



MATERIAL SPECIFICATION				
NO.	DESCRIPTION	MATERIAL	QTY.	REMARK
1	SHELL & CHANNEL	SA-240-Gr.316/316L	1	4t
2	SEMI-ELLIPS HEAD 2:1	SA-240-Gr.316/316L	2	4.5t (NOM.) 3.80t (MIN.)
3	TAILING LUG	SA-36 OR EQ.	2	6t
4	TAILING LUG WEAR PAD	SA-240-Gr.316/316L	1	4t (HOUSING)
4a	TAILING LUG WEAR PAD	SA-36 OR EQ.	1	4.5t (SKIRT)
5	TRUNNION COVER	SA-36 OR EQ.	2	6t
6	TRUNNION	SA-106-Gr.B	2	DN50 SCH.80
7	TRUNNION PAD	SA-240-Gr.316/316L	2	6t
8	SKIRT TOP RING	SA-240-Gr.316/316L	1	4.5t
9	SKIRT RING	SA-36 OR EQ.	1	4.5t
10	BASE PLATE	SA-36 OR EQ.	1	20t
11	SKIRT ACCESS PLATE	SA-36 OR EQ.	1	4.5t
12	GUSSET PLATE	SA-36 OR EQ.	4	8t
13	EARTHING LUG	SA-240-Gr.316/316L	1	4t
-DELETED-				
-DELETED-				
-DELETED-				
DESIGN DATA				
CODE & STANDARD: ASME SECT. VIII DIV.1 2017 EDITION.				
FLUID:		SHELL SIDE	TUBE SIDE	
VOLUME:		AIR GAS/SULPHUR OXIDE	WATER	CU.M.
OPERATING PRESS.:		0.5 / 2 / 3-4	0.5 - 2	Bar(g)
OPERATING TEMP. (min./max):		5.45 / 40 / 150	45	C°
DESIGN PRESS.:		4	4	Bar(g)
DESIGN TEMP.:		150	150	C°
TEST PRESS.:		HYDRO. 5.2	5.2	Bar(g)
		PNEU.		
PWHT:		NIL	NIL	
JOINT EFFICIENCY:		0.7	0.7	
RADIOGRAPHIC EXAM.:		NIL	NIL	
CORR. ALLOWANCE:		0	0	mm.
INSULATION:		HOT 100 (BY OTHERS)		mm.
WIND LOAD:			32.5	m/s
EMPTY WEIGHT:			1200	Kg
OPERATING WEIGHT:			1900	Kg
TEST WEIGHT:			1400	Kg
QUANTITY:			1	

- GENERAL NOTES
- ALL DIMENSION SHALL BE IN MM UNLESS OTHERWISE NOTED.
 - ALL BOLTS HOLES SHALL STRADDLE THE PRINCIPAL AXIS.
 - REINFORCEMENT PLATE SHALL BE MADE IN ONE PIECE OF PLATE.
 - FLANGES SHALL BE ACCORDANCE TO ASME B16.5 2013.
 - FLANGE BOLT HOLES SHALL BE STRADDLE TO VESSEL NORMAL CENTERLINES UNLESS INDICATED.
 - PRIOR TO FINAL INSPECTION, ALL SLAGS, DIRT, DUST, LOOSE SCALE, OIL, PAINT, WELD SPLATTERS AND OTHER FOREIGN MATERIAL SHALL BE REMOVED FROM INSIDE AND OUTSIDE OF THE VESSEL.
 - ALL NOZZLE SIZE, ORIENTATIONS AND ELEVATION ARE ON-HOLD UNTIL FINAL CONFIRMATION WITH APPROVED P&ID.
 - ACID PICKLING TO BE PERFORM FOR CLEANING AND PRIOR TO FINAL DELIVERY.
 - SPECIFIED 316L MATERIAL SHALL BE COMPLY SS316 MECHANICAL STRENGTH AND CONFORM TO SS316L CHEMICAL COMPOSITION.

DOSH APPROVAL:

NOZZLE SCHEDULE		FLANGE DATA	
MARK	DESCRIPTION	QTY.	SIZE
N11	PACKING LOADING	1	DN150 SCH. 40S SA-312-TP.316/316L
N10	PACKING DISCHARGE	1	DN150 SCH. 40S SA-312-TP.316/316L
N9	PACKING DISCHARGE	1	DN150 SCH. 40S SA-312-TP.316/316L
N8	PACKING DISCHARGE	1	DN150 SCH. 40S SA-312-TP.316/316L
N7	TEMPERATURE TRANSMITTER	1	DN50 SCH. 40S SA-312-TP.316/316L
N6	VENT GAS DISCHARGE	1	DN100 SCH. 40S SA-312-TP.316/316L
N5	ALKALINE SOLUTION FROM H-8.605	1	DN25 SCH. 40S SA-312-TP.316/316L
N4	COOLING WATER RETURN	1	DN50 SCH. 40S SA-312-TP.316/316L
N3	COOLING WATER SUPPLY	1	DN50 SCH. 40S SA-312-TP.316/316L
N2	ALKALINE SOLUTION OUTLET	1	DN50 SCH. 40S SA-312-TP.316/316L
N1	ACID GASES INLET	1	DN100 SCH. 40S SA-312-TP.316/316L