

OIL FREE. DISRUPTED

YOUR ALWAYS BETTER CHOICE IS HERE

**AB SERIES OIL FREE
SCREW AIR COMPRESSORS**



11 - 110 kW / 0.85 - 15.85 m³/min

OilFREE[™]
CLASS-0 ISO 8573-1

Low Cost of Ownership | Zero Process Contamination | 100% Class Zero Air | Low Carbon Footprint

Air quality on your mind?



With a global presence in more than 120+ countries and over 2 million installations, ELGi has spearheaded compressed air solutions, creating machines that have altered the way industries function. At ELGi, we believe in enhancing customer experience, producing reliable machines that add value and improving manufacturing



capabilities. With the introduction of the AB 'Always better' series oil free screw air compressors, ELGi brings you a disruption in oil free compressed air technology. If air quality is your priority, then AB Series is your solution.



DEMING PRIZE
2019

In the industrial world, compressed air applications are so numerous and diverse that one may come across it every single day. ELGi, one of the world's leading air-compressor manufacturers, who designs and offers an extensive range of innovative and technologically advanced compressed air solutions for a variety of industry

60+	YEARS OF CUSTOMER CENTRIC INNOVATION
2 mn+	INSTALLATIONS WORLDWIDE
120+	COUNTRIES AND COUNTING

ELGi is the first globally established industrial air compressor manufacturer to be awarded the Deming Prize for Excellence in Total Quality Management.

Industries around the world are endeavouring to reduce their carbon footprint and adhere to international compliance norms.

APPLICATIONS



FOOD & BEVERAGES



TEXTILES



PHARMACEUTICALS



ELECTRONICS



METALS



AUTOMOTIVE



OIL & GAS



POWER

Oil Free Compressed Air The new normal!

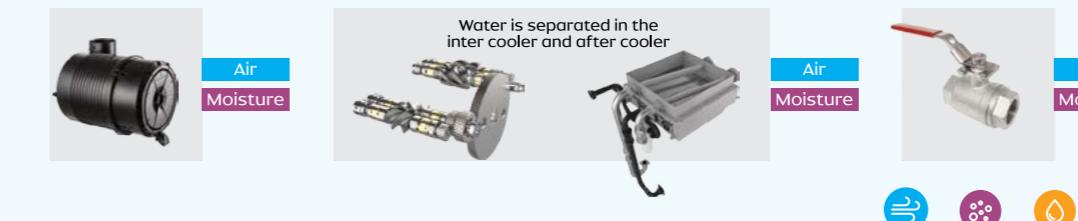
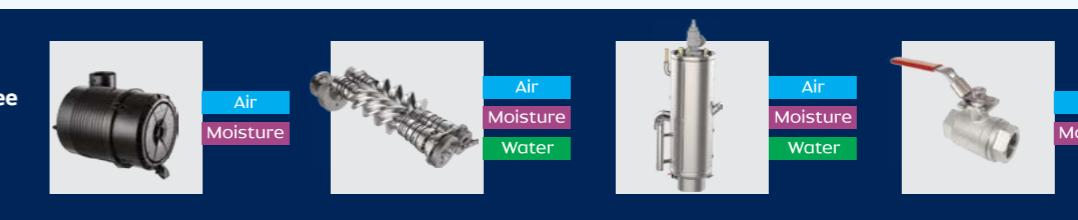
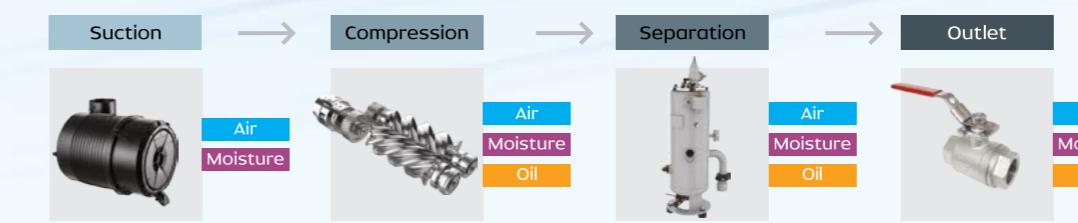
Air quality is critical for sensitive industries ranging from Food and Beverages, Textiles, Pharmaceuticals, Electronics, Oil and Gas, Metals and Power industries, in which stringent compliance norms mandate contaminant free air. With increasing pollution

concerns and stringent environmental regulation, air quality and specifically Oil Free air has become a necessity. Historically companies have suffered the constraints of high cost, poor reliability, and low efficiency in order to have oil free air.



Every year, almost 2 million liters (more than 5 million gallons) of oil is released into the atmosphere. With global climate change and air quality concerns we are witnessing a rise in collaborative international efforts to reduce the concentration of greenhouse gases and critical pollutants.

OIL FREE. DISRUPTED - AB SERIES



Every ELGi AB series customer across the world is assured of zero risk of contamination in the compressed air. Our customers are assured of guaranteed emission reduction while ensuring class zero air, free of oil residue, at all times.

At ELGi, we've re-defined oil free compressor technology and built products that deliver high performance with minimal environmental impact. Today, our oil free compressors support some of the most critical and sensitive applications which demand, not just a high level of air quality, but also zero mineral oil residue. With the ELGi AB 'Always Better' series, we bring you a disruption in oil free compressed air technology.

LOWER LIFE-CYCLE COSTS

A no-compromise, oil free solution at reduced life cycle costs when compared with prevailing oil free technology.

RELIABILITY

Significantly lower maintenance, peace of mind and ease of use.

AIR QUALITY

Class zero certified, contamination free air for sensitive industry applications.

