FRS & PRS & MRS

Re-liquefaction System

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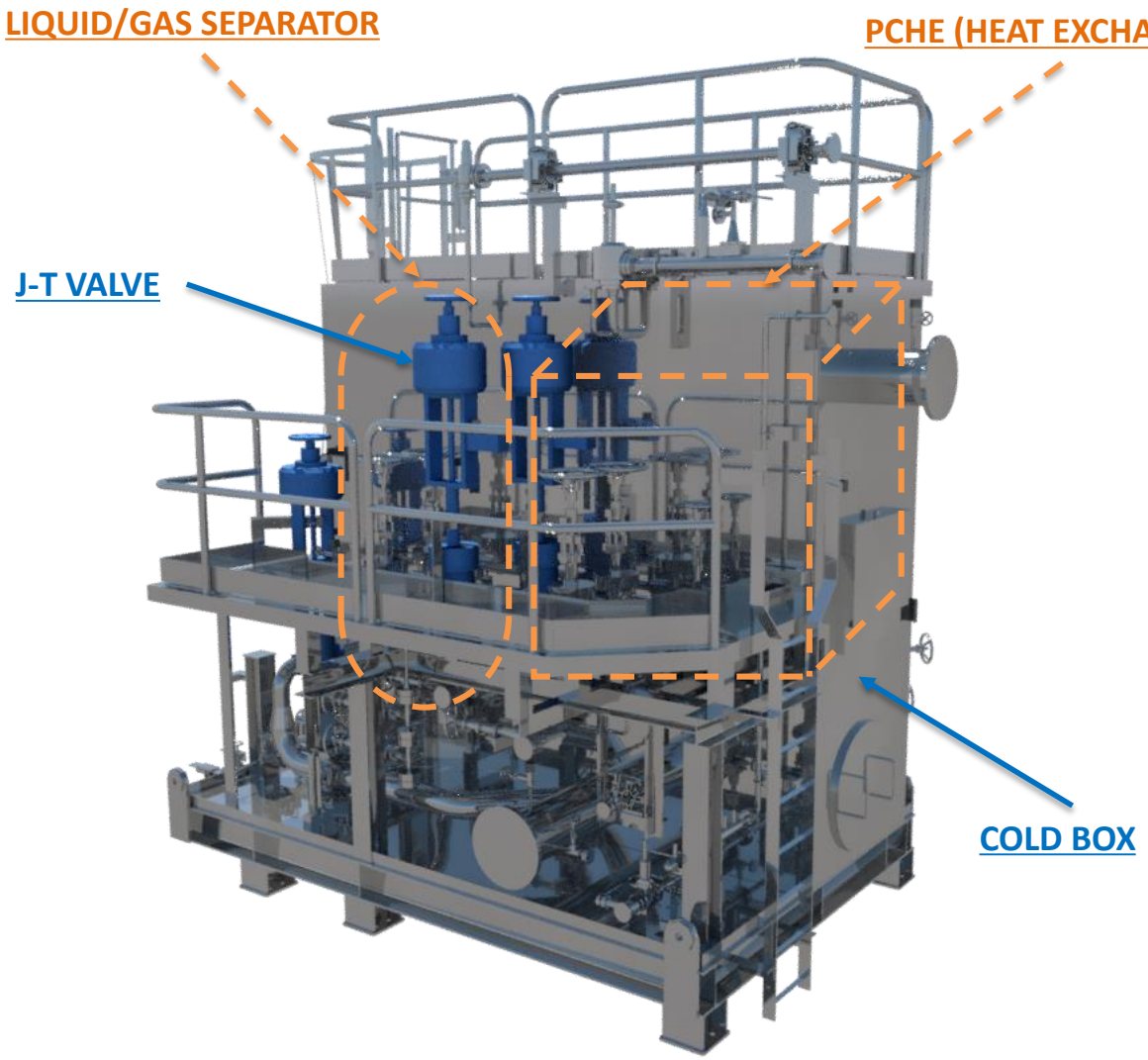
