



**GUJARAT ENERGY TRANSMISSION
CORPORATION LTD.**

**SARADAR PATEL VIDYUT BHAVAN,
RACE COURSE, VADODARA - 390 007**

**TECHNICAL SPECIFICATIONS FOR
STEEL DRUM**

No. GETCO/E-TS-Steel Drum/R1 Nov-18

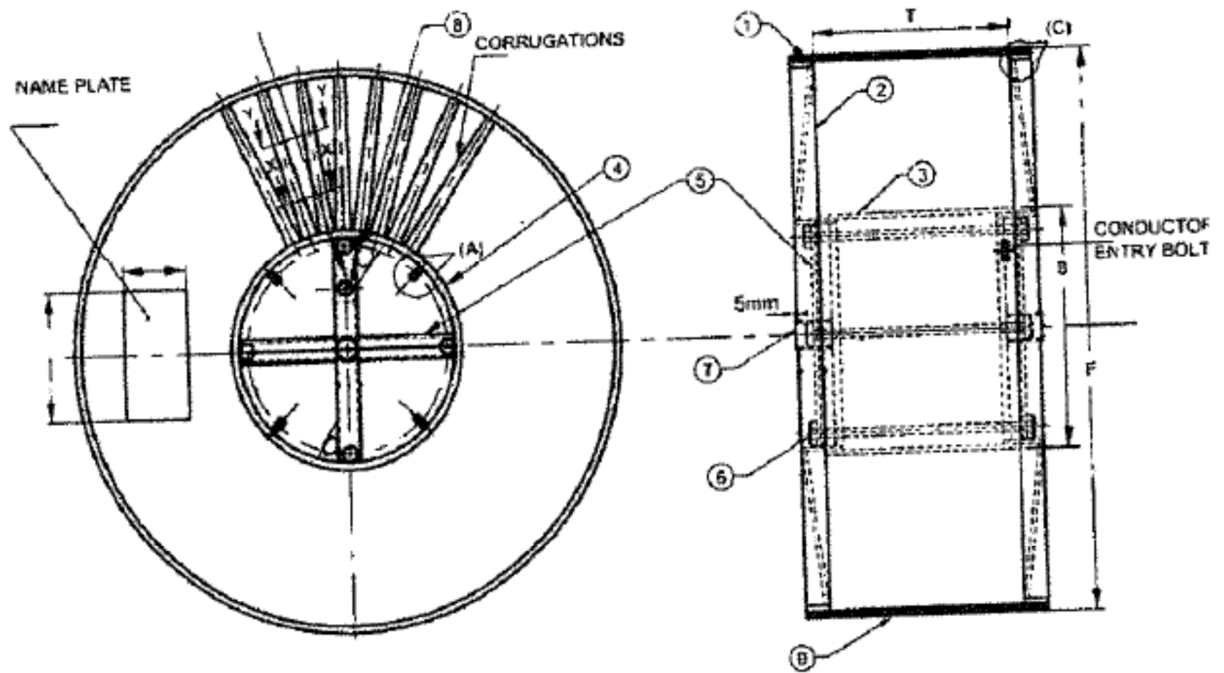
Technical Specifications for Steel Drum for Conductor

The scope of specification is to manufacture, fabricate, test & supply of steel drums suitable for ACSR/AL59 conductors as per IS:15976 (2013) and parameters stated here in. Drum shall be manufactured from MS steel confirming to IS:2062 (amendment up to date).

- 1) Drum size shall be suitable for accommodation conductor length of 2000 meters +/- 5%.
- 2) Drum shall be suitable for use with tension stringing equipments.
- 3) Flanges shall be provided such that the projection of the flanges beyond the outermost layer of conductor shall be at least 75 mm. to achieve clearance between outer surface of outer layer of conductor and inner surface of protective lagging should be not less than 75 mm.
- 4) Flange shall have non-corrosive primer coat & two coat of oil paint shade 631 as per IS:5 (Asian/Berger/Nerolac make). "PROPERTY OF GETCO" shall be marked on both the flanges (on cross arms) & inner side of barrel with white shade.
- 5) Name plate shall contain details of (a) Name & address of the manufacturer/supplier (b) Order no. (c) Year of manufacture (d) Tare weight of drum (e) Gross weight of drum (f) Serial number (g) Size of conductor (h) Length of conductor (i) Arrow marking for rewinding
- 6) The barrel & inner surface of flange (drum surface in contact with conductor) shall be provided with min. 2 mm. HDPE sheet & the same shall be secured with similar material rivets without making protrusions so as to not to damage the conductor. This layer shall not have any sharp edges that may damage the conductor surface.
- 7) Minimum requirements for the components of steel drum –

Sr. No.	Description	Zebra/Moose/ AL59(61/3.50)	Dog/Panther
a.	Corrugated sheet thickness	1.6 mm.	1.2 mm.
b.	Barrel sheet thickness	2.0 mm.	1.6 mm.
c.	Cross arm min. 4 nos. each side thickness	5 mm.	4 mm.

- (d) Name plate size 450 mm.x200 mm.x1.6 mm. thick welded on one side of flange
- (e) Center hole dia. 100 mm.
- (f) Tie rods 8 nos.
- (g) Drive pin hole 2 nos. on each side having dia. 65 mm.
- 8) Where a slot is cut in the flange to receive the inner end of the conductor, the entrance shall be in line with the periphery of the barrel. The edges of the slot shall be smooth to avoid any damage to conductor surface.
- 9) The outermost layer of conductor shall be covered with polypropylene sheet of appropriate thickness & secured using polymeric strap (min. 2 nos.) & sealed for full security. No wooden external laggings required. (This shall be applicable for drum supply with conductor)
- 10) Successful bidder have to submit detailed drawing of steel drum for approval.
- 11) Following Acceptance tests shall be performed
 - a) Visual examination & verification of dimension – minimum 5% of drums offered.
 - b) Drop test on drum – one drum – conductor loaded drum to be dropped from height of 1 meter. No damage to drum or to conductor shall be noticed & the same to be checked by rewinding of conductor. (This shall be applicable for drum supply with conductor).
 - c) Drum strength - minimum 5% of drums offered – Roll down the drum three times from 1 meter height on an inclined plane of 45°. No damage/bend to flange shall be noticed.



Material and Components

Sl No.	Name of the Parts	Material Specification	Qty.
1	OUTER RING	M.S. PLATE	2
2	FLANGE	H.R. SHEET	2
3	BARREL	H.R. SHEET	
4	INNER RING	M.S. PLATE	2
5	CROSS ARM	ISMC.	4
6	TIE ROD	M.S. ROD	8
7	CENTRE BUSH	M.S. PIPE	2
8	DRIVE BUSH	M.S. PIPE	2
9	EXTERNAL LAGGING	WOODEN BATTEN	—

REFERENCE DRAWING FOR STEEL DRUM