Data sheet for Vertical Steel Tank

PROJECT STATEMENT (QUESTIONNAIRE) № FOR VERTICAL TANK DESIGN IN ACCORDANCE WITH ___ GOST 31385-2016 ___ CTO-CA-03-002	PAGE1 OF 3 X - tick where appropriate

PROJECT REPRESENTATIVE	
GENERAL DESIGNER	
ORDERING CUSTOMER	
CONSTRUCTION SITE ADRESS	

1 GENERAL DATA

1.1 TANK NOMINAL VOLUME		m^3						
1.2 TANK TYPE		WITH STATIONARY ROOF				WITH FLOATING ROOF		
		WITHOUT PONTOON				WITH PONTOON		
		WITHOUT SAFETY WALL				WITH SAFETY WALL		
1.3 SHELL DIMENSION: INSIDE DIAMETER		mm	hight			mm		
1.4 TANK CLASS		3a		3b		2a		2b
1.5 TANK DESIGN-TO-LIFE CYCLE		YEARS						

2 OPERATING CONDITIONS

2.1 STORED PRODUCT								
2.2 DENSITY						t/m^3		
2.3 OPERATING FILLING LEVEL						mm		
2.4 DESIGN (MAX) FILLING LEVEL						mm		
2.5 SPECIFIED INTERIOR PRESSURE						kPa		no
2.6 SPECIFIED INTERIOR VACUUM						kPa		no
2.7 MAXIMUM STORAGE TEMPERATURE						°C		
2.8 AVERAGE TEMPERATURE OF THE COLDEST DAY, RELIABILITY OF 0,98 AS PER SP 131.13330.2012						°C		
2.9 RATED SNOW LOAD AS PER SP 20.13330.2016						kPa		
2.10 SPECIFIED WIND LOAD AS PER SP 20.13330.2016						kPa		
2.11 SEISMIC ACTIVITY IN THE AREA OF CONSTRUCTION AS PER SP 14.13330.2014						points		
2.12 SHELL HEAT INSULATOR	DENSITY		kg/m^3	THICKNESS		mm		no
2.13 FOOF HEAT INSULATOR	ПЛОТНОСТЬ		kg/m^3	THICKNESS		mm		no
2.14 STORED PRODUCT TURNOVER						cycle per year		

3 STRUCTURAL-TECHNOLOGICAL PARAMETERS

3.1 SHELL	MANUFACTURING METHOD		ROLLING-UP		PLATE-BY-PLATE			
	CORROSION ALLOWANCE		mm		no			
3.2 BOTTOM	MANUFACTURING METHOD		ROLLING-UP		PLATE-BY-PLATE			
	SLOPE		TO THE OUTSIDE		INWARDS		no	
	CORROSION ALLOWANCE		mm		no			
3.3 STATIONARY ROOF	SHAPE		CONICAL		SPHERIC			
	CONSTRUCTION		SHEALTH		WIREFRAME		PLATE	
	CORROSION ALLOWANCE		mm		no			
3.4 STAIRCASE			HOOP (SPIRAL)		STAIR TOWER		no	

PERSON-IN-CHARGE (ENTERPRISE TITLE, JOB TITLE, FULL NAME, PHONE, FAX, E-MAIL): _____

DATA								
DOCUMENT REVISION DATA								

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3.5 SHUTDOWN VALVE	DN						pcs	no
3.6 INTERCEPTION ROD ON THE SHELL WITH A HIGHT OF			m				pcs	no
3.7 INTERCEPTION ROD IN THE CENTER WITH A HIGHT OF			m				no	
3.8 EARTH CONNECTION FASTENING			pcs				no	
3.9 FRAMEWORK FOR FOAMER OF TYPE							pcs	no
3.10 SUPPORTING ARM OF REFLUX LINE			yes				no	
3.11 ROUND DRILING SUMP WITH NOZZLES OF DIAMETER			DN				pcs	no
3.12 TROUGH DRILING SUMP WITH NOZZLES OF DIAMETER			yes				pcs	no
3.13 BOTTOM CLEANOUT BOX			600 X 600		600 X 900		900 X1200	no
3.14 PONTOON	MATERIAL		CARBON STEEL		STAINLESS STEEL		ALUMINIUM	
3.15 FLOATING ROOF	CONSTRUCTION		SINGLE-DECK				DOUBLE-DECK	
3.16 GUIDE 1	FOR INSTALLATION						DN	
GUIDE 2	FOR INSTALLATION						DN	
3.17 PROTECTING WALL	INSIDE DIAMETER		mm	HIGHT			mm	
	MANUFACTURING METHOD		ROLLING-UP				PLATE-BY-PLATE	
	CORROSION ALLOWANCE		mm				no	
3.18 SAFETY BOTTOM	MANUFACTURING METHOD		ROLLING-UP				PLATE-BY-PLATE	
	CORROSION ALLOWANCE		mm				no	
3.19 HEATER	TUBULAR			ELECTRICAL				no
	HEATING MODE		HEATING				SUPPORTING	
	HEATING TIME		DAYS					
	INITIAL PRODUCT TEMPERATURE						°C	
	DESIRED PRODUCT TEMPERATURE						°C	
	HEAT TRANSFER MEDIUM		STEAM				WATER	
	(for tubular heater)		OIL				ETHYLENE GLYCOL	
	INLET HEATING MEDIUM TEMPERATURE						°C	
	OUTPUT HEATING MEDIUM TEMPERATURE						°C	
	HEAT TRANSFER MEDIUM FLOW						t/h	
	HEAT TRANSFER MEDIUM PRESSURE						MPa	
3.20 ANTI-CORROSION PROTECTION								
	INSIDE SURFACE		yes				no	
	OUTSIDE SURFACE		yes				no	