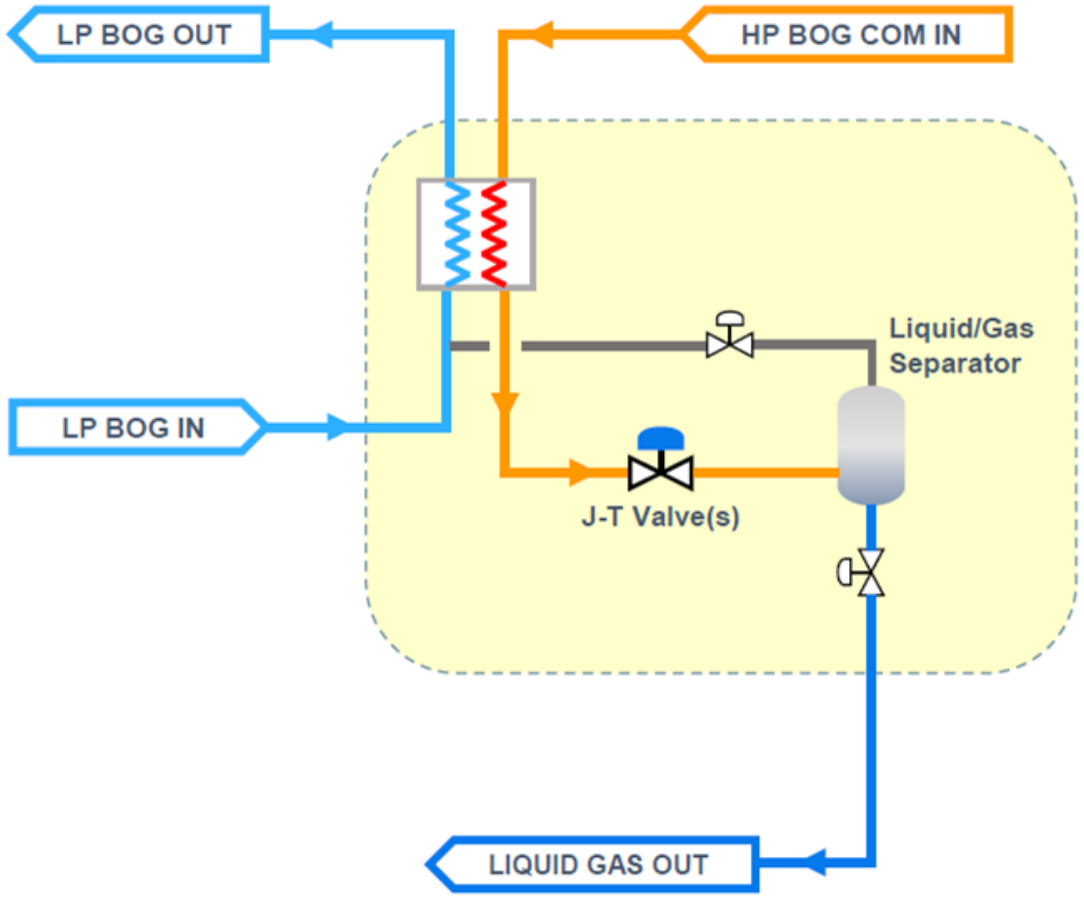
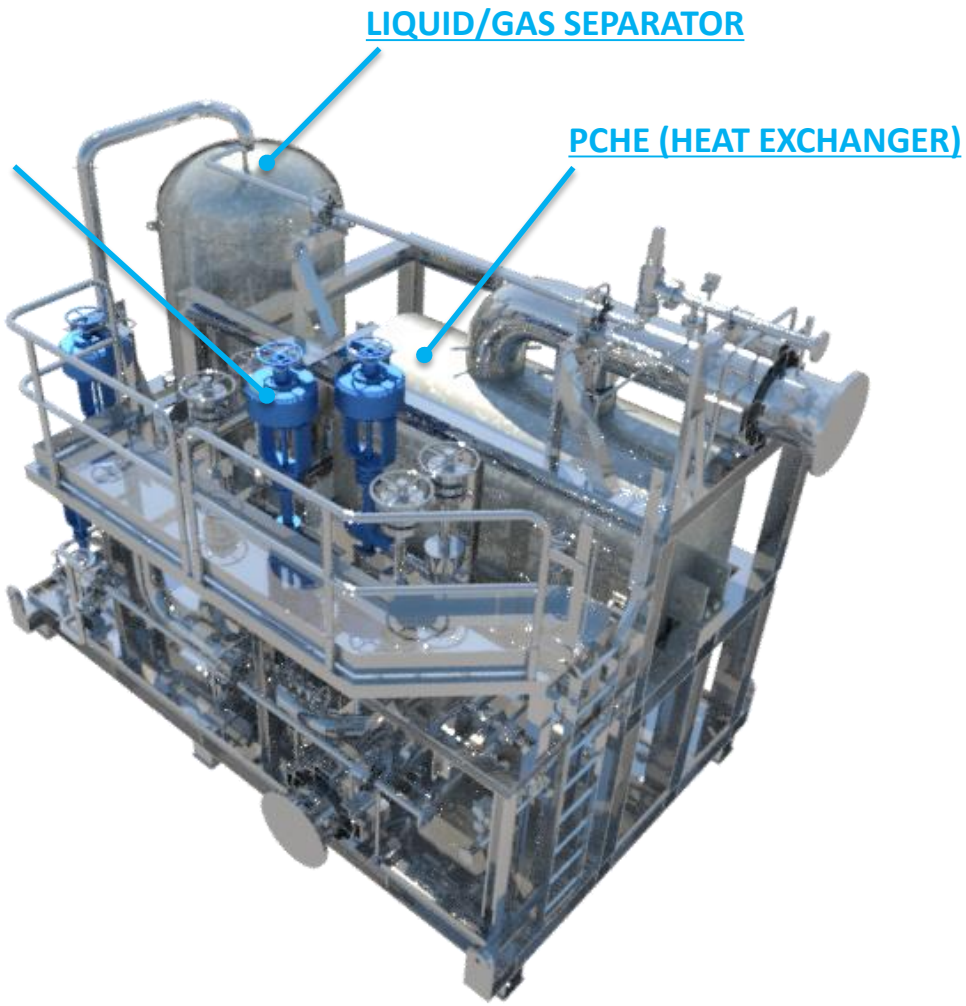
PRS (Partial Re-Liquefaction System)

