

## Refrigerated Compressed Air Dryers

HTDN SERIES - HIGH INLET TEMPERATURE



# HTDN HIGH INLET TEMPERATURE REFRIGERATED AIR DRYERS



## MAKE THE RIGHT CHOICE

Deltech HTDN High Inlet Temperature refrigerated air dryers are designed to efficiently dry compressed air with inlet temperatures up to 180°F.

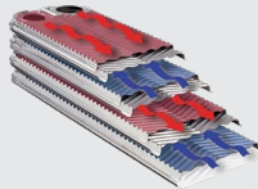
With six pre-engineered sizes to choose from, the HTDN is the ideal drying solution for auto service centers and general shop air applications that use piston type air compressors 5.0 to 30 horsepower.

## BUILT TO INTERNATIONAL STANDARDS FOR PERFORMANCE, SAFETY & ENVIRONMENTAL SUSTAINABILITY

- ✓ Moisture removal to ISO 8573-1: 2010 Quality Class 6 (50°F) pressure dew point
- ✓ Certified for quality and safety to UL1995/CSA 22.2 No. 236-95
- ✓ Environmentally friendly R-134a and R-407c refrigerants

## BUILT TO LAST

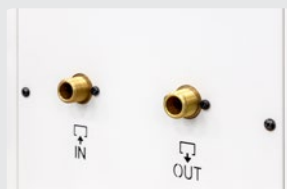
Stainless steel brazed plate heat exchangers with integral demister separator ensure optimal heat transfer for the life of the dryer



Adjustable timed electric drain – valve open and closed time – reliably discharges condensate from the dryer



Widely spaced Inlet/Outlet connections, flow direction stamped into cabinet, for ease of installation and filter mount



Instrumentation with lighted compressor On/Off switch, dew point temperature indicator and fault light



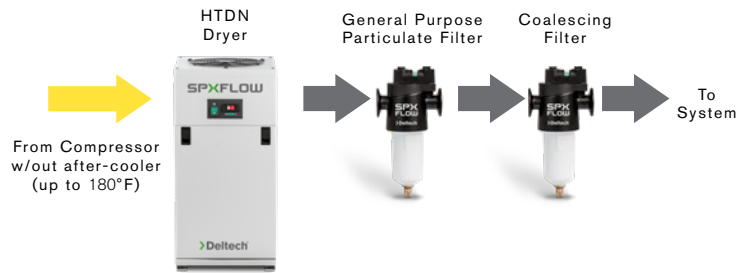
## BETTER BY DESIGN

- Top mount fan, upward condenser air flow allows installation in tight spaces
- Bottom base rail with pre-drilled mounting holes for secure floor mount
- Quick release front panel for ease of access to dryer internals for routine maintenance



## PROTECT YOUR SYSTEM WITH ISO QUALITY CLASS AIR

Dry the air .... then select a General Purpose particulate filter to capture particles down to 1.0 micron and Coalescing filter to remove 99.9% of the oil.



| MODEL            | CONNECTION (NPT) | ISO QUALITY CLASS MOISTURE | GENERAL PURPOSE AFTER-FILTER | CONNECTION (NPT) | ISO QUALITY CLASS SOLIDS | OIL REMOVAL AFTER-FILTER | CONNECTION (NPT) | ISO QUALITY CLASS OIL |
|------------------|------------------|----------------------------|------------------------------|------------------|--------------------------|--------------------------|------------------|-----------------------|
| HTDN20 - HTDN35  | 3/4"             | 6                          | 306-P3-DP1                   | 3/4"             | 2                        | 306-H3-DP1               | 3/4"             | 1                     |
| HTDN50 - HTDN125 | 1"               | 6                          | 308-P3-DP1                   | 1"               | 2                        | 308-H3-DP1               | 1"               | 1                     |

After-Filters have Maximum Operating Temperature of 150°F.  
Install downstream of dryer unless the inlet air temperature is ≤ 150°F.

As an extra measure of protection, Deltech will provide additional coverage beyond the standard 2-year warranty. Purchase a dryer with Filtration Package and the annual purchase of a maintenance kit and receive 3 years additional protection, parts and labor, a total of 5 years. All major components are covered.



