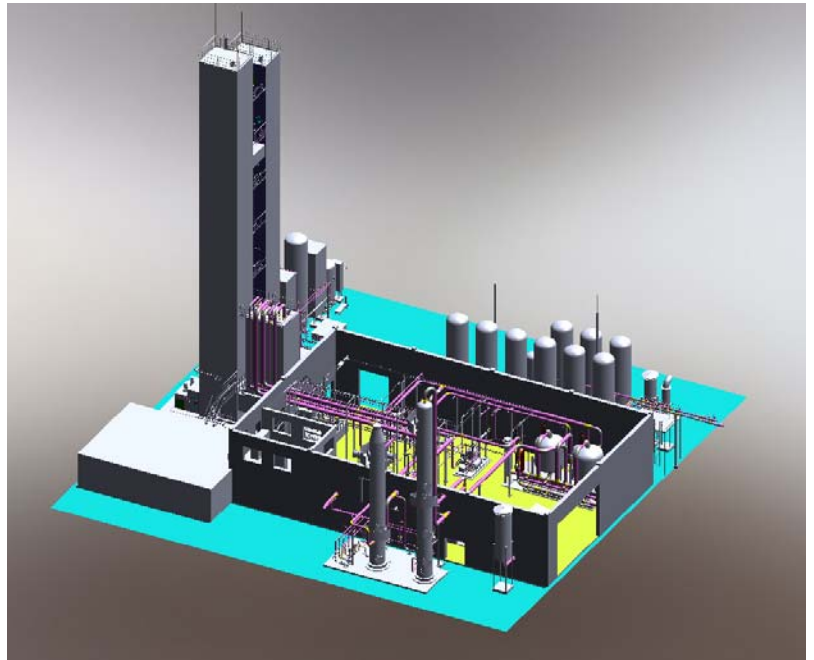


Gas Engineering

Cryogenic Process Systems

Model 5L Series

Liquid O₂/N₂/Argon Generating Plant
3000-5000 Nm³/hr



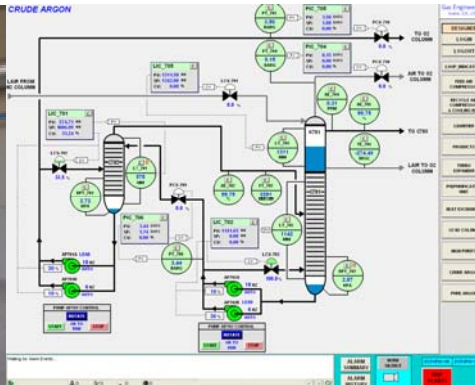
The 5L Series is a modular, “packaged” type plant furnished in eight modules: feed air compressor, recycle air compressor, air chiller, pre-purifier, turboexpander and three cold boxes. Two standard models are available with production capacities of 3000 and 5000 Nm³/hr.

