

LESS...
■ SPACE
■ ENERGY
■ NOISE

...MORE
■ CONVENIENT
■ FEATURES
■ PERFORMANCE



G-TEC
BELT-DRIVEN
ROTARY SCREW
AIR STATION



**POWER
SYSTEM**
Air Compressors

7.5 to 22 kW
8 to 13 bar

G-TEC

Belt-driven rotary screw compressors

A true integrated air station

All you need for dry, clean compressed air...
...super quiet, super reliable.

ADVANTAGES



EASY TO HANDLE



PLUG&PLAY



COMPACT



LOW NOISE



ENERGY EFFICIENCY

- All-inclusive air compressors workstation.
- Complete range from 7.5 to 22 kW.
- Compact and modern design.
- Easy to use.
- Simple installation and maintenance.
- High quality compressed air.
- Long-life and highly reliable.
- Flexibility: three pressures, 26 variants.
- Extremely quiet operation.
- Designed for continuous use.
- Reduced energy consumption.

INTEGRATED DRYER AND FILTERS

The G-TEC range features a fully integrated and complete air treatment module including a generously sized refrigerated air dryer and both inlet and outlet high efficiency filtration. This allows the integrated air station to provide both dry and clean compressed air to quality standard classification 2-4-2, in accordance with ISO 8573-1. The automatic draining of the condensate is collected from the refrigerated dryer and filters and arranged in convenient, single outlet.



Complete range



■ The integration of all the fundamental components that make an ideal compressed air system (screw compressor, dryer, filters, controller and air-receiver) are arranged into a single modular device, providing an extremely compact space saving solution, with numerous significant advantages:

- Drastically reduced installation time and cost;
- High quality, clean and dry compressed air;
- Forms a fully automatic, self monitoring and integrated system;
- Excellent access for simple maintenance and easy access to the filters, refrigerated dryer and other components;
- Dry air receiver providing a constant flow of high quality compressed air and reduced corrosion;
- Lower operating costs;
- Automatic condensate discharge operated and adjusted from the main controller and arranged in a single outlet;
- Visualization clearly indicating all operating values of the compressor as well as the operation of the dryer via the indicator available from the large and clear display of the main controller.

■ LOW NOISE LEVEL

The centrifugal fan design along with the careful arrangement of other components when added to the extensive sound insulation results in the G-TEC offering the lowest operating noise levels available.



G-TEC

Belt-driven rotary screw air station

The energy saving compressor



Expansion Module Options:

GSM/GPRS/Ethernet/WiFi module (for on-line compressor status, remote assistance, connection with PC, Smartphone and Tablet, connection between neighbour compressors).

Master/slave function

It is possible to connect up to 4 compressors for managing the workload in such a way to equalize the hours of each compressor in a network to ease servicing. The system pressure can be dynamically programmed to various set pressures according to usage.

The advanced controller fitted to the G-TEC range has been specifically developed to guarantee optimum monitoring and regulation of the compressor's operation, allowing flexibility and full programming of the complete compressed air station for maximum efficiency and safety.

DNAir2 Electronic Controller

The main controller provides a multi-function and multi-language backlit LCD graphic display, the menu is drop down type for simple intuitive operation. The display utilises familiar and convenient icons for ease of use.

The main screen displays the following important information:

- Working pressure (offload and load pressure);
- Oil temperature;
- Compressor status (stand-by, offload, load);
- Cooling fan status (off or on);
- Date and time;
- Hours remaining to maintenance;
- Percentage load (inverter/variable speed models);
- Dryer dew point indicator.



High efficiency

The design of the G-TEC compressors, including the high efficiency IE3 motors, has been fully focused on combining the different components that make up a perfect compressed air installation for a completely integrated, modular and functional system that combines maximum convenience with optimum energy efficiency.



