

**UNIKLINGER FLASH VESSEL-**

Condensate when discharged from higher pressure to lower pressure, the difference in the sensible heats at the two pressures causes certain amount of Condensate to again convert to Steam known and referred to as Flash Steam. This is as good as dry steam, albeit at lower pressure, and can be utilized as steam. This separation can be done by allowing the hot condensate to discharge into a vessel of a pre determined volume, to get the desired amount of condensate and Flash at a specific pressure. This vessel is known as a Flash vessel.

**Features:-**

UKL Flash vessel is an excellent tool for energy conservation. Under different operating parameters UKL Flash Vessel pays back for its cost in less than 45 days.

High pressure condensate will release as much as 10-15 % of LP steam that can be put back into process loop for substantial monetary gains.

The UKL Flash Vessel is generously sized to ensure low flow velocities that help easy separation of released steam from the condensate.

A safety valve provided on the flash vessel will ensure safety of the equipment where this LP steam is proposed to be used.

A check valve if fitted at outlet of flash steam ensure preventing any back pressure that may cause in the event HP condensate is not generated in the process.

A Float trap is connected at Condensate outlet to restrict the flash steam flow with condensate.

**MATERIAL OF CONSTRUCTION:**

Body Carbon Steel

**SIZES AVAILABLE:-**

6” to 20”

**OPERATING CONDITIONS :**

Maximum Operating Pressure : 149.36 psig

Maximum Operating Temperature : 356 °F



**ON REQUEST:-**

IBR/ Non IBR

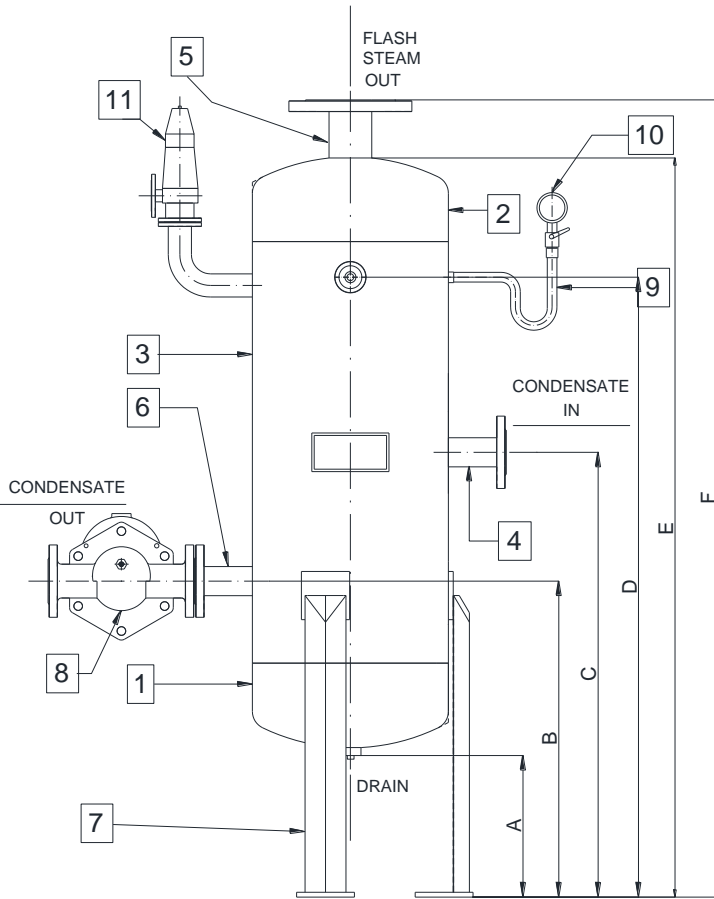
STRAINER/SIGHT GLASS

INSULATING JACKET

TEMPERATURE GAUGE

**END CONNECTIONS:**

Flanged to ANSI #150



No.	PART NAME	MATERIAL	MATERIAL CODE
1	Torishperical Bottom End	Carbon Steel	M.S.
2	Torishperical Top End	Carbon Steel	M.S.
3	Vessel Pipe-Sch40/20	Carbon Steel	ASTM A 106 Gr. B
4	Hot Condensate Inlet Nozzle	Carbon Steel	ASTM A 106 Gr. B
5	Flash steam outlet nozzle	Carbon Steel	ASTM A 106 Gr. B
6	Condensate outlet	Carbon Steel	ASTM A 105 / M.S.
7	Support Legs	Carbon Steel	ASTM A 105 / M.S.
*8	UKL Float trap	C.I.	IS 210 FG 260
*9	Syphon 'D'	Carbon Steel	M.S.
*10	Pressure Gauge	SS	
*11	Safety Valve - 25X40 NB	C.I.	IS 210 FG 260

