

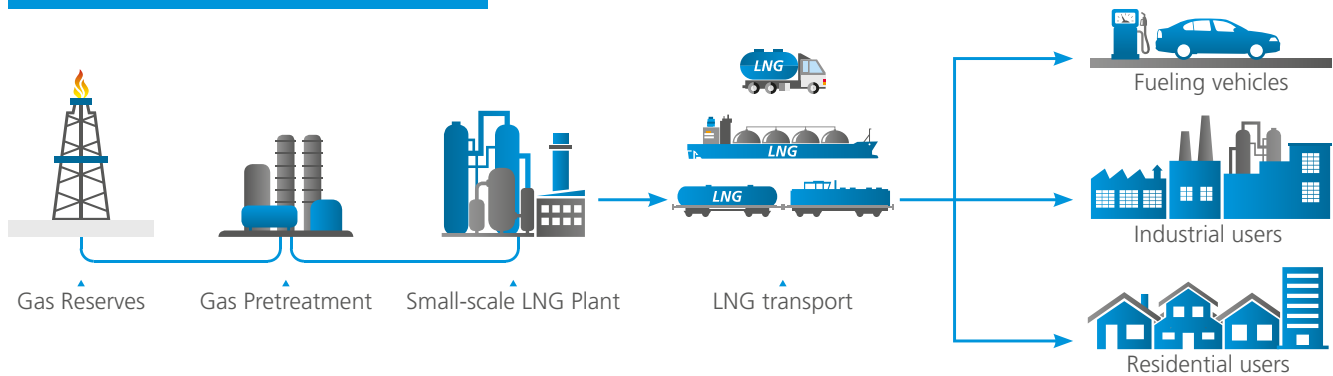


Optimal Liquefaction Cycle

Small-scale LNG plant

Solution for your small scale LNG plant to ensure sound project economics and optimal operation

THE SMALL-SCALE LNG JOURNEY



Small-scale LNG plants applications

- Peak shaving plants
- Satellite LNG plants for gas transport where pipeline is nonexistent
- On-board ship liquefaction
- Coal bed methane recovery
- Bio-gas
- Landfill-gas
- Shale gas liquefaction

Features and benefits

Small and mid-scale liquefaction plants, up to 1 MTPA capacity, (around 10% of base load liquefaction plant) focus upon standardizing compact, preassembled modular designs that can be deployed quickly with minimizing design and construction costs.

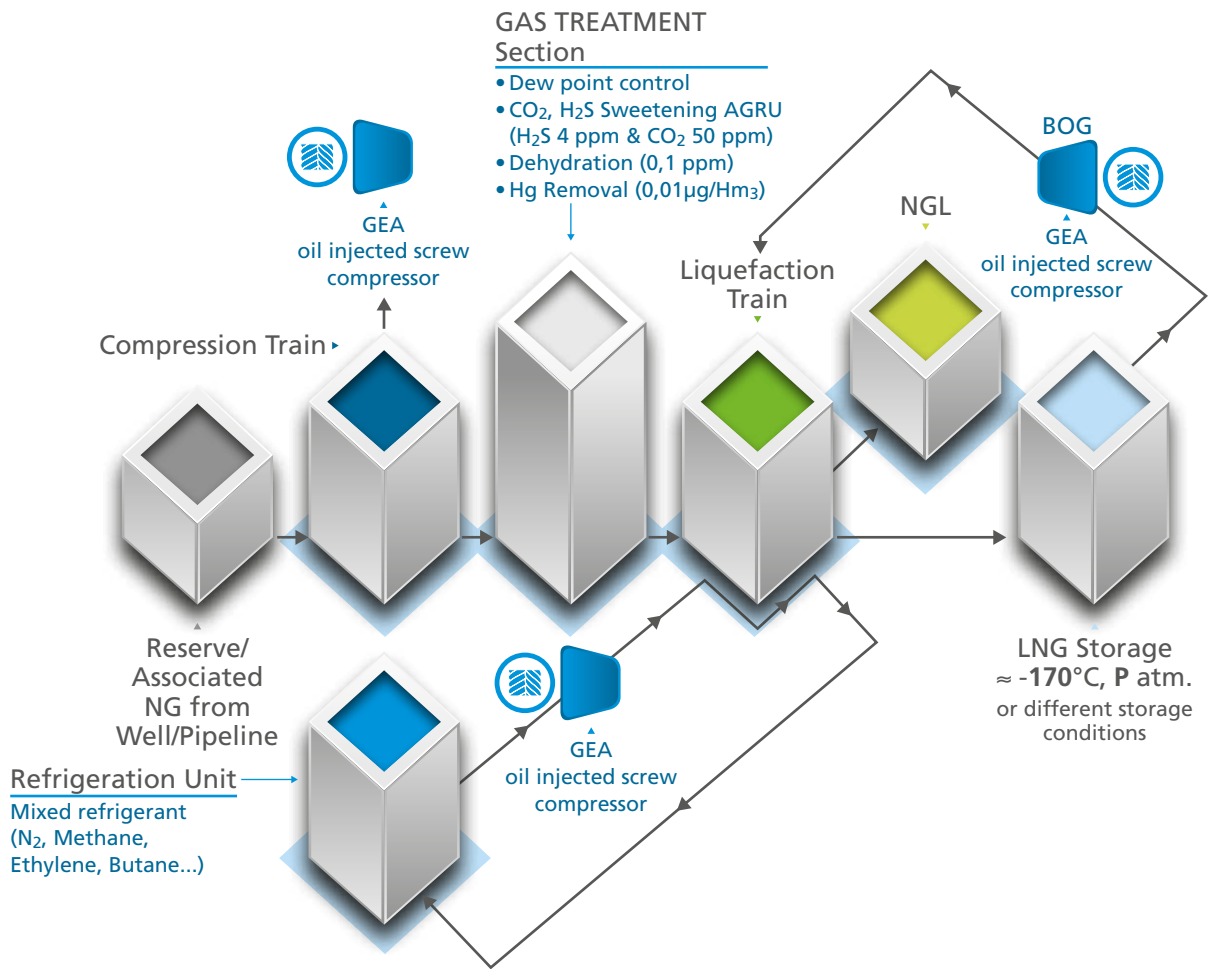


GEA bottom-up support and customized approach

- Process design with HYSYS simulator
- **GEA oil flooded screw compressors** for NG compression & for mixed refrigerant compression
- Only **0,2 ppm of oil carry over** due to process expertise and correct oil selection
- **Best compressor technology** selection in case of higher capacity or different customer's needs
- Partnership with compact and light weight brazed **aluminum heat exchanger** manufacturer
- Partnership with **pretreatment unit** supplier for the complete liquefaction plant
- **High** reliability/availability/maintainability

DESIGN OBJECTIVES





GEA MODULES OF LNG TRAINS

		GAS Processing M Nm ³ /y*	Nominal capacity		Liquefaction line number
			t/h	t/y	
Centrifugal	GEA LNG 160-2	340 (2x170)	34	290.000	2
	GEA LNG 160-1	170	17	145.000	1
Oil flooded screw	GEA LNG 80-2	140 (2x70)	14	120.000	2
	GEA LNG 80-1	70	7	60.000	1
	GEA LNG 40-2	70 (2x35)	7	60.000	2
	GEA LNG 40-1	35	3,5	30.000	1
	GEA LNG 4,5-1	4,5	0,4	3.500	1

*Based on 8000 h/y



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GEA Italy

Utilities Oil & Gas

Via delle Officine Barbieri, 7
40013 Castel Maggiore (BO) - ITALY

Tel. +39 051 718751
Fax +39 051 718656

oil.gas@gea.com
gea.com