G-TEC DV

Belt-driven rotary screw air station

Variable speed for energy saving

VARIABLE
VSD
SPEED DRIVE

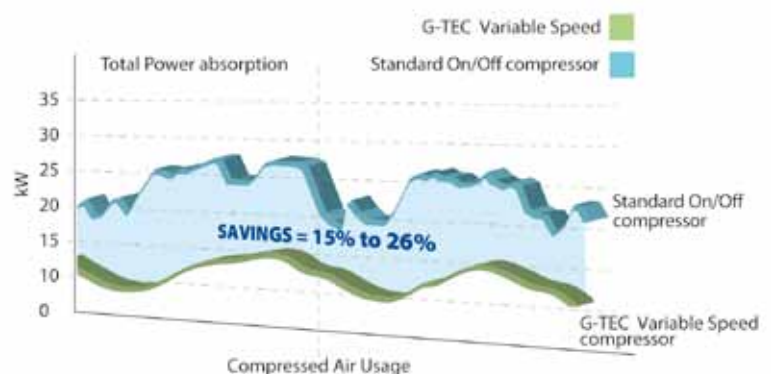
With over 15 years of experience in the manufacture and design of Variable Speed rotary screw compressors, Power System is recognised as a technological leader in the field of Inverter employed variable speed technology. Reducing power consumption and protecting our valuable energy resources represents one of the greatest global environmental challenges of our times. G-TEC series offers energy saving Variable Speed screw compressors at 11 and 22 kW, providing high performance, and energy efficient solutions that are also robust and reliable. Power System is your ideal partner and uniquely qualified to offer the correct energy saving solutions, whatever your application.

A conventional fixed speed air compressor is typically controlled by the inlet valve, opening and closing continuously to meet the air demand. This type of operation may result in a large amount of wasted energy due to the compressor's operation within an on and off load position, typically resulting in expensive non productive "idle running".

In addition the "constant pressure control" offered by the variable speed versions and the avoiding of the discharge of valuable compressed air during the off loading cycle, can reduce energy consumption significantly. The application of a frequency inverter, able to dynamically adjust the voltage/frequency/current values provided to the motor, allows the elimination of unnecessary power losses by constantly adjusting the generation of compressed air to match the real air demand, offering many proven advantages to the user:

- Continuous regulation of the motor speed and compressed air generation;
- Compressed air generation that will precisely match the air demand;
- The air output is constantly adjusted in a range typically between 25% and 100% of the compressors full capacity.
- Constant and accurate control to the operating air pressure control, selectable at any value between 6 and 10 bar (13 bar option also available).
- The energy consumption is proportional to the compressed air delivered.

- **Significant energy savings**
- **Silent operation**
- **Compact design**
- **Low maintenance**
- **High efficiency inverter**



G-TEC

Belt-driven rotary screw compressors

7.5 - 11 - 15 kW versions



BELT-DRIVEN TRANSMISSION AND BELT PROTECTION SYSTEM

The POLY-V belt-drive ensures significantly lower power losses and three times the service life compared to standard range “V” type belts fitted to other compressors on the market. Belt tensioning is carried out through a slider system and adjusted easily using standard tools or our ‘smartphone tuning app’..



SPIN-ON FILTERS

The oil filter and separator filter, both spin-on type, ensure maximum efficiency and simple maintenance.

MINIMUM PRESSURE VALVE

Produced and designed in house using advanced materials and precision machining methods. The advanced design and high quality of engineering results in maximum reliability and increased air delivery in all operating conditions.



IR 30 INTAKE REGULATOR

The highly reliable and robust electropneumatic system: adjusts the compressors operation to guarantee minimum pressure when idle running and provide maximum energy saving upon start-up. All this translates into an optimal energy cost/ performance formula.



THERMOSTATIC VALVE

The thermostatic valve regulates the oil temperature, preventing the formation of condensation inside the oil-separator vessel.



COOLING AIR PREFILTRATION PANEL

The standard pre-filtering and washable panel filter assists in keeping the inside of the machine clean and ensures ease of maintenance and cooler operation.



HEAT EXCHANGER

The large combined heat exchanger ensures that the machine operates within the optimum temperature band. The resulting lower temperature of the delivered compressed air means that the condensation can be removed more easily and ensuring the efficient operation of the refrigerated dryer. The lower oil temperature reduces wear and improves energy efficiency.



Additional pre-filtering panel motor side only on 15 kW models.



COOLING SYSTEM

The thermostatically controlled centrifugal fan is activated automatically by means of the DNAir 2 electronic controller. This allows the machine to quickly reach and precisely maintain the ideal operating temperature. The fan is protected by a safety guard ensuring maximum operator security and at the same time meeting all international standards.



PREMIUM EFFICIENCY IE3 MOTORS

High efficiency IE3 motors
are fitted as standard.