4 DETAILS AND SPECIFIC CONDITIONS

5 NOZZLES AND HATCHES

5.1 NOZZLES AND HATCHES ARE GIVEN IN A FORM OF SPECIFICATION IN ACCORDANCE WITH LAYOUT CHART AT PAGE 3

5.2 THE PARAMETERS OF THE NOZZLES AND HATCHES THAT ARE NOT SPECIFIED IN THE SPECIFICATIONS, ARE DESIGNED IN THE FOLLOWING WAY:
- NOZZLES ARE DESIGNED OF TYPE S WITH FLANGES AS PER GOST 33259-2015 TYPE 01 OR 11, VERSION B, ROW 1 FOR NOMINAL PRESSURE 16 KP/CM2 FOR NOZZLES IN THE SHELL AND 2.5 KP/CM2 FOR NOZZLES IN THE ROOF;
- DIMENSIONS A, B AND C ARE TAKEN IN ACCORDANCE WITH THE OPTIMUM DESIGN REQUIREMENTS.

5.3 DURING PROJECT ENGINEERING, THE NOZZLES AND TANK HATCHES the LOCATION IN THE PLAN (the ANGLE α) AND the SIZE A CAN BE CHANGED TO the SMALLEST POSSIBLE VALUE in ORDER TO MEET the REQUIRENMENTS TO the NOZZLES AND MANHOLES IN the SHELL IN TERMS OF MINIMAL WELDED JOINTS DISTANCE. ALSO NOZZLES AND HATCHES IN the ROOF SHOULD NOT FALL ON the ROOF FRAME ELEMENTS AND ON the CIRCULAR PLATFORM ON the ROOF

DOCUMENT REVISION DATA							

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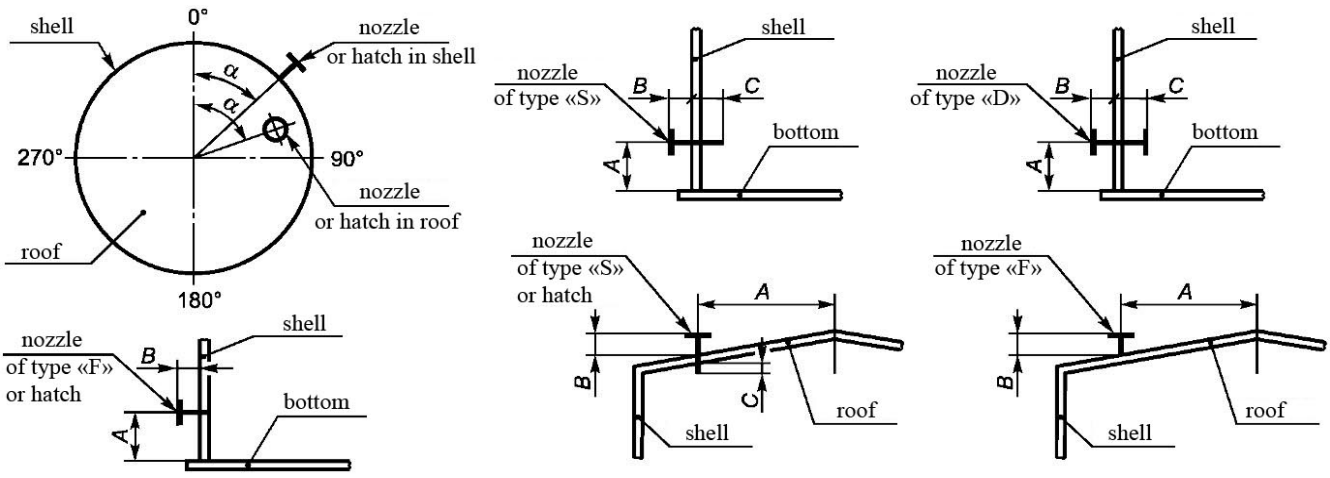
NOZZLES AND HATCHES LAYOUT CHART



NOZZLES AND HATCHES SPECIFICATIONS

№	TITLE (APPLICATION)	NOMINAL DIAMETER mm	NOMINAL PRESSURE, kp/cm²	NOZZLE TYPE	FLANGE			LOCATION			
					TYPE	DESIGN	ROW	A, degree	*A*, mm	*B*, mm	*C*, mm
1	2	3	4	5	6	7	8	9	10	11	12
	NOZZLES AND HATCHES IN THE SHELL										
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
	NOZZLES AND HATCHES IN THE ROOF										
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DOCUMENT REVISION DATA											