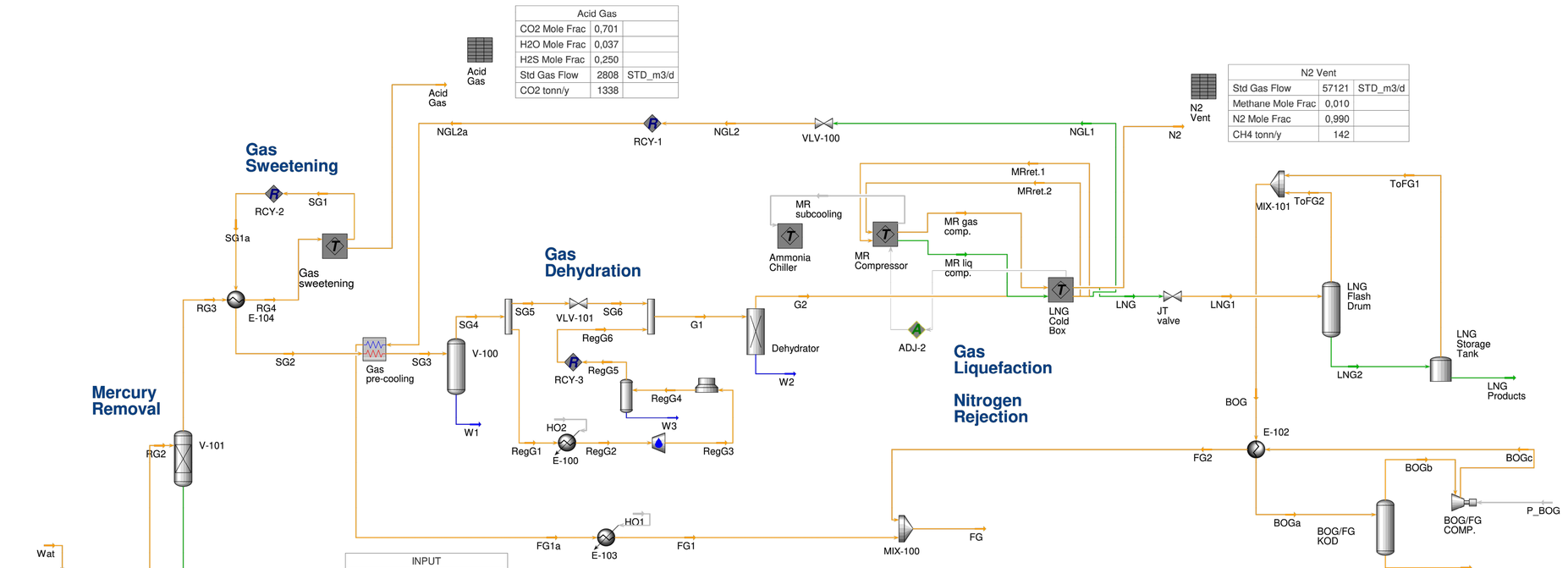
CONFIDENZIALE

PRELIMINARE



Acid Gas		
CO2 Mole Frac	0,701	
H2O Mole Frac	0,037	
H2S Mole Frac	0,250	
Std Gas Flow	2808	STD_m3/d
CO2 tonn/y	1338	

N2 Vent		
Std Gas Flow	57121	STD_m3/d
Methane Mole Frac	0,010	
N2 Mole Frac	0,990	
CH4 tonn/y	142	

INPUT		
Mass Flow	10367	kg/h
Std Gas Flow	283013	STD_m3/d
Temperature	40,00	C
Pressure	50,00	bar_g
CO2 ppmv	6994	
H2O ppmv	1922	
H2S ppmv	2695	
N2 %mol	21,32	

GAS SPEC		
Mass Flow	10140	kg/h
Std Gas Flow	279465	STD_m3/d
H2O ppmv	0,1	
CO2 ppmv	0,1	
H2S ppmv	1,54	

FG Calc.		
E. Power	4969	kW
Duty Power	1695	kW
Steam kg/h	3389	

OUTPUT		
LNG Mass Flow	5099	kg/h
LNG Actual Liquid Flow	278,9	m3/d
LNG ton/y	40800	
LNG Std Gas Flow	172184	STD_m3/d
LNG Mass Density	438,9	kg/m3
LNG Wobbe Index	51,23	MJ/m3
LNG HHV	54831	kJ/kg
LNG HHV	39,05	MJ/m3
LNG HHV MMBTUD	1108539	
Feed/LNG Ratio	1,644	
Liquefaction Ratio	94,66	%
H2S mg/Sm3	1,65	
CO2 mg/Sm3	0,11	