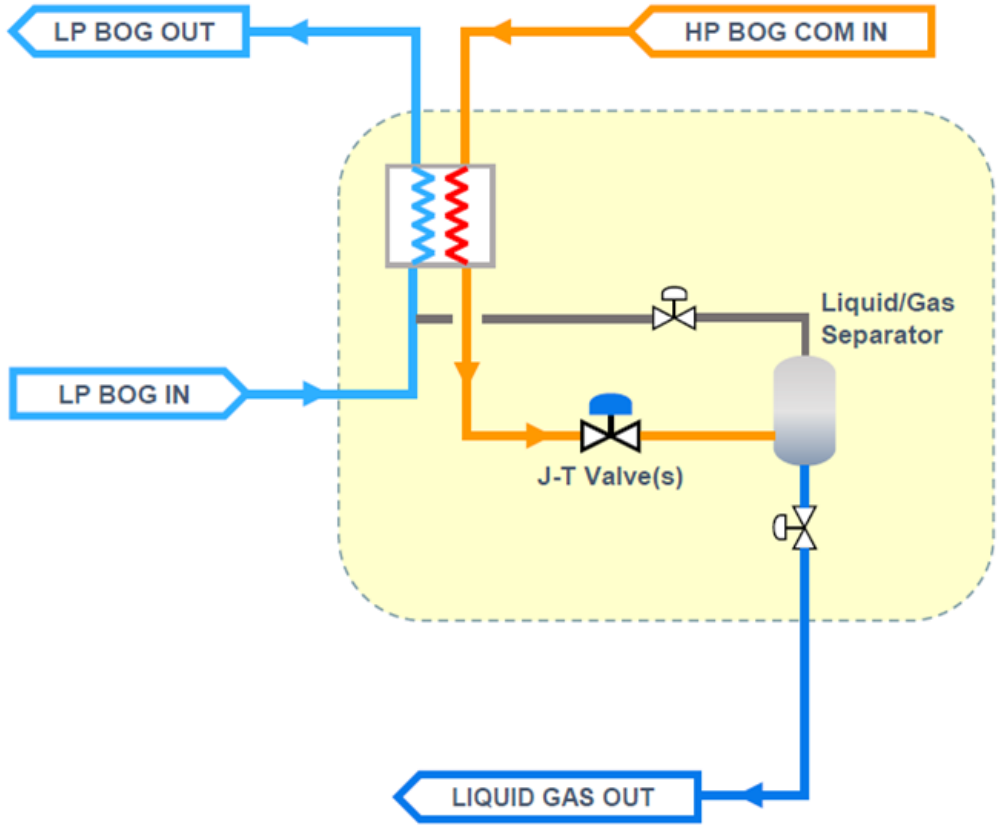




Separation efficiency (BOG → liquid): less than 50% (based on NBOG)

