GEM Equipments (P) Ltd.

GEM

Since 1984

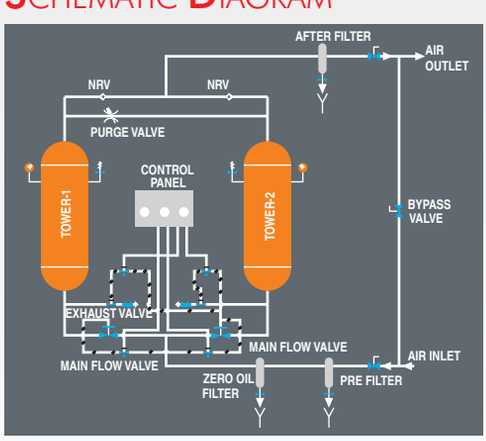
Compressed Air & Cooling Systems

Heatless Compressed Air Dryers

HLN Series

HLD Series

Schematic Diagram



ISO 9001 REGISTERED

DNV

MGMT. SYS. RvA C 024

DNV Certification B.V., The Netherlands

Capacity : 20 - 2000 cfm • Working Pressure : 7 - 40 bar g

HLN Product Features

Salient Features

HLN Series Heatless Air Drier are designed and manufactured for high reliability and ease of use.

Paint

Painted with long lasting corrosion and resistance light grey epoxy paint which gives excellent finish and aesthetic look.

Tower

Amply sized to save heat of adsorption minimises purge air usage.

Limited velocities through prevent bed fluidization - stops desiccant.

Large desiccant bed ensures sufficient contact time to produce -40° dew point (-60° dew point with molecular sieves).

Separate fill and drain ports for ease of desiccant replacement.

Heavy duty purge exhaust mufflers for quite operation.

Pressure gauge on both the towers.

Filters

Every drier is equipped with a pre-filter, oil filter and after filter. Pre filter is fitted with double seat pneumatic auto drain valve which discharge the condensate during change over of tower.

Frame

Sturdy box frame with complete floor stand to withstand vibration and transit damage.

Control Panel

The control panel is compact user friendly with mimic panel indication. The various operation like drying regeneration, purging are indicated by LEDs.

Highly accurate motorised cam timer.

Solenoid valve and electricals to international standards using plug, socket and cable connections.

Purge Flow

Highly accurate purge flow with the help of well desingned orifice to avoid tampering of purge at site.

Technical Specification:

Base Model	Model Variance				Air Flow		Inlet Outlet Flg	Dimensions in mm			Dessicant qty / tower kg.	Weight kg.
	A	B	C	D	CFM	m³/hr		L	B	H		
HLN-002	✓	✓	✓	✓	20	34	½" BSP	500	400	1315	20	75
HLN-003	✓	✓	✓	✓	35	60	½" BSP	500	400	1565	35	90
HLN-006	✓	✓	✓	✓	60	102	¾" BSP	730	450	1245	60	120
HLN-007	✓	✓	✓	✓	75	128	¾" BSP	730	450	1340	75	150
HLN-010	✓	✓	✓	✓	100	170	1" BSP	750	450	1830	100	200
HLN-012	✓	✓	✓	✓	125	215	1 ½" FLG	1000	500	1675	120	250
HLN-015	✓	✓	✓	✓	150	255	1 ½" FLG	1000	500	2060	150	290
HLN-017	✓	✓	✓	✓	175	298	1 ½" FLG	1100	560	1645	170	320
HLN-020	✓	✓	✓	✓	200	340	1 ½" FLG	1100	560	1710	200	350
HLN-025	✓	✓	✓	✓	250	425	2" FLG	1100	560	1810	250	400

* Specifications subject to change due to constant upgradation of products.

Model Nomenclature :

HLN (Product Series) — XXX (Capacity in cfm x 10) — X

- A - Desiccant – Activated Alumina / IS 2825 Code of Construction
- B - Desiccant – Activated Alumina / ASME sec VIII DIV 1 Code of Construction
- C - Desiccant – Molecular Sieve / IS 2825 Code of Construction
- D - Desiccant – Molecular Sieve / ASME sec VIII DIV 1 Code of Construction

Working Conditions :

Working Pressure	: 7 bar g to 12.5 bar g
Inlet temperature	: 42°C
Atmospheric Dew point	: -40°C, -60°C

HLD Product Features

Salient Features

- Power on light.
- On-Off switch.
- Tower pressure gauges.
- Highly accurate motorised cam timer
- Differential pressure gauge for filters*.
- PLC*.
- Cycle failure indication*.
- Sized to save heat of adsorption - minimises purge air usage.
- Limited velocities through tower prevent bed fluidization-stops desiccant dusting.
- Large desiccant bed - ensures sufficient contact time to produce -40°C dew point. Molecular sieves for -60°C.
- Uses bulk desiccant - no special cartridges required.
- Can be offered for higher pressure and lower dew points also.
- Heavy duty purge exhaust mufflers for quite operation.
- Non-lubricated inlet control valves.
- Purge flow valve for adjusting purge rate.
- Pressure relief valves on both towers.

* Optional

Fill And Drain Ports

- Separate fill and drain ports for ease of desiccant replacement.

Stainless Steel Support Screens And Air Diffusers

- Easily removable for cleaning.
- Filters out gross contaminants protect valves.
- Prevents channelling.

Structural Steel Frame With Complete Floor Stand

Easy installation.
Dryer is completely assembled, piped and wired before shipping.
Optional factory mounting of pre and after filters.
Shipped with full charge of desiccant. Choice between alumina or molecular sieve.
Only hook-up utilities need to operate.
Lifting lugs for easy handling.