PS 26TF AIR-END

Our own highly reliable, premium performance air-ends ensure low maintenance and a long life service. All of our air-ends are entirely designed, machined, assembled and tested at our modern manufacturing facility in Italy, together with the other key components, such as intake regulator and separator block and minimum pressure/check valve.

G-TEC

Belt-driven rotary screw compressors

18.5 - 22 kW versions



BELT-DRIVEN TRANSMISSION AND NEW BELT PROTECTION

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PREMIUM EFFICIENCY IE3 MOTORS

High efficiency IE3 motors
are fitted as standard.



PS 50TF AIR-END

Our high performance
and extremely reliable air-ends
are entirely produced
in our Italian facilities.

G-TEC 7.5 - 11 - 15 kW

- Power range from 7.5 kW to 11 kW;
- Operating pressure at 8-10-13 bar;
- 270 or 500-lt air receiver;
- Fully integrated refrigerated dryer and dual oil removing filters;
- Operating noise level between 62 and 65 dB(A);
- Variable speed version (11 kW).



▲ G-TEC 15-10-270 DF



▲ G-TEC 15-10-500 DF DV

Model	Tank	Power		Air delivered **			Max. Pressure		Sound level	Connection	Net Weights		Net Dimensions L x W x H
	lt	kW	HP	l/min.	m³/h	CFM	bar	p.s.i.	dB(A)	G	Kg	Lbs	(cm)
FIXED SPEED DRIVE													
G-TEC 7.5-08-270 DF	270	7.5	10	1250	75	44	8	116	62	3/4"	326	719	156 x 70 x 158
G-TEC 7.5-10-270 DF	270	7.5	10	1000	60	35	10	145	62	3/4"	326	719	156 x 70 x 158
G-TEC 7.5-13-270 DF	270	7.5	10	750	45	26	13	188	62	3/4"	336	741	156 x 70 x 158
G-TEC 7.5-08-500 DF	500	7.5	10	1250	75	44	8	116	62	3/4"	386	851	198 x 70 x 167
G-TEC 7.5-10-500 DF	500	7.5	10	1000	60	35	10	145	62	3/4"	386	851	198 x 70 x 167
G-TEC 7.5-13-500 DF	500	7.5	10	750	45	26	13	188	62	3/4"	401	884	198 x 70 x 167
G-TEC 11-08-270 DF	270	11	15	1650	99	58	8	116	65	3/4"	350	772	156 x 70 x 158
G-TEC 11-10-270 DF	270	11	15	1500	90	53	10	145	65	3/4"	350	772	156 x 70 x 158
G-TEC 11-13-270 DF	270	11	15	1150	69	41	13	188	65	3/4"	360	794	156 x 70 x 158
G-TEC 11-08-500 DF	500	11	15	1650	99	58	8	116	65	3/4"	410	904	198 x 70 x 167
G-TEC 11-10-500 DF	500	11	15	1500	90	53	10	145	65	3/4"	410	904	198 x 70 x 167
G-TEC 11-13-500 DF	500	11	15	1150	69	41	13	188	63	3/4"	425	937	198 x 70 x 167
G-TEC 15-08-270 DF	270	15	20	2150	129	76	8	116	65	3/4"	376	829	156 x 70 x 158
G-TEC 15-10-270 DF	270	15	20	1850	111	65	10	145	65	3/4"	376	829	156 x 70 x 158
G-TEC 15-13-270 DF	270	15	20	1550	93	55	13	188	65	3/4"	386	851	156 x 70 x 158
G-TEC 15-08-500 DF	500	15	20	2150	129	76	8	116	65	3/4"	436	961	198 x 70 x 167
G-TEC 15-10-500 DF	500	15	20	1850	111	65	10	145	65	3/4"	436	961	198 x 70 x 167
G-TEC 15-13-500 DF	500	15	20	1550	93	55	13	188	64	3/4"	451	994	198 x 70 x 167
VARIABLE SPEED DRIVE (DV)													
G-TEC 11-08-270 DF DV	270	11	15	1650 / 660	99 / 40	58 / 23	8	116	65	3/4"	366	807	156 x 70 x 158
G-TEC 11-10-270 DF DV	270	11	15	1500 / 600	90 / 36	53 / 21	10	145	65	3/4"	366	807	156 x 70 x 158
G-TEC 11-13-270 DF DV	270	11	15	1150 / 460	69 / 28	41 / 16	13	188	65	3/4"	398	878	156 x 70 x 158
G-TEC 11-08-500 DF DV	500	11	15	1650 / 660	99 / 40	58 / 23	8	116	65	3/4"	428	944	198 x 70 x 167
G-TEC 11-10-500 DF DV	500	11	15	1500 / 600	90 / 36	53 / 21	10	145	65	3/4"	428	944	198 x 70 x 167
G-TEC 11-13-500 DF DV	500	11	15	1150 / 460	69 / 28	41 / 16	13	188	65	3/4"	457	1008	198 x 70 x 167

