



AMINE UNIT EVALUATION

To: AMINES & PLASTICIZERS LIMITED
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Date: _____

CUSTOMER INFORMATION:

Company:

Contact Person:

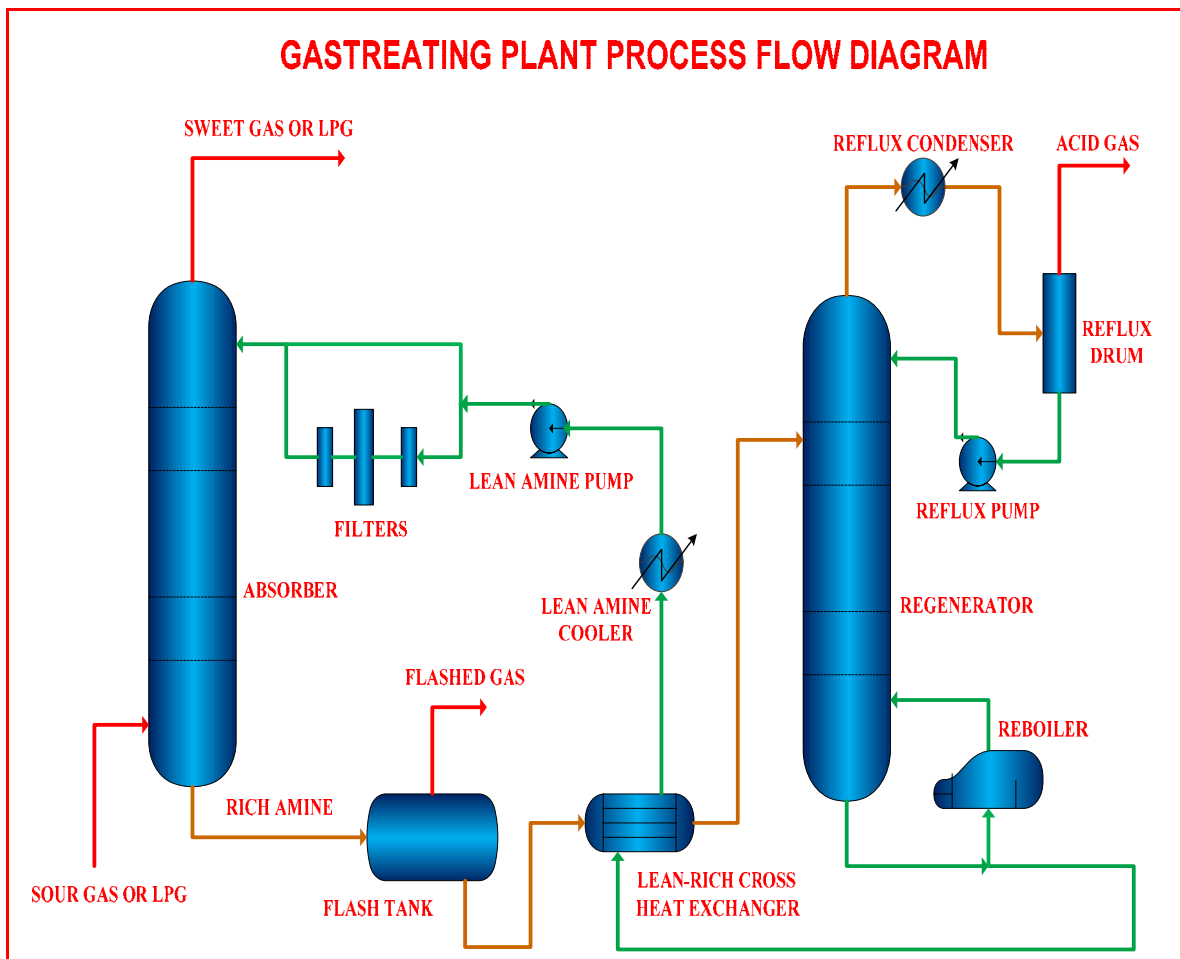
Location:

Phone:

Fax:

E-mail:

GENERAL PLANT LAY-OUT:



English units :

ABSORBER DETAILS

NAME / NUMBER:

FEED STREAM CONDITIONS OF SOUR GAS OR LPG:

