

StirLIN

Up to 3000 l/day reliable on site LN₂

Stirling Technology

Since more than sixty years Stirling Cryogenics has designed and manufactured liquid nitrogen production systems, serving customers all over the world under all possible climatic conditions. This experience has culminated in our current range of plants called StirLIN, producing liquid nitrogen in quantities from 60 to more than 3.000 liters per day.

The fully automatic StirLIN allows the user to concentrate on his core activity, eliminating all issues involved with the purchasing and logistics of bulk liquid nitrogen supply.

StirLIN-1 Lite, Economy & Compact



StirLIN systems

The StirLIN Systems are a popular, plug and produce solution. Taking up little space and ready for work. With the optional chiller no external cooling water supply is needed. Simply connect power and start producing your own liquid nitrogen. The liquid is dispensed through a flexible hose simply by opening a valve. Liquid nitrogen where you need it, when you need it!

Operators only need to replace filters and perform routine checks between maintenance intervals of 8.000 operating hours.

StirLIN-1 Extendible & StirLIN-2



Typical StirLIN features

- Easy Installation
- Fully automatic operation by PLC
- Easy liquid nitrogen dispense
- Efficient production
- Low noise level
- Built for stringent climatic conditions
- Connectable to all power supplies
- Worldwide service & maintenance

StirLIN-4 (Extendible) & StirLIN-8



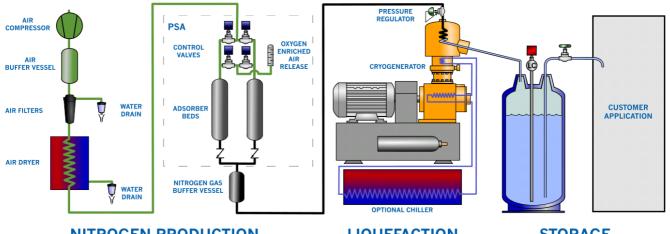
StirLIN Options

- Water chiller
- Installation on site
- Consumable parts
- **Toolsets**
- Maintenance training
- Generator set
- Voltage stabilizer
- Liquid nitrogen handling package
- Remote monitoring
- Automatic transfer system

StirLIN Specifications

| | | StirLITE | StirLIN-1 Economy | | StirLIN-1 Extendible | StirLIN-2 | StirLIN-4 | StirLIN-4 Extendible | StirLIN-8 |
|---|-------|----------|----------------------|-------|-------------------------|-----------|-----------|-------------------------|-----------|
| Specifications | | | | | | | | | |
| Liquid nitrogen production* at nominal operating conditions | [l/h] | | | | | | | | |
| • 1 bar(g) purity 99% nitrogen + inerts | | 2,9 | 5,8 | 11,5 | 11,5 (99,7%) | 23 | 48 | 48 (99,7%) | 97 |
| • 3 bar(g) purity 98% nitrogen + inerts | | 3,5 | 7 | 14 | 14 (99,5%) | 29 | 64 | 64 (99,5%) | 124 |
| • 5 bar(g) purity 98% nitrogen + inerts | | | | 16,5 | 16,5 (99,5%) | 33 | 75 | 75 (99,5%) | 151 |
| Other purities | | | | | | 0 | 0 | 0 | 0 |
| Power consumption** (supplied in 200V-480V, 50Hz-60Hz**) | [kW] | 8 | 11 | 21 | 27 | 34 | 69 | 77 | 122 |
| Water consumption (at 15°C, incl 20% EG) | [l/h] | 750 | 750 | 1.000 | 1.000 | 2.000 | 4.500 | 4.500 | 9.000 |
| Noise | [dBA] | 72 | 72 | 72 | 72 | 74 | 72 | 72 | 74 |
| System size (I x w x h, external chiller not incl.) | [m] | 2,10 | 2,10 | 2,10 | 3,50 | 3,50 | 4,90 | 4,90 | 4,90 |
| | | 2,30 | 2,30 | 2,30 | 3,50 | 3,50 | 3,65 | 4,35 | 4,35 |
| | | 2,15 | 2,15 | 2,15 | 1,80 | 1,80 | 2,00 | 2,00 | 2,00 |
| Advised room size (I x w x h, external chiller not incl.) | [m] | 3,75 | 3,75 | 3,75 | 5,00 | 5,00 | 6,50 | 6,50 | 6,50 |
| | | 3,50 | 3,50 | 3,50 | 4,80 | 4,80 | 4,80 | 5,80 | 5,80 |
| | | 3,00 | 3,00 | 3,00 | 3,00 | 3,00 | 3,00 | 3,00 | 3,00 |
| Weight | [kg] | 1.350 | 1.425 | 1.500 | 1.600 | 2.200 | 4.000 | 4.150 | 5.200 |
| Liquid nitrogen storage capacity (max pressure 5 barg)***** | | | | | | | | | |
| • 200 I | | • | 0 | | | | | | |
| • 300 I | | 0 | • | 0 | | | | | |
| • 500 I | | | 0 | • | | | | | |
| • 1.000 I | | | | | • | • | 0 | 0 | 0 |
| • 2.000 I | | | | | 0 | 0 | • | • | • |

- Standard
- Option
- Usable liters at atmospheric pressure will be different depending on liquefaction pressure
- Power consumption is excl. Optional chiller
- Power supply can influence the design and construction
- Other storage capacities are possible, but not as a standard option



NITROGEN PRODUCTION

LIQUEFACTION

STORAGE