Free air delivery as per ISO 1217 Annex C, at 7.5 - 9.5 - 12.5 bar at the compressor outlet. ± 3 dB (A) as PNEUROP/CAGI PN-NTC 2.3.

G-TEC 18.5 - 22 kW

- Power range of 18.5 and 22 kW;
- Operating pressure at 8-10-13 bar;
- 500-lt air receiver;
- Fully integrated refrigerated dryer and dual oil removing filters;
- Operating noise level between 70 and 71 dB(A);
- Variable speed versions (only 22 kW models).



▲ G-TEC 18.5-10-500 DF



▲ G-TEC 22-10-500 DF DV

Model	Tank		Power		Air delivered **			Max. Pressure		Sound level	Connection	Net Weights		Net Dimensions L x W x H
	lt		kW	HP	l/min.	m³/h	CFM	bar	p.s.i.	dB(A)	G	Kg	Lbs	(cm)
FIXED SPEED DRIVE														
G-TEC 18.5-08-500 DF	500		18.5	25	2700	162	95	8	116	70	3/4"	595	1312	198 x 73 x 175
G-TEC 18.5-10-500 DF	500		18.5	25	2500	150	88	10	145	70	3/4"	595	1312	198 x 73 x 175
G-TEC 18.5-13-500 DF	500		18.5	25	2050	123	72	13	188	70	3/4"	627	1382	198 x 73 x 175
G-TEC 22-08-500 DF	500		22	30	3350	201	118	8	116	71	3/4"	615	1356	198 x 73 x 175
G-TEC 22-10-500 DF	500		22	30	3000	180	106	10	145	71	3/4"	615	1356	198 x 73 x 175
G-TEC 22-13-500 DF	500		22	30	2400	144	85	13	188	71	3/4"	647	1426	198 x 73 x 175
VARIABLE SPEED DRIVE (DV)														
G-TEC 22-08-500 DF DV	500		22	30	3350 / 1340	201 / 80	118 / 47	8	116	71	3/4"	650	1433	198 x 73 x 175
G-TEC 22-10-500 DF DV	500		22	30	3000 / 1200	180 / 72	106 / 42	10	145	71	3/4"	650	1433	198 x 73 x 175
G-TEC 22-13-500 DF DV	500		22	30	2400 / 960	144 / 58	85 / 34	13	188	71	3/4"	682	1503	198 x 73 x 175

Free air delivery as per ISO 1217 Annex C, at 7.5 - 9.5 - 12.5 bar at the compressor outlet. ± 3 dB (A) as PNEUROP/CAGI PN-NTC 2.3.

** For DV models the data refer to max. and min. values

G-TEC BELT-DRIVEN ROTARY SCREW AIR STATION

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THE COMPANY

Since 1992 Power System has been an undisputable leader in the design, development, production and worldwide distribution of industrial premium quality Rotary Screw Compressors in a power range from 2.2 to 315 kW. The most comprehensive range satisfies air demands up to 50 m³/min., and suitable for the most demanding applications in any technology sector, from the largest industrial process to the smallest enterprise.

Since its birth Power System has been engaged in a Research mission aimed at creating advanced solutions that deliver reliable compressed solutions with the lowest possible energy consumption.



Power System is dedicated to providing maximum value and security to all clients whilst delivering advanced technology that works.

Quality Certifications:

- UNI EN ISO 9001 Vision 2000 (TÜV)
- Russian GOST-R Certification

Products Certifications:

- EC European Directives
- RINA-LLOYDS-REGISTER on request
- MOM for Singapore

The science of compressed air.



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