

CENTURION TANK

UPRIGHT GUN BARREL & REACTION TANK



DESCRIPTION

Oil skimmers work on the principle that oil floats on production water. Oil is forced to the top of the tank and is discharged from a port that removes oil from a raised skimmer bucket. Water is forced to a level before it can achieve access to the outlet, creating the oil trap.

APPLICATIONS

- Temporary production gun barrel/wash tank
- Water treatment oil removal
- Flowback oil recovery
- Chemical treatment reaction tank

BENEFITS

- Cleaner water discharge reduces water disposal cost
- Recovers sellable oil at the well site
- Permits production to come online earlier
- Rotational flow inside the tank maximizes retention time

FEATURES

- Raised oil skim bucket
- Can be operated in series to increase retention times
- Vent incorporates flame arrester
- Option to make vapor tight by tying vent into vapor recovery system
- Optional VOC capture filers (active carbon disposable)
- Sight glass configuration permits view of oil water interface
- Top fill line that can double as a vapor recovery tie in
- Quality liners provide long life endurance
- Built to API 12F standard

SPECIFICATIONS

Material.....	Carbon steel
Diameter.....	12'
Height.....	20'
Inlet Port.....	ANSI 150 # 12" or 8"
Outlet Port.....	ANSI 150 # 12" or 8"
Oil Outlet Port.....	ANSI 150 # 4"
Drain Port.....	ANSI 150 # 4" x 3 ports
Top Access.....	Thief hatch 8" (relief at 16 oz/in ² , vacuum 0.4 oz/in ²)
Vent Port.....	Top center 4"
Manway.....	Side entry 22" bolted hatch
Flame Arrester.....	Full bore 4" stainless steel
Sight Glass.....	1/2", 3-section split 10' sections
Top Access.....	Ladder
Mobility.....	Skid mounted
Weight (empty).....	11,500 lb.
Liner.....	Standard, tolerant for pH 4-14 (oil-tolerant)



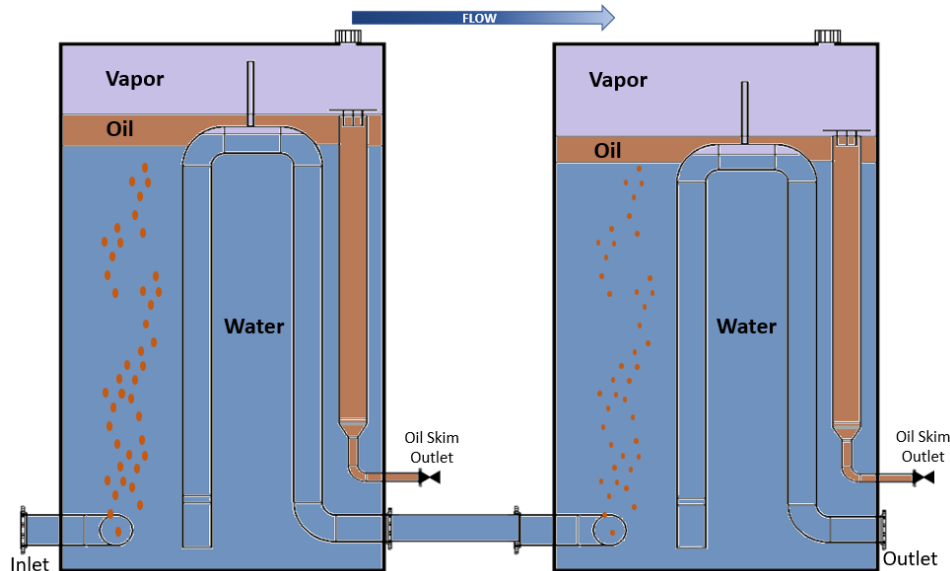
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CONFIGURATION

Tanks can be employed as a single unit or in series to increase retention time. Flow is introduced to create a rotational flow in the tank and a water weir is created by inverted U piping that forces water up and over prior to discharge. Oil floating on the water level in the tank reaches the skim outlet due to its lighter density. The oil skimmer feeds to an independent 4-inch outlet with check valve.



RETENTION TIMES

By connecting multiple tanks in series, the functional retention time for oil separation or chemical reaction time can be increased. The table below shows some throughput capacities and corresponding retention times with single or multiple tanks.

Retention Time (min.)	Throughput (bbl/day)		
	1 Tank	2 Tanks	3 Tanks
10	51,840		
15	34,560	69,120	
20	25,920	51,840	77,760
25	20,736	41,472	62,208
30	17,280	34,560	51,840
35	14,811	29,623	44,434
40	12,960	25,920	38,880
45	11,520	23,040	34,560
50	10,368	20,736	31,104
55	9,425	18,851	28,276
60	8,640	17,280	25,920

Disclaimer: These values are influenced by many factors, including wind, terrain and gas composition, and should be taken as guidance only.