Features

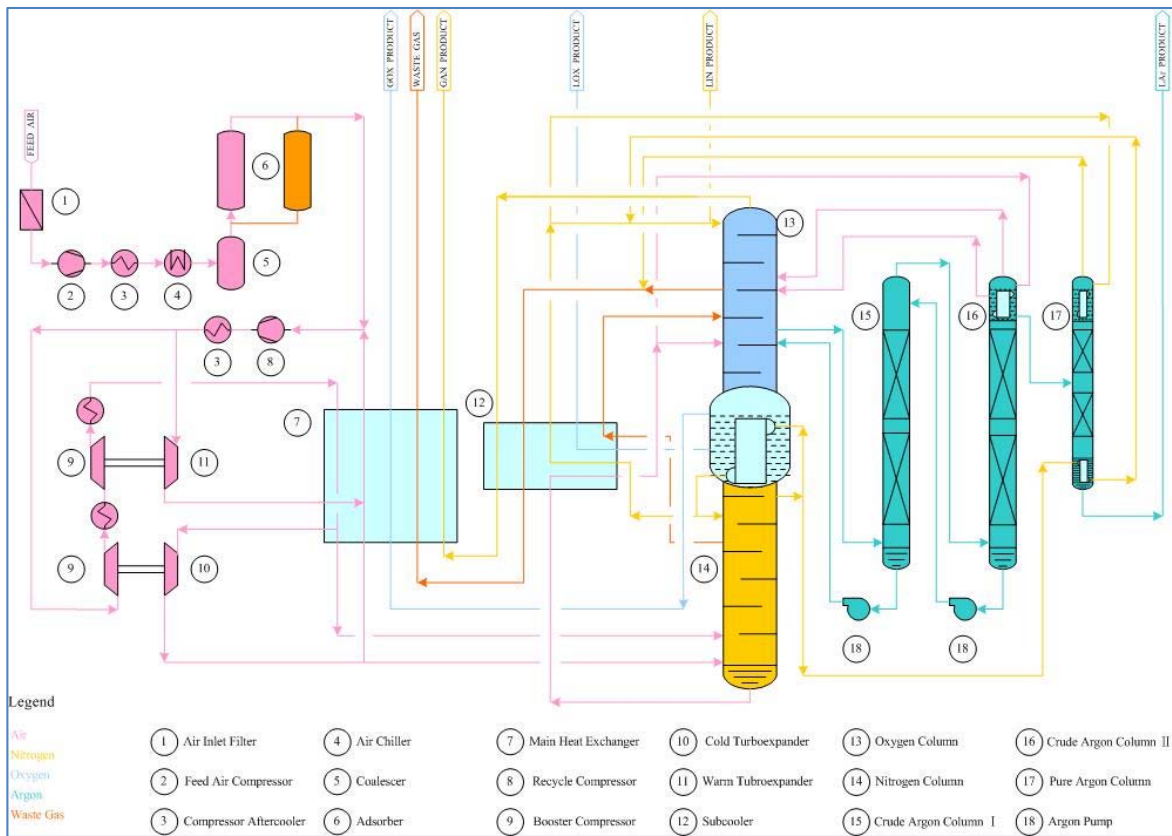
- State-of-the-art process with **ultra-low specific power**
- **Modular plant design** facilitates ease of installation and minimizes on-site construction cost
- State-of-the-art Gas Engineering **GEX Control System** provides fully automated operation, remote access capability and optional **100% redundant “hot” PLC backup**
- **Robust, low speed turboexpander system** provides maximum reliability with no compromise to efficiency
- High efficiency process compressors **optimize reliability and efficiency**

Plant Options

- LOX sub cooling
- Evaporative cooling system
- Total Hydrocarbon Analyzer
- LIN, LOX and LAr storage tanks
- High Pressure Gas Cylinder Filling System
- Prefabricated Interconnecting Piping
- ASME/CE certification
- On-site assistance – installation, start-up



Gas Engineering



		SL3000		SL5000	
Operating Mode		Max O2	Max N2	Max O2	Max N2
Production					
Liquid Oxygen	Nm3/hr	2,678	50	4,600	100
Liquid Nitrogen	Nm3/hr	515	3,280	930	5,900
Liquid Argon	Nm3/hr	90		160	
Total Liquid Production	Nm3/hr	3,283	3,330	5,690	6,000
Gaseous Nitrogen	Nm3/hr	3,000		5,000	
Purity					
Oxygen	% O2, Min	99.6	99.6	99.6	99.6
Nitrogen	PPM O2, Max	5	5	5	5
Argon	% Ar, Min	99.999		99.999	
Product Temperature and Pressure					
Liquid Oxygen	K, bar(g)	90.5, 1.0	90.5, 0.5	90.5, 1.0	90.5, 0.5
Liquid Nitrogen	K, bar(g)	78, 5.0	78, 5.0	78, 5.0	78, 5.0
Liquid Argon	K, bar(g)	89, 0.5		89, 0.5	
Utilities					
Power	kW	3,185	3,099	5,408	5,422
Cooling Water Flow	lpm	5,800	5,800	11,000	11,000
Cooling Water Temp.	Deg C	20	20	20	20
Specific Power (based on liquid production)	kW-hr/Nm3	0.97	0.93	0.95	0.90

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