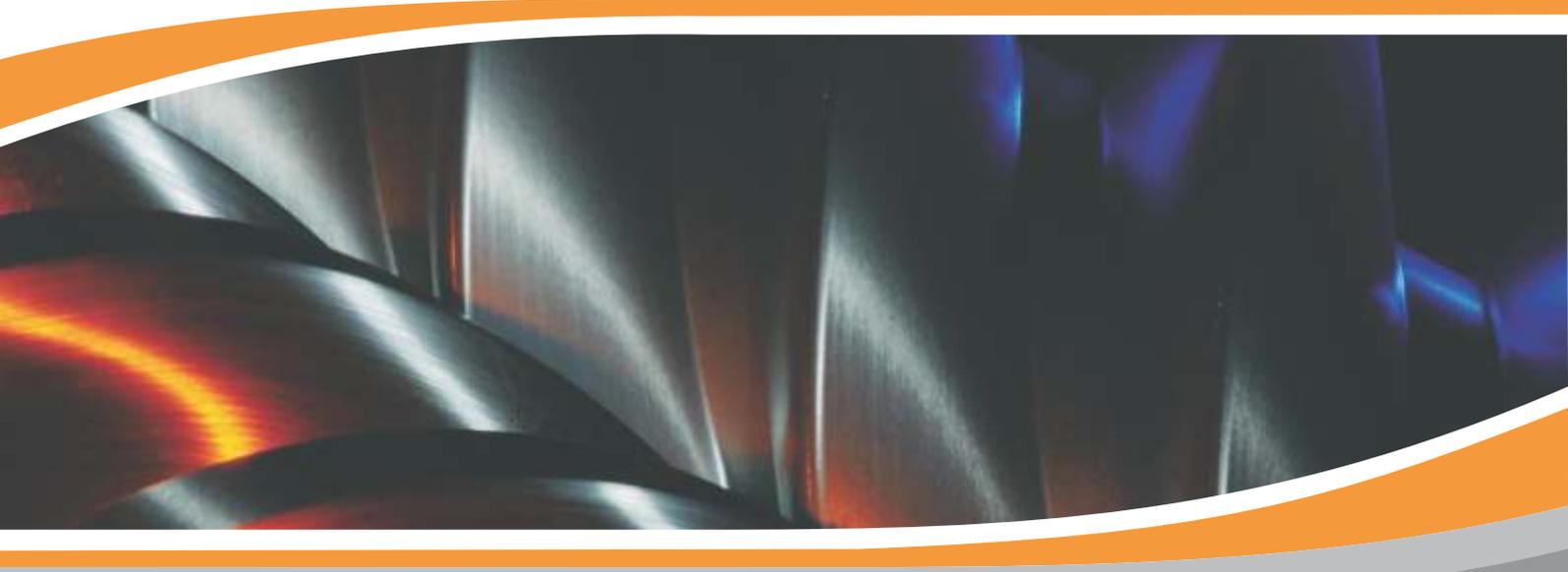


# Horizon Series Screw Air Compressors

Built to last



Single Stage: 90-250 kW





**ELGI**

## a tradition of **RELIABILITY**

Elgi, established in 1960, designs and manufactures a wide range of compressors. The company has gained its reputation for design and manufacture of screw compressors through strategic partnerships and continuous research and development. Over the years it emerged as a multi-product, multi-market enterprise providing total compressed air in all segments. Elgi's design capabilities translated into a wide range of products ranging from oil-lubricated and oil-free rotary screw compressors, reciprocating compressors and centrifugal compressors. Elgi has its own manufacturing operations in China, France, India and Italy with subsidiaries in Australia, Brazil, UAE and USA. The company is fast expanding its global footprint attracting distributors and customers with its latest generation products.

## innovative **TECHNOLOGY**

Screw compressor elements are manufactured in-house using state-of-the-art machining centres for rotor grinding and machining castings of various sizes. Elgi's own eta-V profile rotors ensure energy-efficient compressed air supply for all demanding applications. Elgi is one of the few companies capable of manufacturing wide range of air ends and compressor packages in the world. Elgi's patent portfolio is a testament to the company's continuous research and innovation capability.