**DIMENSIONS:-**

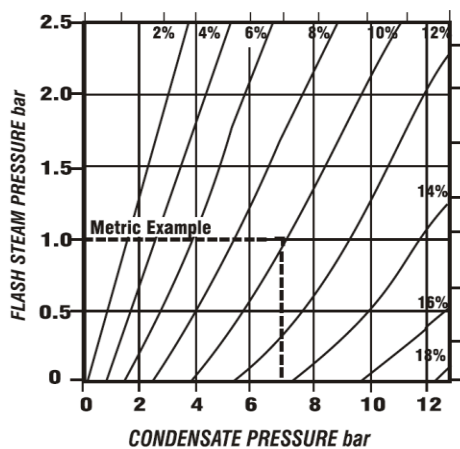
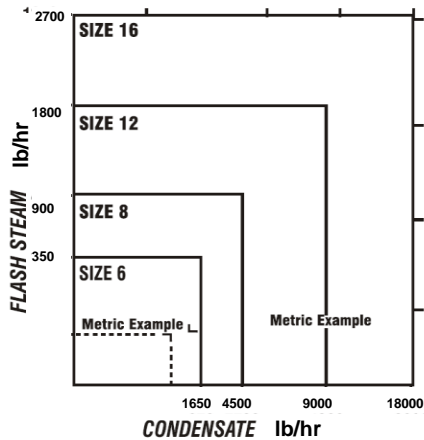
Sr.	Size (Inch)	A	B	C	D	E	F
		(inches)					
1	6"	11.26	24.41	31.54	41.73	49.49	54.21
2	8"	11.81	24.41	31.81	41.93	50.00	54.72
3	12"	11.81	24.41	32.48	39.96	50.55	55.43
4	16"	11.81	26.06	36.57	50.87	60.43	65.31
5	18"	11.81	26.97	38.98	53.35	68.98	74.61
6	20"	13.31	28.35	45.75	66.93	76.77	82.68

**AVAILABLE PIPE CONNECTIONS:-**

Size	Condensate Inlet	Condensate Outlet	Flash Steam Outlet	Safety Valve	Float Trap	Strainer
6"	3" FLG	2" FLG	3" FLG	1"	2"	2"
8"	3" FLG	2" FLG	3" FLG	1"	2"	2"
12"	3" FLG	2" FLG	3" FLG	1"	2"	2"
16"	6" FLG	2" FLG	4" FLG	1"	2"	2"
18"	6" FLG	2" FLG	6" FLG	1"	2"	2"
20"	8" FLG	2" FLG	8" FLG	1"	2"	2"

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## How to size-

The graph shows the proportion by weight of flash steam formed from condensate with various pressure drops. Underneath it is a sizing chart.

1. From the graph find the weight of flash per unit weight of condensate. Multiply this by maximum condensation rate to get the maximum weight of flash steam expected from the Flash vessel.
2. Select the appropriate size of flash vessel from the chart by finding the smallest area within which lie both the condensate rate and the flash steam weight.

Where the condensate is contaminated by solids – as with flash steam recovery boiler slowdown- select the next size larger.

When the condensate is 3000 lb/hr and flash steam is 500 lb/hr. The condensate load of 1500 lb/hr meets the flash steam load of 250 lb/hr in the size 8 area, so this is the size to use.

## How to Order

**Size 8” UKL Flash Vessel**

UNI KLINGER FLASH VESSEL and the respective spares should be stored only in enclosed dry rooms in a non-aggressive atmosphere. Fully assembled UFV must be stored as supplied by UNI KLINGER. Spare parts must be handled with care and should be stored in their original packing.

Other Products: 

Cast / Forged Steel Piston Valves, Bellow seal valves, High Pressure valves (Gate/Globe), Strainers – “Y” Type, ITVS Steam Traps (Thermodynamic, Thermostatic, Ball Float Traps and IBT), Pressure Reducing Station, Condensate Recovery Products. Level Gauges (Reflex, Transparent, Bicolor), Sight Glass, Hot Water Generation System, Safety and Relief Valves.  
**FSD Products** : Compressed Asbestos / Non Asbestos Fiber Sheeting / Cut Gaskets, Spiral Wound Gaskets.

*In view of technical progress design and dimensions are subjected to change without notice.*

**UKL**®

**UNI KLINGER LIMITED**

A joint venture of the Neterwala group of companies and KLINGER AG. Switzerland.

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