## HTDN SERIES PRODUCT SPECIFICATIONS

| MODEL   | FLOW CAPACITY SCFM <sup>1</sup> | POWER REQUIREMENTS |      | IN / OUT CONNECTIONS | REFRIGERANT TYPE <sup>2</sup> | MAXIMUM WORKING PRESSURE <sup>3</sup> | MAXIMUM INLET TEMPERATURE <sup>3</sup> | AMBIENT TEMPERATURE RANGE <sup>3</sup> | DIMENSIONS IN (MM) |          |          | WEIGHT |     |
|---------|---------------------------------|--------------------|------|----------------------|-------------------------------|---------------------------------------|--|--|--------------------|----------|----------|--------|-----|
|         |                                 | V/ph/Hz            | kW   |                      |                               |                                       |  |  | NPT                | H        | W        | D      | LBS |
| HTDN20  | 20                              | 115/1/60           | 0.69 | 3/4"                 | R-134a                        |                                       |  |  | 29 (744)           | 14 (366) | 17 (430) | 100    | 45  |
| HTDN25  | 25                              | 115/1/60           | 0.69 | 3/4"                 | R-134a                        |                                       |  |  | 29 (744)           | 14 (366) | 17 (430) | 100    | 45  |
| HTDN35  | 35                              | 115/1/60           | 0.99 | 3/4"                 | R-407c                        | 42-227 psig                           | 40°F-180°F                             | 40°F-110°F                             | 29 (744)           | 14 (366) | 17 (430) | 106    | 48  |
| HTDN50  | 50                              | 115/1/60           | 0.83 | 1"                   | R-407c                        | 3.0-16.0 bar                          | 4°C-82°C                               | 4°C-43°C                               | 41 (1044)          | 18 (447) | 17 (430) | 125    | 57  |
| HTDN75  | 75                              | 115/1/60           | 1.13 | 1"                   | R-407c                        |                                       |  |  | 41 (1044)          | 18 (447) | 17 (430) | 130    | 59  |
| HTDN125 | 125                             | 230/1/60           | 1.97 | 1"                   | R-407c                        |                                       |  |  | 46 (1166)          | 18 (447) | 17 (430) | 153    | 69  |

1 Rating conditions are 180°F inlet temperature, 125 psig inlet pressure, 100% inlet relative humidity, 100°F ambient temperature.

2 Refer to dryer data plate for refrigerant charge.

3 To ensure optimal performance, do not operate continuously in conditions below or above max/min specifications.

Add -FP to any model to include the Filter Pack. Filter Pack consists of the following: (1) Deltech 300 Series P3 Particulate Filter and (1) Deltech 300 Series H3 Oil Coalescing Filter. Maximum temperature for air entering the filters should not exceed 150°F (66°C).

# Capacity Correction Factors

## CAPACITY FOR FLOWS BASED ON 180°F, 82°C INLET

| MODEL          | FLOW CAPACITY SCFM <sup>1</sup> @ 175 | RECOMMENDED AIR COMPRESSOR SIZE | FLOW CAPACITY SCFM <sup>1</sup> @ 150 | RECOMMENDED AIR COMPRESSOR SIZE | FLOW CAPACITY SCFM <sup>1</sup> @ 125 | RECOMMENDED AIR COMPRESSOR SIZE | FLOW CAPACITY SCFM <sup>1</sup> @ 100 | RECOMMENDED AIR COMPRESSOR SIZE |
|----------------|---------------------------------------|---------------------------------|---------------------------------------|---------------------------------|---------------------------------------|---------------------------------|---------------------------------------|---------------------------------|
|                | PSIG (12 KG/CM <sup>2</sup> )         | HP                              | PSIG (11 KG/CM <sup>2</sup> )         | HP                              | PSIG (9 KG/CM <sup>2</sup> )          | HP                              | PSIG (7 KG/CM <sup>2</sup> )          | HP                              |
|                | 60 HZ                                 | 60 HZ                           | 60 HZ                                 | 60 HZ                           | 60 HZ                                 | 60 HZ                           | 60 HZ                                 | 60 HZ                           |
| <b>HTDN20</b>  | 23                                    | 5                               | 22                                    | 5                               | 20                                    | 5                               | 18                                    | 5                               |
| <b>HTDN25</b>  | 29                                    | 7.5                             | 27                                    | 7.5                             | 25                                    | 7.5                             | 23                                    | 5                               |
| <b>HTDN35</b>  | 41                                    | 10                              | 38                                    | 10                              | 35                                    | 10                              | 32                                    | 7.5                             |
| <b>HTDN50</b>  | 58                                    | 15                              | 54                                    | 15                              | 50                                    | 15                              | 45                                    | 10                              |
| <b>HTDN75</b>  | 87                                    | 20                              | 81                                    | 20                              | 75                                    | 20                              | 68                                    | 15                              |
| <b>HTDN125</b> | 145                                   | 30                              | 135                                   | 30                              | 125                                   | 30                              | 114                                   | 25                              |