## robust **INFRASTRUCTURE**

Elgi has modern manufacturing facilities in equipped with advanced high precision grinding machines, turning centres and CNC horizontal and vertical machining centres. Screw airends are manufactured with the latest rotor grinding technology, coupled with measurement technology to maintain precise manufacturing tolerances. Elgi's manufacturing plants are both ISO and EOHS certified. The products are manufactured under controlled environment to ensure that its quality continues to meet the highest standards.

# Single-Stage Screw Air Compressors

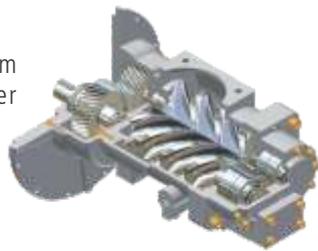
90 - 250 kW | 16.7 - 43.9 m<sup>3</sup>/min



By exploring customer needs and applications, Elgi develops customer engineered products- products which in turn help the customer build better end-products, boost performance and command better markets. The Horizon range of products is one among them. The Horizon range of Single-Stage screw compressors are offered with advanced features that ensure high levels of reliability, efficiency and economy. Build and tested to Elgi's robust manufacturing standards, the compressors are designed to perform in the most demanding conditions.

## Energy efficient

Unique eta-V profile rotors for maximum air flow and minimum power consumption



## Efficient coupling

Airend and motor shafts are coupled through a permanently aligned cushion type claw coupling. Elgi's efficient coupling ensures efficient power transmission and constant FAD throughout the life

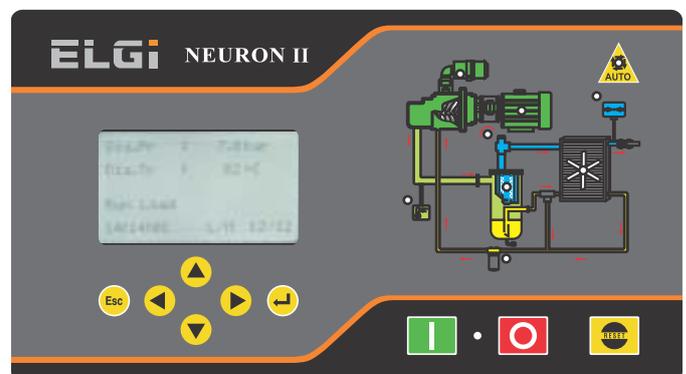


## Efficient air oil separation with OSBIC

Elgi has perfected the "OSBIC" (Oil Separation by Impact and Centrifugal Action) process which enables efficient separation of air and oil with minimum pressure drop. The process results in low oil carry-over (< 2 ppm) level at the output of the compressor



## Microcontroller edge



Elgi's Neuron II is a high end RISC microcontroller for control of medium to large screw air compressors. The system allows you to monitor and control overall system performance with service indications, malfunction alarms and safety shutdowns. It also includes a service and operational history feature to provide real-time feedback and increases system productivity

## Reports

- Cumulative Report (Run Hours, Load Hours, Unload Hours, Stop Hours, Fault Hours and remaining AFCT, OFCT, OSCT, OCT and RGT)
- Detailed Report - Previous 30 Days (Load Hours, Unload Hours, Stop Hours, Fault Hours, and Number of times machine stopped due to standby)
- Fault Report - (Previous 99 Faults in chronological Order with Real Time stamping and type of fault)



## Remote monitoring

- **DCS (MODBUS RTU/RS 485):** Controller is enabled to synchronize with Distributed Control System – control of compressor from control panel of customer
- **SCADA :** Compressor control through PC with remote monitoring by Supervisory Control and Data Acquisition Process