Material Streams

		RG1	RG2	RG3	RG4	SG1	SG2	SG3	SG4	SG5	SG6	G1	G2	LNG	LNG1	LNG2	LNG Products	C1	C2	C3	W1	W2	W3	NGL1	NGL2	FG1	FG2	FG	BOG	Acid Gas	N2
Vapour Fraction		1,0000	1,0000	1,0000	1,0000	1,0000	0,9996	0,9979	1,0000	1,0000	1,0000	0,9999	1,0000	0,0000	0,0486	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,4263	0,9997	1,0000	1,0000	1,0000	1,0000	1,0000
Temperature	C	40,00	40,00	40,00	45,97	50,07	44,00	20,00	20,00	20,00	19,64	22,79	23,56	-155,0	-160,8	-160,8	-161,3	40,00	40,00	-25,00	20,00	23,56	50,00	-75,00	-114,0	20,00	24,73	20,38	-161,0	43,12	25,00
Pressure	bar_g	50,00	50,00	50,00	49,50	48,80	48,30	48,00	48,00	48,00	47,20	47,20	47,20	24,70	0,1500	0,1500	0,1000	50,00	50,00	0,0000	48,00	47,20	47,50	45,20	5,200	4,700	5,000	4,700	0,1000	1,200	0,7000
Mass Flow	kg/h	10367	10367	10367	10367	10165	10165	10165	10146	9132	9132	10149	10140	5387	5387	5117	5099	0	0	0	19	8	350	1946	1946	1946	288	2234	288	199	2808
Heat Flow	kW	-8813	-8813	-8813	-8776	-8379	-8416	-8567	-8484	-7635	-7635	-8475	-8439	-7937	-7937	-7623	-7603	0	0	0	-84	-36	-1533	-1955	-1955	-1656	-306	-1962	-334	-399	-21
Std Gas Flow	STD_m3/d	283013	283013	283013	283013	280247	280247	280247	279650	251685	251685	279722	279465	181575	181575	172759	172184	0	0	0	597	256	11024	40768	40768	40768	9392	50160	9392	2808	57121
Actual Liquid Flow	m3/d	0	0	0	0	0	0	0	0	0	0	0	0	299	280	280	279	0	0	0	0	0	8	100	57	0	0	0	0	0	0
Specific Gravity rel Air	rel_to_air	0,7176	0,7176	0,7176	0,7176	0,7107			0,7108	0,7108			0,7109														0,6005	0,8725	0,6005	1,392	0,9630
Molecular Weight		20,79	20,79	20,79	20,79	20,58	20,58	20,58	20,59	20,59	20,59	20,59	20,59	16,83	16,83	16,81	16,80	18,02	18,02	17,39	18,02	18,02	18,02	27,09	27,09	27,09	17,39	25,27	17,39	40,31	27,89

Firmato digitalmente da: FRASCOGNA STEVEN MARK
Data: 20/07/2022 14:48:24

Firmato digitalmente da: DI PAOLO ELSA AURORA ANTONIA
Data: 21/07/2022 11:28:22

Wed Jun 1 14:08:27 2022 | Case: LNG Bomba_R02C.hsc | Flowsheet: Case (Main)

Rev.	Data	Descrizione	Elaborato	Verificato	Approvato
01	08-06-22	EMISSIONE PRELIMINARE PER ENTI	DG Impianti	ITF Cosmep	ITF Cosmep
00	03-06-22	EMISSIONE PRELIMINARE PER ENTI	DG Impianti	ITF Cosmep	ITF Cosmep

Cliente: CMI Energia

Contrattore: DG Impianti

ITALFLUID COSMEP

TITOLO: SCHEMA DI PROCESSO SEMPLIFICATO

OGGETTO: SMALL SCALE LNG PLANT
Monte Pallano 1-2 (MP1 and MP2) - Collesanto gas field

TIPO	SCALA	DENOMINAZIONE FILE:	POSIZIONE DOCUMENTO:	FOGLIO/DI
A1		-	R&D	1/1