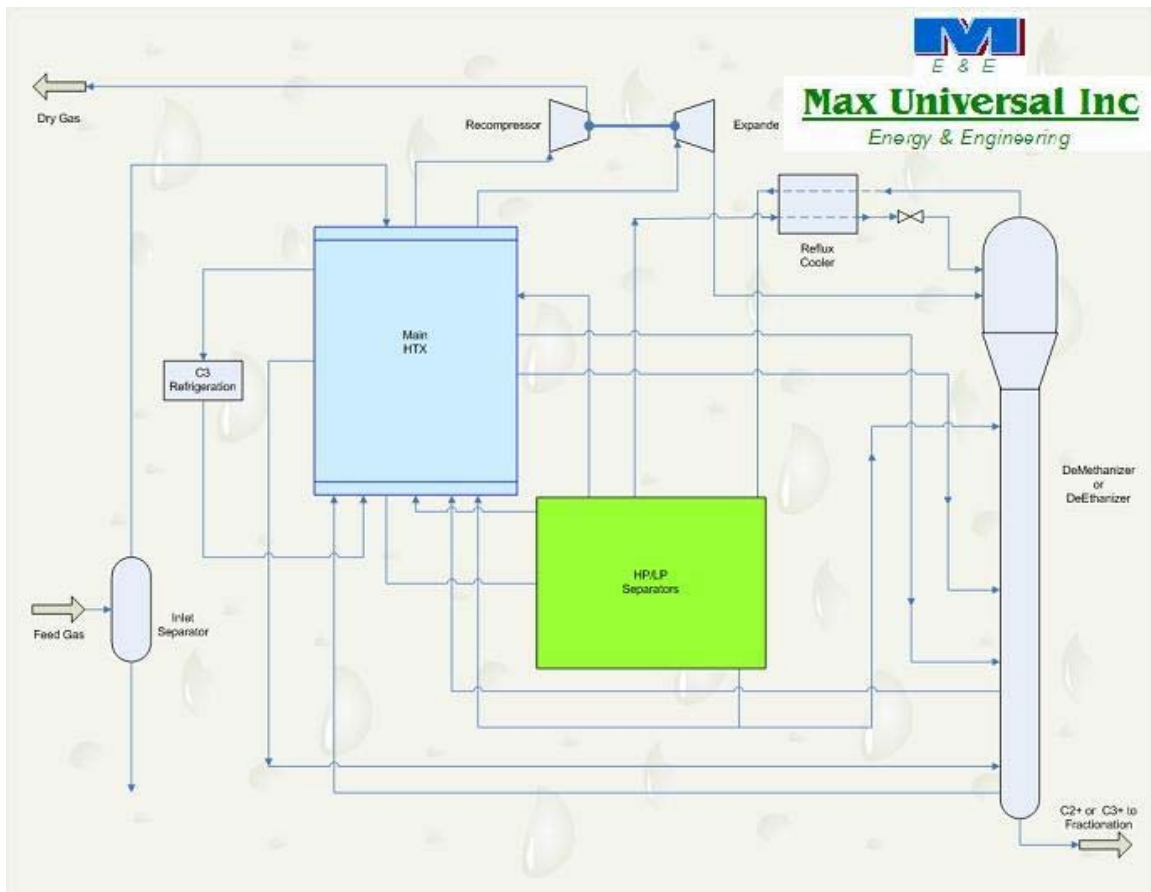


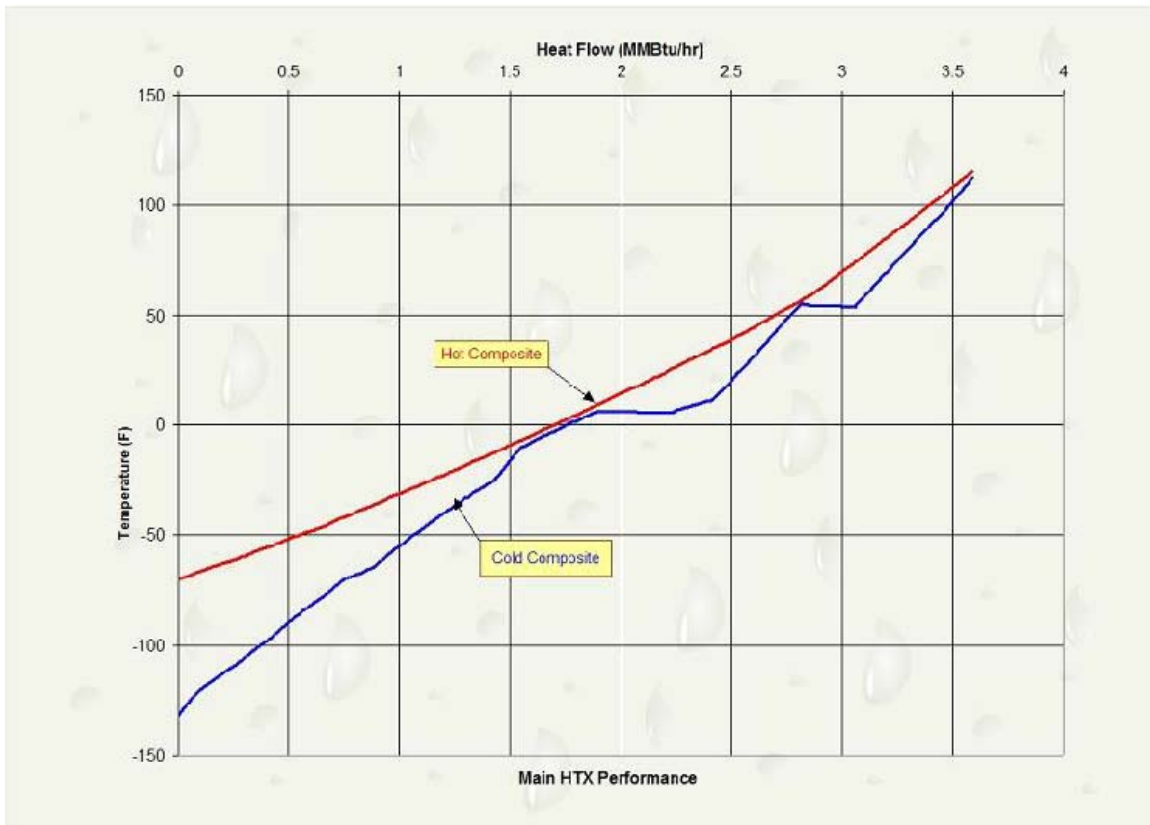
Max Universal's Proprietary Gas Processing Process

美国顶值国际天然气加工专有工艺

SPR™ (Split Reflux) C2&C3 Recovery Process

SPR™ (分式回流) 已烷及丙烷回收工艺





- Turboexpander process is applied to a wide range of process conditions not only for ethane recovery but also for high propane recovery. The process is designed to switch from ethane recovery to ethane rejection operation with minimal operating changes.

采用膨胀机工艺，使其适用于各种工艺条件，不但用于回收已烷，而且用于高丙烷回收。仅仅通过调整工艺操作条件，便可以将此工艺从已烷回收转换为丙烷回收。

- Mechanical refrigeration (propane refrigeration) is often needed to supplement the gas chilling for richer gas with $GPM > 4.0$, where GPM is gallons per thousand cubic feet.

当处理 $GPM > 4.0$ 的富气时，可以增加机械制冷(丙烷制冷)以保证回收率。GPM 是一衡量天然气贫富之参数，意为1000标准立方英尺加仑。



- The SPR™ (Split Reflux) design guarantees this process to recovery 95% ethane and 98% propane for feed gas CO₂ content of up to 2%(mole) without pre-treating CO₂.

特除的SPR™(分式回流)工艺设计, 使得该工艺处理CO₂含量达2%的天然气时保证已烷回收率达到95%, 丙烷回收率达到98%, 而无需预处理CO₂。

- Main HTX minimum temperature approach 3°F with LMTD of <9°F. Minimal energy consumption.

主换热器之最小接近温差可达3°F, 加权平均温差可达9°F。因此大大降低工艺能耗。

- Minimal process equipments.

采用最少之工艺设备。