Source of feed

	DESIG	ACTUAL	
Flow:		_____	MMSCFD gas
Pressure:		_____	psia
Temperature:		_____	°F

FEED COMPOSITION OF SOUR GAS / LPG:

CO ₂	mol%	H ₂ S	mol%		
H ₂	mol%	CH ₄	mol%	C ₂ H ₆	mol%
C ₂ H ₄	mol%	C ₃ H ₈	mol%	C ₃ H ₆	mol%
n-C ₄	mol%	i-C ₄	mol%	n-C ₅	mol%
i-C ₅	mol%	n-C ₆	mol%		
CO	mol%	N ₂	mol%	O ₂	mol%
H ₂ O	mol%	COS	mol%	CS ₂	mol%
C ₁ SH	mol%	C ₂ SH	mol%	C ₃ SH	mol%

Other components:

REQUIRED SPECIFICATION OF TREATED GAS OR LPG:

CO ₂	ppmv gas	H ₂ S	ppmv gas	COS	ppmv gas
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Other sulfur

LEAN AMINE DETAILS:

Temperature:	°F	Feed tray number:	
Design rate:	US gpm	Actual rate:	US gpm

ABSORBER DETAILS:

Diameter:	inch	Height:	ft
TRAYED ABSORBER		PACKED ABSORBER	
Type of trays:		Type of packing:	
Number of trays:		Packing material:	
Tray spacing :	inch	Nominal size:	inch
Number of		Packing Bed Height:	ft
Weir height:	inch	No. of Packed Beds	
Downcomer			
Side:	inch	Downcomer Area:	ft ²
Central:	inch	Active Area :	ft ²
Off Center	inch		

REGENERATOR DETAILS:		NAME / NUMBER:	
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Diameter:	inch	Bottom pressure:	psia
Rich amine		Overhead pressure:	psia
- Temperature:	°F	Overhead temp:	°F
- Feed tray number:		Reflux flow rate:	US gpm
TRAYED REGENERATOR		PACKED REGENERATOR	
Type of trays:		Type of packing:	
Number of trays:		Packing material:	
Tray spacing :	inch	Nominal size:	inch
Number of passes:		Packing Bed	ft
Weir height:	inch	No. of Packed	
Downcomer width			
Side:	inch	Downcomer Area:	ft ²
Central:	inch	Active Area :	ft ²
Off Center:	inch		

REBOILER DETAILS:		NAME / NUMBER:	
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Number of reboilers:		Heat source:	
Total design duty:	MMBTU/h	Total actual duty:	MMBTU/h

RICH-LEAN CROSS HEAT EXCHANGER DETAILS:		NAME /NUMBER:	
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Total design duty:	MMBTU/h	Exchanger area:	ft ²
Rich amine:		Lean amine:	
Temperature in:	°F	Temperature in:	°F
Temperature out:	°F	Temperature out:	°F

LEAN AMINE COOLER DETAILS:		NAME / NUMBER:	
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Total design duty:	MMBTU/h	Exchanger area:	ft ²
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ACID GAS COOLER DETAILS:		NAME / NUMBER:	
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Total design duty:	MMBTU/h	Exchanger area:	ft ²
Gas temperature in:	°F	Gas temperature out:	°F

FLASH DRUM DETAILS:		NAME / NUMBER:	
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Operating pressure:	psia	Total volume:	US gallon
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RICH AMINE MECHANICAL FILTER DETAILS:		NAME / NUMBER:	
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Type :		Nominal size of cartridges:	
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LEAN AMINE MECHANICAL AND CARBON FILTERS:

MECHANICAL FILTER BEFORE CARBON BED:

Type : _____ Nominal size of cartridges: _____

CARBON BED: YES NO

MECHANICAL FILTER AFTER CARBON BED: YES NO

Type : _____ Nominal size of cartridges: _____

% of main circulation flow treated _____

GENERAL BACKGROUND INFORMATION:

Current solvent used: MEA DEA DIPA DGA
 Other amines

Total solution inventory: _____ US gallons Concentration: _____ Wt%

WHY YOU REASON(S) FOR CONSIDERING AN ALTERNATE SOLVENT:

- Energy savings
- Increased capacity
- Reduced corrosion
- Reduced CO₂ pick-up

Current operating problems: _____

COMMENTS:

