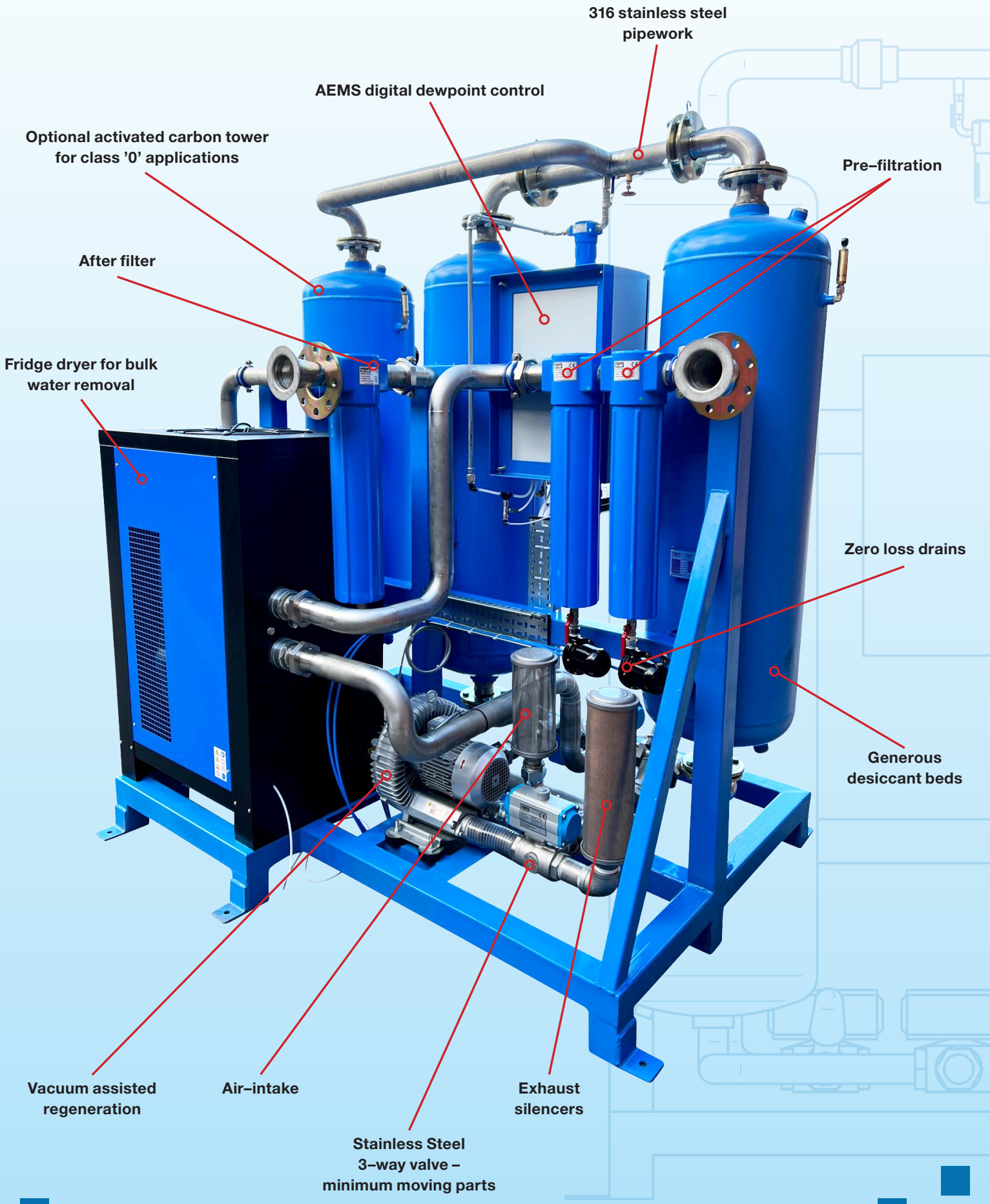
HI-LINE INDUSTRIES

HI-PLEX DUAL TECHNOLOGY DRYERS

Hybrid Energy Saving Compressed Air Treatment

MADE IN BRITAIN


316 stainless steel pipework
AEMS digital dewpoint control
Optional activated carbon tower for class '0' applications
Pre–filtration
After filter
Fridge dryer for bulk water removal
Zero loss drains
Generous desiccant beds
Vacuum assisted regeneration
Air–intake
Exhaust silencers
Stainless Steel 3–way valve – minimum moving parts

PRINCIPLE OF OPERATION

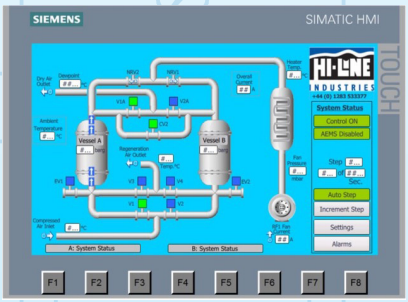
Energy efficiency has always been at the forefront of our dryer design and in the last 22 years our development has moved on significantly. From our own branded DRI-ZORB27 hybrid alumina to our robot welded vessels PSA 'pressure Swing Adsorption' has been around since 1950's in Air Treatment, but only in the last decade has been refined.

