



### Reduce Costs, Increase Profits!

Using an in-house nitrogen generator to supply your nitrogen gas demand is the easiest way to reduce nitrogen related costs, and thus increase profits.

The Spirit™ system is a membrane based nitrogen generator designed with flexibility in mind for growing companies. Completely self-contained, the base model includes all filtration needed even with an oil-flooded compressor.

Controls are manual, but options are available to automate start and stop and continuous display of purity.

All models installed in NEMA-12 cabinet (top left).  
Production and air:nitrogen ratio for HSS-30 at 77°F ambient is below. Use correction factors for larger systems.

| Production Correction factors |    |
|-------------------------------|----|
| HSS-30                        | x1 |
| HSS-60                        | x2 |
| HSS-90                        | x3 |

### Major Features:

- Electricity not required on base models
- Low to Moderate capacities
- Manual control standard (options available)
- Fits through standard 36" door
- Connect compressed air and go!

| NITROGEN PRODUCT FLOWRATE (SCFH) |       |     |      |      |      |      |
|----------------------------------|-------|-----|------|------|------|------|
| INLET PRESSURE (psig)            | 99.5% | 99% | 98%  | 97%  | 96%  | 95%  |
| 70                               | 118   | 160 | 233  | 301  | 367  | 434  |
| 80                               | 147   | 199 | 289  | 371  | 453  | 535  |
| 90                               | 177   | 238 | 345  | 441  | 538  | 637  |
| 100                              | 206   | 277 | 401  | 511  | 623  | 739  |
| 110                              | 236   | 315 | 457  | 581  | 708  | 841  |
| 120                              | 265   | 354 | 513  | 652  | 793  | 943  |
| 130                              | 295   | 393 | 569  | 722  | 879  | 1045 |
| 140                              | 324   | 432 | 625  | 792  | 964  | 1146 |
| 150                              | 354   | 471 | 681  | 862  | 1049 | 1248 |
| 160                              | 383   | 509 | 736  | 932  | 1134 | 1350 |
| 170                              | 413   | 548 | 792  | 1002 | 1219 | 1452 |
| 180                              | 442   | 587 | 848  | 1072 | 1304 | 1554 |
| 190                              | 472   | 626 | 904  | 1142 | 1390 | 1655 |
| 200                              | 501   | 665 | 960  | 1213 | 1475 | 1757 |
| 210                              | 531   | 703 | 1016 | 1283 | 1560 | 1859 |
| 220                              | 560   | 742 | 1072 | 1353 | 1645 | 1961 |
| 230                              | 590   | 781 | 1128 | 1423 | 1730 | 2063 |

| FEED AIR TO NITROGEN RATIO (MULTIPLIER) |       |      |      |      |      |      |
|---|-------|------|------|------|------|------|
| INLET PRESSURE (psig)                   | 99.5% | 99%  | 98%  | 97%  | 96%  | 95%  |
| 70                                      | 4.90  | 4.00 | 3.10 | 2.60 | 2.50 | 2.20 |
| 80                                      | 4.80  | 3.90 | 3.00 | 2.60 | 2.40 | 2.20 |
| 90                                      | 4.70  | 3.80 | 3.00 | 2.60 | 2.40 | 2.20 |
| 100                                     | 4.60  | 3.80 | 3.00 | 2.50 | 2.40 | 2.10 |
| 110                                     | 4.50  | 3.70 | 2.90 | 2.50 | 2.30 | 2.10 |
| 120                                     | 4.40  | 3.60 | 2.90 | 2.50 | 2.30 | 2.10 |
| 130                                     | 4.30  | 3.60 | 2.80 | 2.50 | 2.30 | 2.10 |
| 140                                     | 4.20  | 3.50 | 2.80 | 2.50 | 2.20 | 2.10 |
| 150                                     | 4.20  | 3.40 | 2.80 | 2.50 | 2.20 | 2.10 |
| 160                                     | 4.10  | 3.40 | 2.70 | 2.50 | 2.20 | 2.10 |
| 170                                     | 4.00  | 3.40 | 2.70 | 2.40 | 2.20 | 2.00 |
| 180                                     | 4.00  | 3.30 | 2.70 | 2.40 | 2.20 | 2.00 |
| 190                                     | 4.00  | 3.30 | 2.70 | 2.40 | 2.20 | 2.00 |
| 200                                     | 3.90  | 3.30 | 2.70 | 2.40 | 2.10 | 2.00 |
| 210                                     | 3.90  | 3.30 | 2.70 | 2.40 | 2.10 | 2.00 |
| 220                                     | 3.90  | 3.30 | 2.70 | 2.40 | 2.10 | 2.00 |
| 230                                     | 3.90  | 3.30 | 2.70 | 2.40 | 2.10 | 2.00 |