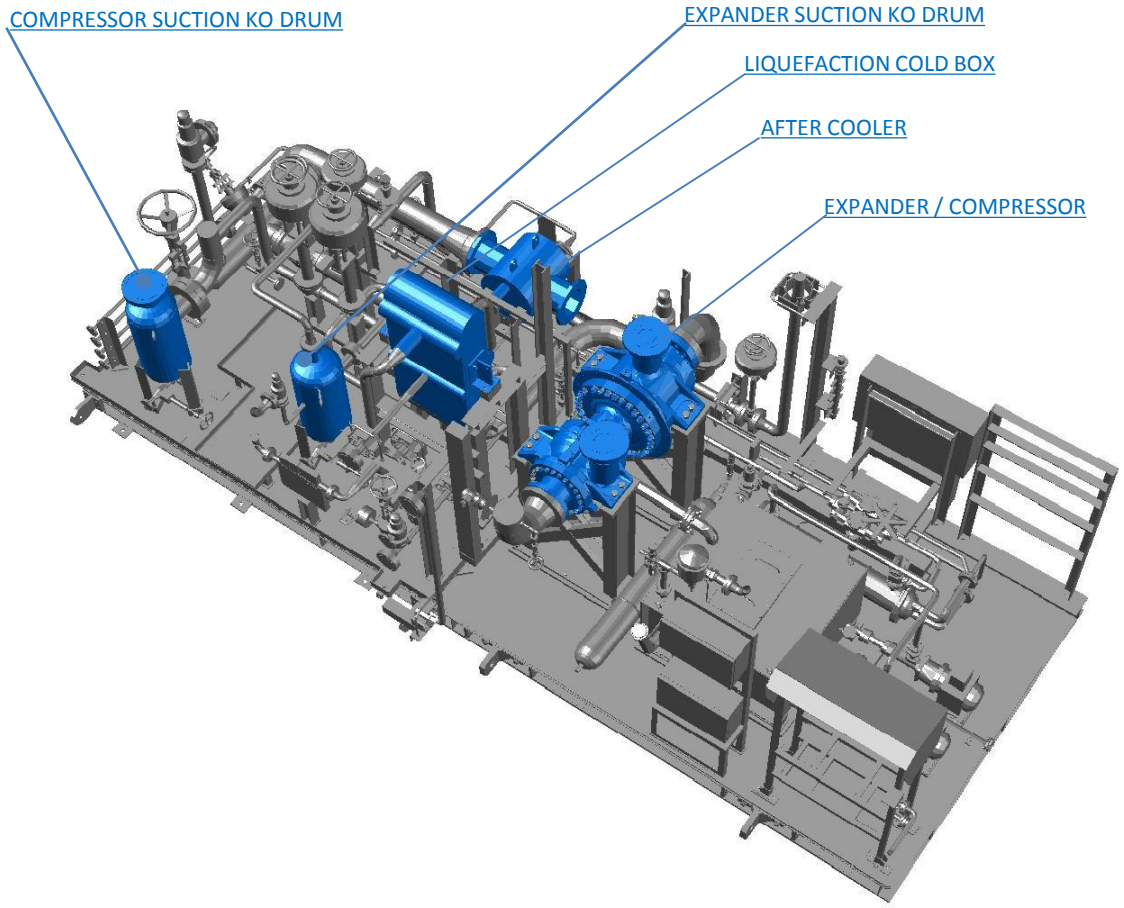
FRS (Full Re-Liquefaction System)