### Single-Stage Screw Air Compressor Range - Standard Pressure

Model 50 Hz		Working Pressure			Weight	Air Outlet Connection
	Rated Power		FAD			
	kW	bar g	m <sup>3</sup> /min	cfm	Kg	
<b>Dimension LXBXH (mm): Air-cooled models - 2745 x 1620 x 2020mm Water-cooled models - 2745 x 1620 x 1900mm</b>						
E90-8	90	7	17.0	602	3200	2 1/2" NPT
E90-9	90	8	16.1	570	3200	2 1/2" NPT
E90-11	90	10	14.0	493	3200	2 1/2" NPT
E110-8	110	7	20.0	706	3300	2 1/2" NPT
E110-9	110	8	19.1	667	3300	2 1/2" NPT
E110-11	110	10	16.9	598	3300	2 1/2" NPT
E132-8	132	7	24.2	855	3500	2 1/2" NPT
E132-9	132	8	22.8	806	3500	2 1/2" NPT
E132-11	132	10	20.1	710	3500	2 1/2" NPT
E160-8	160	7	28.4	1003	3600	2 1/2" NPT
E160-9	160	8	26.1	923	3600	2 1/2" NPT
E160-11	160	10	23.3	822	3600	2 1/2" NPT
<b>Dimension LXBXH(mm): 4100 x 2100 x 2050 mm</b>						
E200-8	200	7	38.2	1350	5500	3" NPT
E200-9	200	8	34.5	1218	5500	3" NPT
E200-10.5	200	9.5	31.1	1100	5500	3" NPT
E200-13.5	200	12.5	25.8	910	5500	3" NPT
E250-8	250	7	45.3	1600	5600	3" NPT
E250-9	250	8	41.8	1475	5600	3" NPT
E250-10.5	250	9.5	37.4	1320	5600	3" NPT
E250-13.5	250	12.5	31.1	1100	5600	3" NPT

### Single-Stage Screw Air Compressor Range - Low Pressure

Model	Rated Power	Working Pressure	FAD		Weight	Air Outlet Connection	
			m <sup>3</sup> /min	cfm		A/C	W/C
	kW	bar g	m <sup>3</sup> /min	cfm	Kg	A/C	W/C
E90-5.5	90	4.5	17.2	608	3100	2 1/2" NPT	3" NPT
E110-5.5	110	4.5	20.1	699	3150	2 1/2" NPT	3" NPT
E132-5.5	132	4.5	24.4	860	3300	2 1/2" NPT	3" NPT
E160-5.5	160	4.5	30.3	1070	3600	2 1/2" NPT	3" NPT
E200-5.5	200	4.5	36.9	1304	5500	3" NPT	3" NPT
E250-5.5	250	4.5	45.6	1612	5600	3" NPT	3" NPT
<b>Dimension LXBXH(mm): E90-160 Air-cooled models - 2745 x 1620 x 2020mm E90-160 Water-cooled models - 2745 x 1620 x 1900mm</b>							
<b>E200-250 Air-cooled &amp; Water-cooled models - 3410 x 1920 x 1900mm</b>							

**Note:** All models 90kW and above are available in air-cooled and water-cooled variants  
 Max. pressure or unload pressure for all models is 1 bar above the working pressure. i.e. For a E90-8, working pressure is 7 bar and max. pressure is 8 bar.  
 Due to continuous engineering improvements, specifications are subject to change without prior notice.

## Air Treatment Accessories



### Refrigeration Air Dryer

Capacity : 1-90 m<sup>3</sup>/min  
 Working pressure : 7 - 13 bar g  
 Dew point : +3 °C PDP



### Airmate Filter

Capacity : 1 - 90 m<sup>3</sup>/min  
 Working pressure : 7- 13 bar g  
 Filtration Range : 1 - 0.003 microns