Hi-Plex utilises traditional dryer technologies of Refrigeration and PSA to give a hybrid drying solution at low capital cost compared to Heat Regeneration Air Dryers.

Essentially wet air enters via pre-filled where bulk, oil and water are removed via zero loss autodrains. From here the air is chilled down to +1°C in the heat exchanger to condense out all water to a +3°C PDP (Pressure Dewpoint)

From here into a standard energy efficient HPSA – Hi-line Pressure Swing Adsorption dryer where the pre dried air is further dried via adsorption to dewpoints of between -20°C PDP and -70°C PDP dependent of the end users requirements. The regeneration for the Hi-Plex is done using vacuumed assisted fan which using a reduced amount of purge air causes a desorption effect within the desiccant beds. The small amount of remaining water is removed by the side channel vacuum pump via a silencer back to the atmosphere from where it came.

LOWEST POSSIBLE RUNNING COSTS OF LOW DEWPOINTS



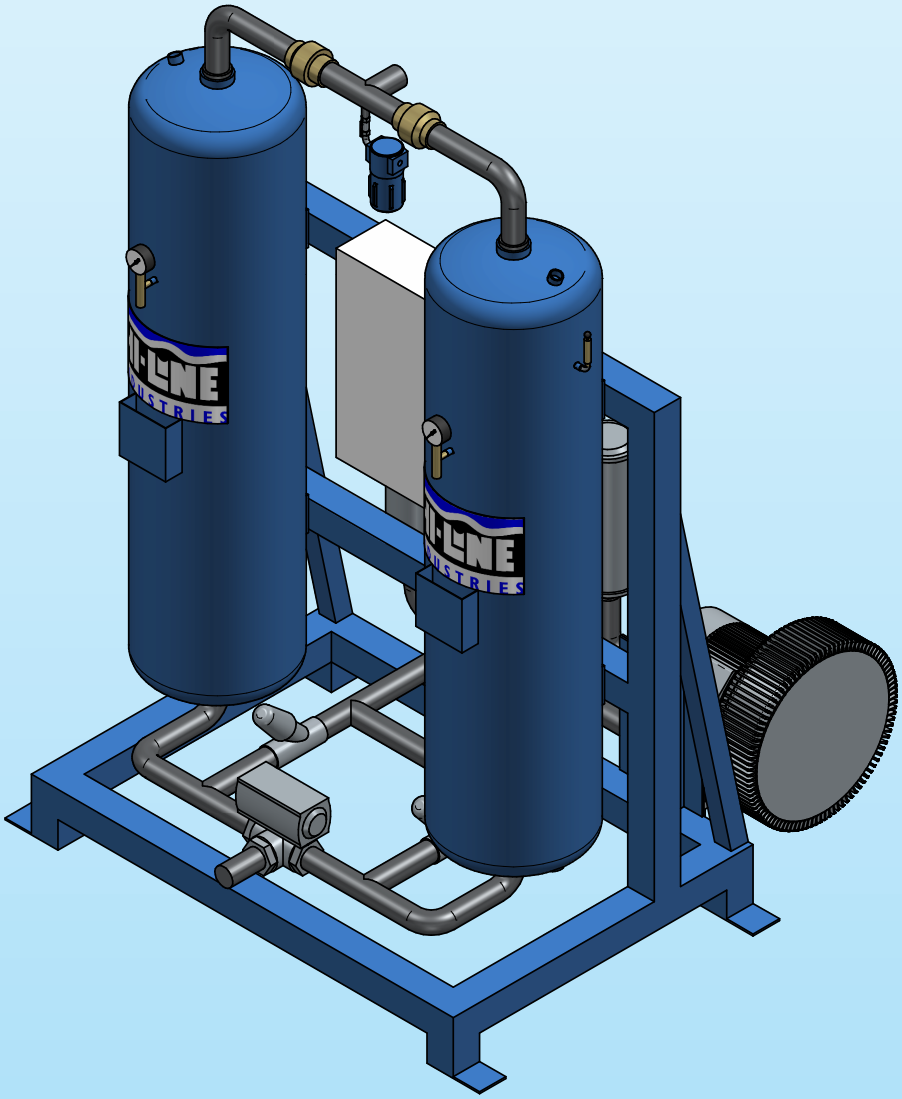
Hi-plex high performance dual technology dryers use only approximately 1-2% as opposed to 13-15% on some standard desiccant dryers. Considerably more savings are achieved when the Dewpoint Control (AEMS Automatic Energy Management System) is employed to the Hi-Plex skid. This allows the customer to set stand by times once pre-set dewpoint is achieved and no energy is consumed.