FILTERS

Prefilter

Every drier should be equipped with pre-filter to protect the desiccant from free water contamination, dust, scales, etc., from compressed air supply. This assures top efficiency and longer desiccant life.

Zero Oil Filter

Oil from the compressor's crank case will be passed on to the line. This will severely effect the life of the desiccant. Oil particles are removed in this filter upto Micron Rating.

After Filter

This is provided after the drier to remove the desiccant dust carried over to the equipment.

Technical Specification:

Base Model	Model Variance				Air Flow		Inlet Outlet Flg	Dimensions in mm			Dessicant qty / tower kg.	Weight kg.
	A	B	C	D	CFM	m³/hr		L	B	H		
HLD-030	✓	✓	✓	✓	300	510	2" NB	1400	1000	1900	110	500
HLD-040	✓	✓	✓	✓	400	680	3" NB	1600	1300	2415	140	650
HLD-050	✓	✓	✓	✓	500	850	3" NB	1600	1300	2270	180	750
HLD-060	✓	✓	✓	✓	600	1020	3" NB	1800	1300	2450	215	900
HLD-075	✓	✓	✓	✓	750	1275	4" NB	2000	1300	2660	260	1050
HLD-100	✓	✓	✓	✓	1000	1700	4" NB	2000	1300	2520	360	1200
HLD-125	✓	✓	✓	✓	1250	2125	5" NB	2000	1300	2600	450	1500
HLD-150	✓	✓	✓	✓	1500	2550	5" NB	2200	1600	2960	520	2000
HLD-200	✓	✓	✓	✓	2000	3400	6" NB	2400	2000	2990	720	2350

* Specifications subject to change due to constant upgradation of products.

Model Nomenclature :

HLD XXX X

- HLD — Product Series
- XXX — Capacity in cfm x 10
- X — A - Desiccant – Activated Alumina / IS 2825 Code of Construction
  B - Desiccant – Activated Alumina / ASME sec VIII DIV 1 Code of Construction
  C - Desiccant – Molecular Sieve / IS 2825 Code of Construction
  D - Desiccant – Molecular Sieve / ASME sec VIII DIV 1 Code of Construction

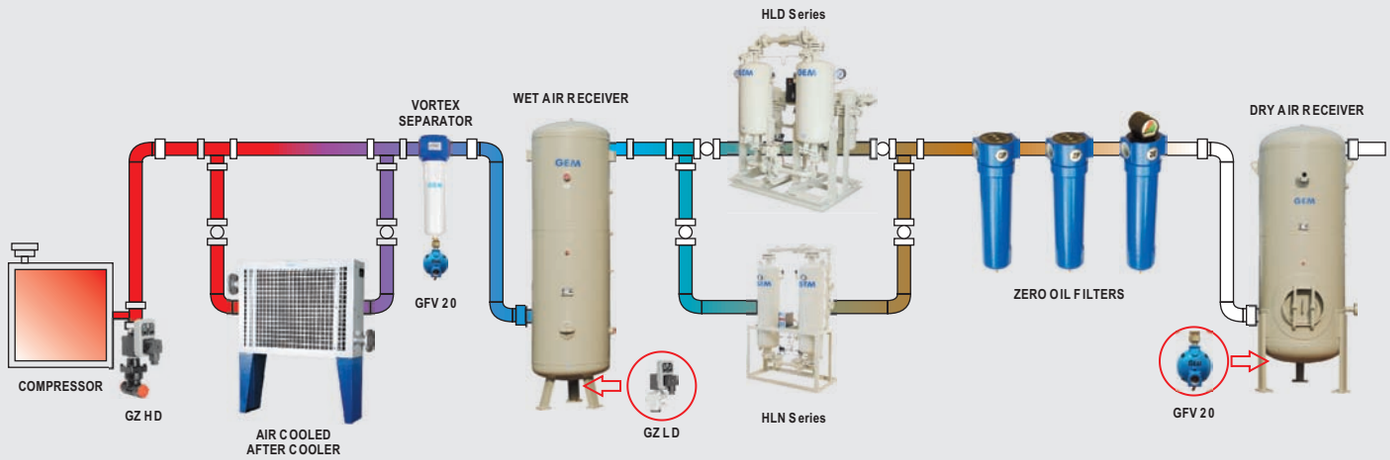
Working Conditions :

Atmospheric Dew point	:	-40°C, -60°C
Working pressure	:	7 bar g to 12.5 bar g
Inlet temperature	:	42°C
Pressure drop	:	0.2 bar g

Code of construction	:	IS2825 / ASME Sec VIII Div 1*
All flanges	:	As per ANSI B16.5*
Electric	:	230 C AC, 50 Hz

For other operating pressure, temperature and dew point, please contact factory

TYPICAL INSTALLATION



TYPICAL APPLICATION

Automobile Industry
Chemical Industry
Electronics Industry
Food & Beverage Industry
Footwear Industry
Glass Industry
Leather Industry
Pharmaceutical Industry
Textile Industry

Cement Plants
Distilleries / Breweries
General Instrumentation& Plant Air
Health Care / Hospitals
Lacquering or Spray Painting
Paper Mills
PET - Stretch Blow Moulding
Power Plants
Printing
Rice Mills
Sand Blasting
Spinning / Knitting / Hosiery Mills
Sugar Mills
Tea Gardens
and many more

SALES & CUSTOMER CARE

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Coimbatore

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Mumbai
Delhi
Pune

Channel Associates
Ahmedabad
Aurangabad
Bengaluru
Bhopal
Chandigarh
Cuttack
Delhi
Hyderabad
Jamshedpur
Lucknow
Madurai
Nagpur
Nasik
Pune
Rajkot
Sangli
Sivasagar
Surat
Vadodara
Visakhapatnam

F/MKT/030/03

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