### Air Receiver

Capacity : 0.3 - 20m<sup>3</sup>  
 Working pressure : 7 - 13 bar g

## Energy Saving Solution

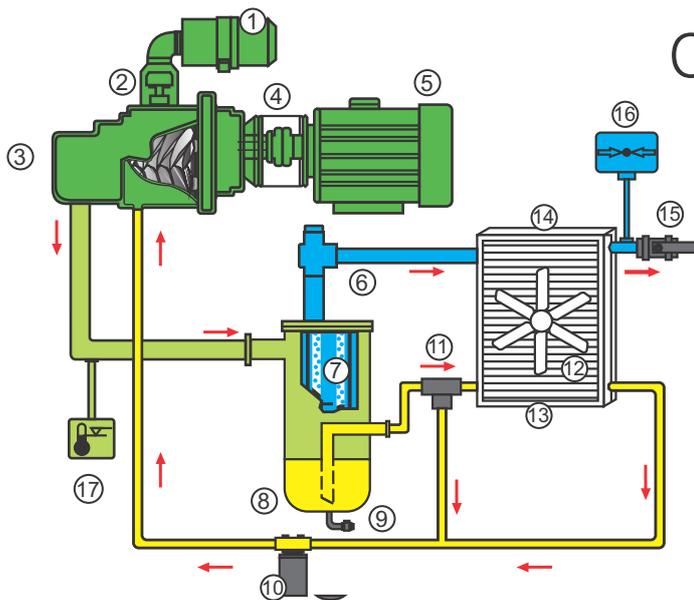
### Variable Frequency Drive

Capacity : 11-250 kW  
 Standalone ready to use package

### Automatic Supply Side Controller

- 2 - 12 compressors integration
- Multi-compressor control upto 12 compressors

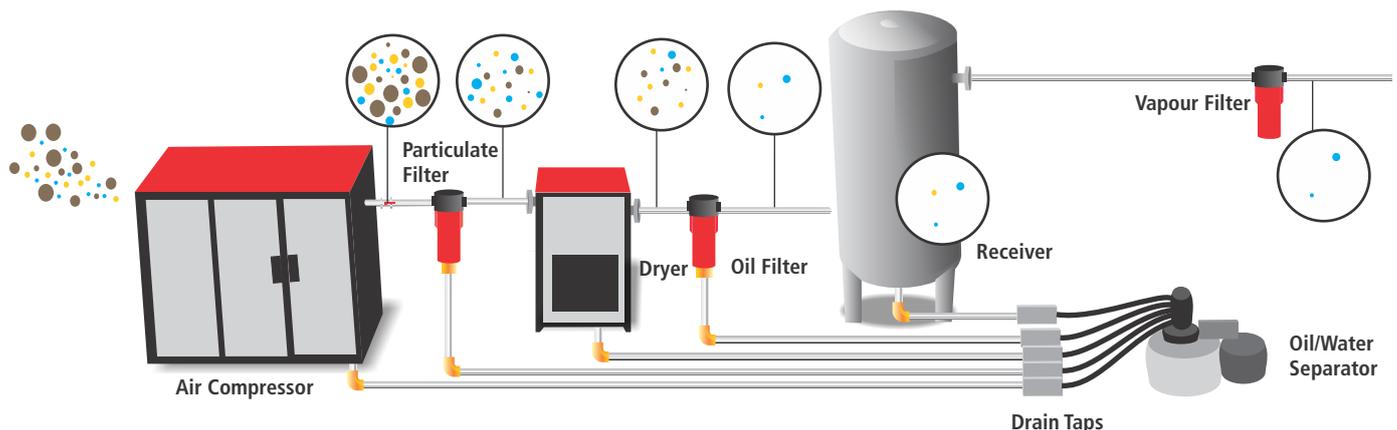
## Compressor Air/Oil Schematic



- |                           |                              |
|---------------------------|------------------------------|
| 1. Air Intake filter      | 12. Fan                      |
| 2. Intake valve           | 13. Oil cooler               |
| 3. Airend                 | 14. After cooler             |
| 4. Drive coupling         | 15. Ball valve-service line  |
| 5. Electric motor         | 16. Pressure transmitter     |
| 6. Minimum pressure valve | 17. Temperature Sensor Probe |
| 7. Separator element      |                              |
| 8. Separator tank         |                              |
| 9. Drain valve            |                              |
| 10. Oil filter            |                              |
| 11. Thermal valve         |                              |

■ Air-oil mixture ■ Oil ■ Air

## Typical Compressed Air Supply system



# global REACH

Elgi serves the world marketplace. Over two million compressors are powering business in 63 countries worldwide. The company offers a strong sales and service network with a well-knit distribution network of more than 250 dealers worldwide. Elgi has its own manufacturing facilities in China, France, India and Italy. Additionally, Elgi has warehouse operations to stock units and parts in Australia, Brazil, UAE and USA.



Distributed by:



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