BESPOKE DRYERS AS STANDARD

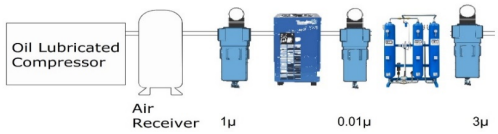
Hi-Plex are 'application specific' or bespoke, but are built from standard off the shelf Hi-line products. Tundra refrigeration air dryers for pre-drying and HPSA desiccant dryers for second stage low dewpoints.

All the components and pipework / filters are added to a skid, fabricated in our Burton-upon-Trent factory.

So if you have a 'special' requirement, such as a smaller foot print, or its got to go in a low ceiling compressor house etc, we can take all of this on board at the time of order placement. You might want it to talk to your own software or BMS, all these options are available even down to the choice of colour!



HI-LINE HI-PLEX SKID MOUNTED DRYER RANGE									
CAPACITY @ 7 Barg 35°C – inlet temp 20°C ambient									
Specifications - HI-PLEX Dryer Range									
Dryer Type	**Capacity**			**Conn**	**Dimensions**				**Installed power kW**
	Scfm	**Nm³/m**	**Nm³/h**		**W**	**D**	**H**	**Weight**	
HI-PLEX-165	165	280	4.68	1 ½" PN16	1500	950	2080	960	3.1
HI-PLEX-225	225	382	6.37	1 ½" PN16	1500	950	2300	1200	3.4
HI-PLEX-280	280	476	7.93	2" PN16	1650	950	2200	1300	3.4
HI-PLEX-350	350	595	9.91	2" PN16	1650	950	2400	1500	3.4
HI-PLEX-450	450	765	12.74	2 ½" PN16	1800	1100	2400	1700	2.5
HI-PLEX-565	565	960	16.00	2 ½" PN16	1600	1100	2900	1900	3.8
HI-PLEX-850	850	1250	24.06	3" PN16	2700	950	2500	2100	5.3
HI-PLEX-1000	1000	1700	28.31	3" PN16	2350	1300	2960	2500	8.6
HI-PLEX-1130	1130	1920	32.00	4" PN16	2350	1200	3040	2700	9.3
HI-PLEX-1400	1400	2380	39.64	4" PN16	2700	1700	2640	2900	9.3
HI-PLEX-1700	1700	2890	48.13	5" PN16	2520	1700	3200	3100	10.8
Above this value the energy saving is greater than capital cost in all occasions - chose from our HBP-ZL range of dryers									



Class '2' - ISO8573.1:2010
Is achieved by this system

HI-PLEX PRODUCT DESCRIPTION & BENEFITS

- Low capital cost energy efficient dryer skid
- Pre & After filtration included
- 5 Year Warranty as standard subject to service criteria
- Standard pressure 11 bar – higher pressure on request
- Over 70% energy savings compared to traditional desiccant dryer
- Hi-Plex offers much quicker payback time than other heat regen options
- Tight & compact all inclusive skid leaves small foot print
- Plug & Play, wet air in – dry air out, fully automatic
- On board AEMS, Automatic Energy Management Systems that ensure minimum energy is used to achieve dewpoints at any time
- Dewpoint required from -20°C PDP to -70°C PDP dependent on customer requirement. This dewpoint is adjustable
- Additional Activated Carbon Tower can be added for "Class 0" application
- All Hi-Plex dryers are 'application specific' we will build a bespoke to your application

SERVICE DIVISION

All Hi-Plex dryers are fully supported by a nationwide team of Hi-line Service Technicians. All factory trained and fully conversant with energy management of compressed air.

Hi-Plex's are normally sold with a Hi-line Maintenance Agreement which then extends the warranty period to 5 years full warranty.

Hi-line Technicians are available to service other brands of dryers and retro fit our energy saving touch screen panel to less sophisticated dryers.

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