	35
TOWER	LESS THAN 20M IN HEIGHT	1	35
	20M AND HIGHER	2	35
DRUM	—————	1	35
HEAT EXCHANGER	—————	1	16
STEEL STRUCTURE	—————	2	70 OR 35
PIPE RACK	—————	EVERY 30M	70
PIPE	—————	(NOTE "1")	16
LADDER & STAIRWAYS	—————	(NOTE "1")	35

GROUNDING CONDUCTOR SIZE FOR ELECTRICAL EQUIPMENT

EQUIPMENT		No.OF GROUNDING POINTS	GROUNDING CONDUCTOR SIZE (sq.mm.)
TRANSFORMER	BODY	1	70
MEDIUM VOLTAGE & HIGH VOLTAGE SWITCHGEAR	SWITCHGEAR	2	120
	LIGHTNING ARRESTER	1	70
L/V SWGR, MCC OR PANELS	—————	(NOTE "1")	70
LOCAL CONTROL STATION	—————	1	16
LOCAL LIGHTING PANEL BOARD	—————	1	35
WELDING OUTLET	—————	1	35
MOTOR	UP TO 22KW	1	16
	23KW TO 55KW	1	35
	MORE THAN 56KW	1	70
MAIN LOOP	—————	(NOTE "1")	70
SUBSTATION LOOP	—————	(NOTE "1")	120

NOTES

- 1- THE No.OF GROUNDING POINTS SHALL BE IN ACCORDANCE WITH THE GROUNDING LAYOUT DRAWING.
- 2- THE INTERVAL BETWEEN GROUNDING POINTS ALONG TANK CIRCUMFERENCE SHALL NOT EXCEED 30 METERS.
- 3- GROUNDING CONDUCTOR SHALL BE PVC INSULATED STRANDED COPPER WIRE.

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REV	DESCRIPTION	DATE	
IRANIAN PETROLEUM STANDARDS 			
NO REVISION PERMITTED UNLESS APPROVED BY STANDARD ORGANIZATION			
REFERENCE DRAWING GROUNDING INSTALLATION DETAILS "CATEGORY 400" SELECTION CHART			
DATE	DRAWING No.	SHEET	REV.
	IPS - D - EL - 417	1	1