

DEWDRY DEHY™

VS

CONVENTIONAL DEHY

DEWDRY DEHY™



CONVENTIONAL DEHY



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FUNCTIONAL COMPARISON

Functional Comparison Explained

OTSO's DewDry™ Dehydrator is glycol dehydration for pipeline and wellhead applications at its finest. We have leveraged four (4) - **OTSO** patent pending and proprietary products created while developing our **BoneDry™ Dehydrator** for cryogenic applications to design a product that other glycol dehydration units simply cannot compete with, not in performance, sales price or operational expense.

	DewDry™	Conventional
Falling Water Condenser™	✓	✗
BTEX Unit	✓	✗
Consistent Pressure	✓	✗
Skurge™ Separator	✓	✗
Flash Separator**	✓	✗
Emissions Free	✓	✗
Safe Glycol Loading	✓	✗
Reduced Heat Exchanger Loading	✓	✗
Single Vapor Stream	✓	✗
Mr. Mister™	✓	✗
High Glycol Purity	✓	✗
Low Glycol Inventory	✓	✗
Small Footprint	✓	✗
Long Firetube Life	✓	✗
Easy Exchanger Access	✓	✗
Containment Skid Design	✓	✗
ASME Code Vessels	✓	✗

5 KEY COMPONENTS

1

LIFTERATOR™

- Improved Lean / Rich Exchanger Performance
 - » 33% Reduction in Reboiler Duty
 - » Eliminates Lean Gas Cooler
 - » Eliminates Surge Tank Insulation
- Extra Stage of Contact: Increased Drying

FEATURES

- » No Moving Parts
- » No Controls
- » No Instrumentation
- » No Additional Power Required

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SKURGE™ SEPARATOR

- ** Flash Separator
 - » Eliminates a flash separator by combining a skimmer and surge vessel to recover liquid hydrocarbons through instrument free operation
- Safe glycol loading
 - » The Skurge™ Separator is a non-insulated vessel operating at lower temperatures creating a safer glycol makeup
- Reduced heat exchanger duty
 - » Reduced heat exchanger duty due to lower circulation rate and higher glycol purity
 - » Resulting in increased pump life due to lower operating temperature
- Single vapor stream
 - » The Skurge™ Separator allows for a single stream of vapor by flashing in the still as opposed to a flash separator. The still overhead vapor is easier to manage and requires fewer instruments

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FALLING WATER™ CONDENSER

- *Replaces BTEX Unit
- Removes water from still vent gas
- Provides cool conditioned gas for compression
- Minimal pressure drop
- Consistent vapor flow rate and pressure baseloads Vapor Recovery Unit (VRU) with combustor
- Emissions free
 - » The DewDry™ Dehydrator is an enclosed pressure system allowing for emission free operation
 - » Mechanically designed for pressure resulting in zero BTEX emissions
 - » Eliminates need for assist gas to qualify for Quad-0

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MR. MISTER™

- Reduces foaming
- Stops yearly shutdowns
 - » Firetube cleanout
 - » Glycol inventory replacement
- High glycol purity
 - » High glycol purity is the result of a low circulation rates, combined with redundant high-pressure rich glycol filters. Results in BTEX to handle, less heat duty burden on reboiler
- Low glycol inventory
 - » High glycol purity result in less glycol inventory
- Long firetube life
 - » The combination of enhanced features provided by the Falling Water™ Condenser, Skurge™ Separator and Mr. Mister™ innovation

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EASY EXCHANGER ACCESS

- The DewDry™ heat exchanger is located on the side of the unit allowing for easy access. In contrast, standard glycol units have “no-access” exchangers creating long shutdowns should you experience an exchanger problem

CONTAINMENT SKID DESIGN

Our DewDry™ system offers a containment skid and is secondary containment ready, whereas conventional units are typically open skid design

ASME CODE VESSELS

Code Matters. Our vessels are ASME code providing a higher quality product with increased reliability

FINANCIAL SAVINGS

Year 1 Cost – DewDry™ Dehydrator

	QTY	Cost	Unit Measurement	Extended
Glycol Inventory	630	\$15	Gallon	\$9,450
500 Reboiler Fuel Consumption	365	\$36	MCF Day	\$13,140
Yearly Heat Exchanger Cleanout	1	\$3,500	Day Rate - T&M	\$3,500
Production Loss Exchanger Cleanout	4	\$1.25/mcf	(50MM day, 4hrs)	\$12,500
Year 1 Total:				\$38,590

Year 1 Cost - Standard 750M Glycol Dehydration Unit

	QTY	Cost	Unit Measurement	Extended
BTEX Unit	1	\$55,000	Each	\$55,000
Glycol Inventory	940	\$15	Gallon	\$14,100
750 Reboiler Fuel Consumption	365	\$54	MCF Day	\$19,710
Yearly Heat Exchanger & Firetube Cleanout	2	\$3,500	Day Rate - T&M	\$7,000
Production Loss Exchanger & Firetube Service	16	\$1.25/mcf	(50MM day, 16hrs)	\$50,000
Year 1 Total:				\$145,810



**ESTIMATED YEAR ONE (1) SAVINGS OF
DEWDRY™ DEHYDRATOR VS CONVENTIONAL**

**OVER
\$107K**

**ESTIMATED YEAR TWO (2) SAVINGS OF
DEWDRY™ DEHYDRATOR VS CONVENTIONAL**

\$52K