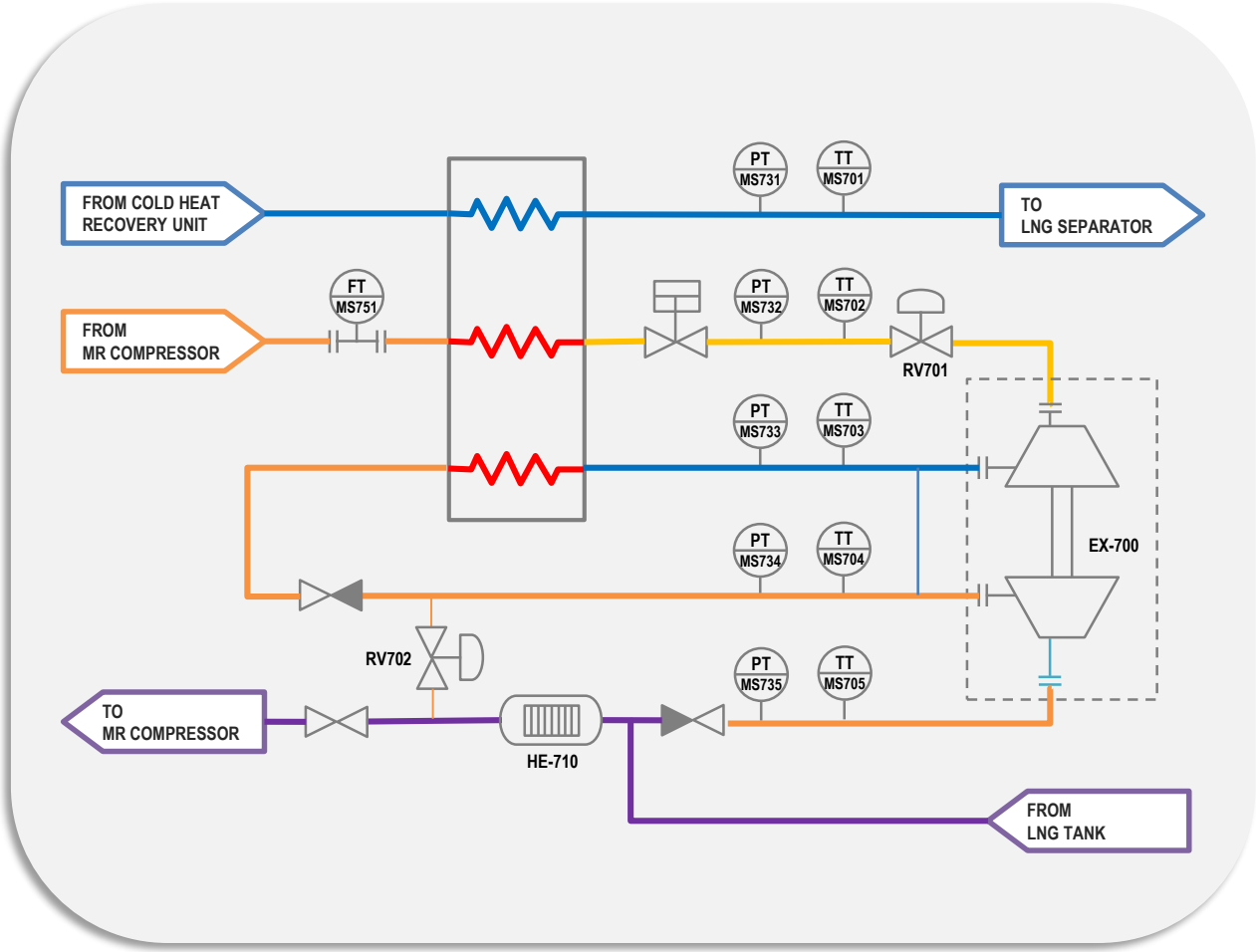




Separation efficiency (BOG → liquid) : less than 70% (based on NBOG)

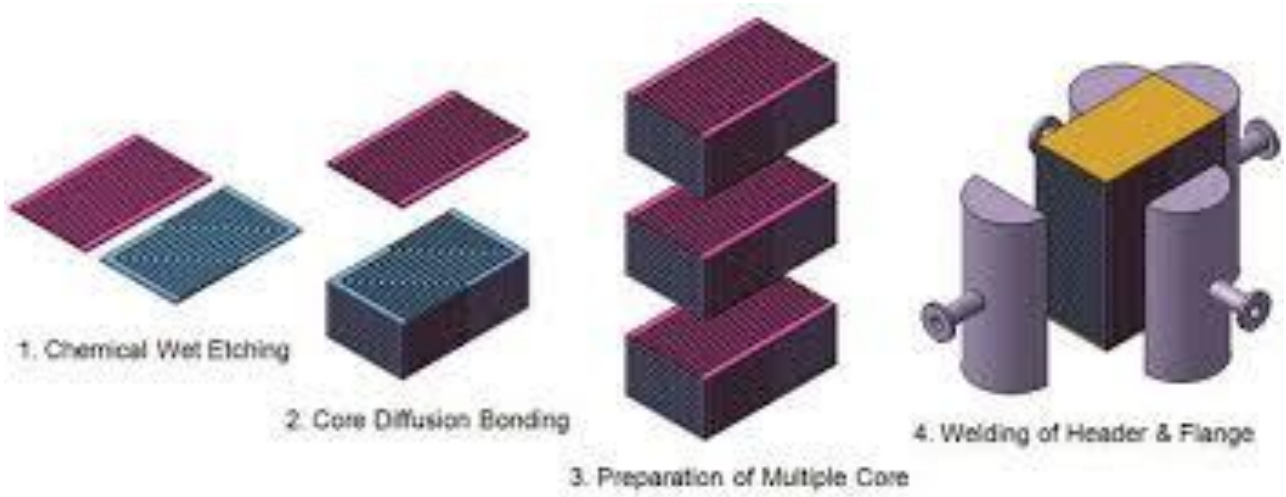
MRS (Methane Re-liquefaction System)