For typical applications where there is NO aftercooler installed upstream

1 Capacity @ 180°F (82°C) inlet temperature, 160°F (71°C) inlet pressure dew point, 95°F (35°C) ambient temperature, 50°F (10°C) outlet pressure dew point, and less than 5 psig (0.35 kg/cm<sup>2</sup>) pressure drop.

## CAPACITY FOR FLOWS BASED ON 100°F, 38°C INLET

| MODEL          | FLOW CAPACITY SCFM <sup>1</sup> @ 175 | RECOMMENDED AIR COMPRESSOR SIZE | FLOW CAPACITY SCFM <sup>1</sup> @ 150 | RECOMMENDED AIR COMPRESSOR SIZE | FLOW CAPACITY SCFM <sup>1</sup> @ 125 | RECOMMENDED AIR COMPRESSOR SIZE | FLOW CAPACITY SCFM <sup>1</sup> @ 100 | RECOMMENDED AIR COMPRESSOR SIZE |
|----------------|---------------------------------------|---------------------------------|---------------------------------------|---------------------------------|---------------------------------------|---------------------------------|---------------------------------------|---------------------------------|
|                | PSIG (12 KG/CM <sup>2</sup> )         | HP                              | PSIG (11 KG/CM <sup>2</sup> )         | HP                              | PSIG (9 KG/CM <sup>2</sup> )          | HP                              | PSIG (7 KG/CM <sup>2</sup> )          | HP                              |
|                | 60 HZ                                 | 60 HZ                           | 60 HZ                                 | 60 HZ                           | 60 HZ                                 | 60 HZ                           | 60 HZ                                 | 60 HZ                           |
| <b>HTDN20</b>  | 32                                    | 10                              | 30                                    | 7.5                             | 28                                    | 7.5                             | 25                                    | 7.5                             |
| <b>HTDN25</b>  | 40                                    | 10                              | 37                                    | 10                              | 34                                    | 10                              | 31                                    | 7.5                             |
| <b>HTDN35</b>  | 55                                    | 15                              | 51                                    | 15                              | 47                                    | 10                              | 43                                    | 10                              |
| <b>HTDN50</b>  | 78                                    | 20                              | 73                                    | 20                              | 67                                    | 15                              | 61                                    | 15                              |
| <b>HTDN75</b>  | 118                                   | 25                              | 110                                   | 25                              | 102                                   | 25                              | 92                                    | 20                              |
| <b>HTDN125</b> | 197                                   | 40                              | 183                                   | 40                              | 170                                   | 40                              | 155                                   | 30                              |

For typical applications where an aftercooler is installed upstream

1 Capacity @ 100°F (38°C) inlet temperature, 100°F (38°C) inlet pressure dew point, 100°F (38°C) ambient temperature, 50°F (10°C) outlet pressure dew point, and less than 10 psig (0.7 kg/cm<sup>2</sup>) pressure drop.

### SPX FLOW

4647 SW 40th Avenue  
 Ocala, Florida 34474-5788 U.S.A.  
 P: (724) 745-1555  
 F: (724) 745-6040  
 E: deltech.americas@spxflow.com  
 www.spxflow.com/deltech

SPX FLOW, Inc. reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region. For more information visit [www.spxflow.com](http://www.spxflow.com).

The green "S" and "X" are trademarks of SPX FLOW, Inc.