THERMOSYPHON SYSTEMS

API PLAN 52, 53



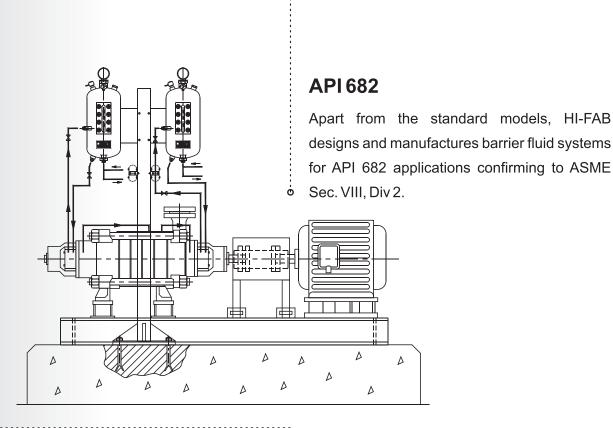
Thermosyphon Systems provide lubrication, dissipate heat and maintain the required pressure gradient across the seal faces in case of double back to back and tandem seal arrangements for pumps and agitators.

HI-FAB standard programme thermosyphon systems are available in a variety of options as shown in the table below.

MODEL	COOLING COIL	TANK MOC		HAND PUMP MOC		PRESSURE		CAPACITY	<u>0</u>		
		MS	SS	MS	SS	LOW	HIGH	G7 III 7 10 1 7 1	OLIN		
STS - 13A		✓					✓	3.5 Litres	WITHOUT COOLING	WITHOUT HAND PUMP	WITHOUT PRESSURE BALANCING SYSTEM
STS - 13B			✓				✓	3.5 Litres			
STS - 15A		√				✓		10 Litres			
STS - 15B			✓			✓		10 Litres			
STS - 23A	✓	✓					√	3.5 Litres	WITH COOLING COIL		
STS - 23B	✓		✓				√	3.5 Litres			
STS - 25A	✓	✓				✓		10 Litres			
STS - 25B	✓		✓			✓		10 Litres			
STS - 3A	✓	✓		√			√	3.5 Litres		WITH HAND PUMP	
STS - 3B	✓		✓	✓			√	3.5 Litres			
STS - 3C	✓		✓		✓		√	3.5 Litres			
STS - 5A	✓	✓		✓		✓		10 Litres			
STS - 5B	✓		✓	✓		✓		10 Litres			
STS - 5C	✓		✓		✓	✓		10 Litres			
STS - 33A	✓	✓		✓			√	3.5 Litres			WITH PRESSURE BALANCING SYSTEM
STS - 33B	✓		✓	✓			✓	3.5 Litres			
STS - 33C	✓		✓		√		√	3.5 Litres			
STS - 53A	✓	✓		✓		✓		10 Litres			
STS - 53B	✓		✓	✓		✓		10 Litres			
STS - 53C	√		✓		✓	√		10 Litres			

Low Pressure: Up to 12 bar.

High Pressure: Up to 40 bar



PRESSURE BALANCING SYSTEM

HI-FAB Automatic Pressure Balancing System is a modular unit which can be added on to a standard thermosyphon system.

An impulse pressure from the equipment pressurizes the seal cavity at 10% above the equipment pressure throughout the batch cycle.

This feature maintains a very low differential pressure across the product side seal and also relieves the out board seal when reactor is depressurized.



PRESSURE BALANCING UNIT