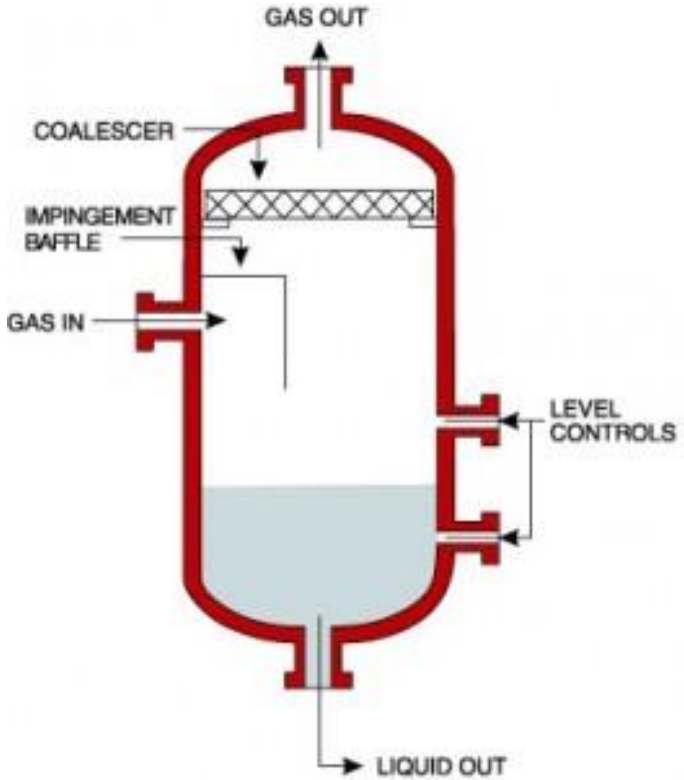
PCHE (Printed Circuit Heat Exchanger)

PCHEs are constructed from flat metal plates into which fluid flow channels are chemically milled. The chemical milling technique is similar to that employed for manufacturing electronic printed circuits. This method of manufacture gave rise to the name ‘Printed Circuit Heat Exchanger’.
The milled plates are stacked and diffusion bonded together. Diffusion bonding is a ‘solid-state joining’ process entailing pressing metal surfaces together at high temperatures. This promotes grain growth between the surfaces, creating a bond of parent metal strength and ductility. Diffusion bonding thus converts stacks of milled plates into solid blocks containing precisely engineered fluid flow passages. The blocks are then welded together to form the complete heat exchange core to meet the specified thermal duty. Finally, fluid headers and nozzles are welded to the core in order to direct the fluids to the appropriate sets of passages.



LIQUID/GAS SEPARATOR

SEPARATOR fluids enter the vessel through an inlet device whose primary objectives are to achieve efficient bulk separation of liquid from he gas and to improve flow distribution of both phases through the separator.
Liquid removed by the inlet device is diverted to the bottom of the vessel while the gas moves upward, usually passes through the mist extractor to remove small droplet of entrained liquid, and then the vapour phase flows out of vessel.



J-T (Joule-Thomson)VALVE

Joule–Thomson effect

The phenomenon of producing lowering of temperature when a gas is made top expand adiabatically from a region of high pressure into a region of low pressure on effect.
When valve open the gas pressure drop suddenly and accordingly, the gas shall be changed to the mixture of liquid and gas.
The Joule-Thomson valve shall be specially made for smooth change of big pressure drop and state change of handling liquid.