

CryoFLEX™

CRYOGENIC UNITS ADAPTED TO YOUR UNIQUE RECOVERY NEEDS

We approach each project through the lens of what makes the most sense for that particular operation—going beyond feed conditions and product specifications to consider how things like energy requirements and market dynamics factor into design decisions. That’s why Joule offers three primary types of cryogenic units, allowing for maximum design and operational flexibility in order to deliver the most value.

GAS SUB-COOLED PROCESS (GSP)

When you don’t have 99% propane recovery requirements, our GSP units require the lowest capital investment. These units are used for leaner gas and lower propane recovery but are also capable of operating in ethane recovery mode, depending on market economics.

RECYCLE SPLIT VAPOR (RSV)

If you do have a 99% propane recovery requirement, or are working with richer gas, our RSV units provide enhanced cooling compared to the GSP, due to the additional pass through the sub-cooler.

FLUOR CRYO-GASSM DEEP DEWPOINTING PROCESS (DDP)

DDP utilizes a two column configuration—where the first column operates as an absorber and the second acts as a stripper. This creates an ethane loop between the two columns, increasing cooling for enhanced recoveries. These columns also work in tandem as a de-methanizer or de-ethanizer, depending on your operating mode. This not only provides the flexibility to tailor the reflux schemes and operating conditions to maximize recoveries, it also leads to considerable savings on fabrication, transport and installation. Plus, the flexibility in design requires up to 3,900 less HP compression, aligning horsepower needs with the least impact to project economics.

SMARTSTEEL™

Our approach to equipment design starts with a robust skid and strengthened box frame which allows stackable skids. Plus, our outside-in design approach provides optimal operator and maintenance access. These combined features mean reduced overall footprint, maximum on-skid accessibility and easier facility tie-ins for quick installation and start-up.

PSV DECK

Joule identified that the PSV scope is more efficient when included in the equipment scope vs. the construction scope because it reduces installation costs and improves quality control. This deck allows a consolidation of valves to a common area for maintenance without the need for scaffolding or man lifts.

ADDITIONAL SERVICES

- **Project Development**
- **Facility Engineering**
- **Automation**
- **Field Services**
- **Operations & Maintenance**
- **Process Optimization**

PRE-DESIGNED OFFERINGS

• **60**
MMSCFD
cFLEX™-60

• **120**
MMSCFD
cFLEX™-120

• **200**
MMSCFD
cFLEX™-200