OIL FREE. DISRUPTED

AB 'ALWAYS BETTER' SERIES OIL FREE SCREW AIR COMPRESSORS

ELGi's AB Series compressors deliver 100% oil free air, in compliance with the stringent norms of ISO 8573-1 Class 0 and ISO 8573-7. The result? High quality air, free of microbiological contaminants.

Using an innovative approach to reduce cost and increase efficiency, the ELGi AB series is engineered to deliver maximum uptime and reliability, bridging the gap between energy

efficiency and a low cost of ownership. ELGi's unique rotor design reduces pressure loss, increases stage efficiency, resulting in an optimised compressed air system.

From a design perspective, the AB series is customer centric and reflects our focus on product aesthetics, design and innovation.

The AB series oil free screw compressor incorporates 16 design claims that makes ELGi the 1st in market to introduce this type of compressors with minimum life cycle cost for customers.

BETTER RELIABILITY | LOWER MAINTENANCE COST

LOWER LIFE-CYCLE COST | SIMPLICITY OF DESIGN



Why ELGi AB Series is 'Always Better'



ENERGY SAVINGS

Highly efficient airend

ELGi's airenads are equipped with inhouse developed η -V profile rotors, with 4/5 lobe combination. The rotors are designed to run at optimum speeds.

This unique design reduces pressure losses and increases efficiency. The rotors ensure energy efficient compressed air supply for all demanding applications.

- Precise rotor clearances for best-in-class energy efficiency.
- Low operating speed for long life, low maintenance and low sound level.
- Complies with applicable safety standards.



MOISTURE FREE AIR

99% Water Free

Depending on the humidity level of inlet air, bulk water remains in compressed air at varying levels and cause corrosion of piping, end tools, machinery and valves. AB Series air compressors have a custom-designed centrifugal type moisture separator with an automatic drain.

This comes as a part of the package at no extra cost and removes over 99% of bulk water from the compressed air, resulting in corrosion-free, longer life of end use equipments and less load on the dryer.



EFFICIENT SEPARATION

Efficient air-water separation with WSBIC (3 stages)

ELGi has applied unique WSBIC process (Water separation by Impact and Centrifugal Action) which enables efficient separation of air and water with minimum pressure drop. The method enables separation of water in three stages increasing the life of the separator element.



SAFETY AND PROTECTION

AB series compressors are designed and perfected to ensure highest level of safety for

- Pressure regulating valve
- High pressure
- High temperature
- Pressure relief valve
- Phase order and single phase

Special Features of AB Series



STAINLESS STEEL MATERIAL W/COATING

ELGi machines use **FDA approved** stainless steel with **proprietary coating** which eliminates any chances of corrosion. Other compressors have polymer rotors which has a significantly lower life.



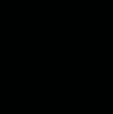
USAGE OF ROLLER BEARINGS

ELGi uses roller bearings and not hydrodynamic bearings. Hydrodynamic bearings require additional water pumping circuit to pressurize these bearings. This increases power consumption in both loaded & unloaded conditions. Roller bearings eliminates these requirements and **reduces power consumption**. They are also a **proven technology** which is widely used and easy to maintain / replace.



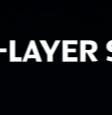
NO RO FILTERS IN THE SYSTEM

Other compressor manufacturers either have an open-loop circuit or auxiliary water circuit for bearings & cooling. To maintain the quality of water these compressors have a RO purifier in the water inlet line. On the other hand, ELGi machines have a **closed loop water circuit** which eliminates the need for a RO system. This **reduces power & maintenance cost** for our customers.



FOOD GRADE APPROVED ANODIZED ALUMINUM HOUSING

ELGi compressors have a **food grade approved** anodized aluminum housing that helps in inhibiting any microbial growth.



3-LAYER SEALING

Compared to conventional dry screw compressors, the Always Better Series compressors have 3 layer sealing for absolute sealing and peace of mind for our customers - gearcase side for oil sealing; air side seal on airends and redundant seals in between. This system offers absolute sealing & peace of mind to customers.



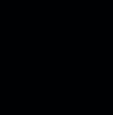
AUTO-WATER REPLENISHMENT

Elgi AB series compressors reuse condensate water to top up water circuit. The level switch in the tank drains excess water. This ensures fresh clean water being auto replenished thereby avoiding the need for any open-loop requirement or water filtration/treatment at water inlet line into the compressor.



IMPROVED DRYER PERFORMANCE

Elgi AB series compressors have low airend discharge temperature and better moisture separation. This results in better Dew Point management with Dryer.



NON-CONTACT TYPE ROTORS

The rotors in the ELGi compressors do not touch ensuring consistent performance across the product life cycle. This creates less noise & vibration.

BENEFITS

How can the all new AB series benefit your business?



REDUCED COST OF OWNERSHIP

Energy cost amounts to approximately 70% of a compressors running cost. AB series compressors offer optimized pressure & volume with reduced load on-air treatment equipment.

LOWER MAINTENANCE COST

The efficient rotors with best in class performance, single-stage operation, low operation speed and application-oriented design, lowers overall maintenance.

KEY HIGHLIGHTS

SUPERIOR AIREND TECHNOLOGY WITH HIGH VOLUMETRIC EFFICIENCY

Low Energy Cost

ROBUST COOLING SYSTEM

Reduced air outlet temperature

ENCLOSURE DESIGNED TO INDUSTRIAL STANDARDS

Silent, Aesthetic, Safety Compliant package

HIGHLY EFFICIENT MOTOR

Energy cost savings

ENVIRONMENT FRIENDLY

The compressed air from the package is absolutely pure with zero oil or any form of contaminant. The condensate from the compressor has clean water without any oil, making it virtually safe for reuse eliminating the need for any filter or Reverse osmosis water separator.

REDUCED RISK OF CONTAMINATION

The FDA has approved ELGI AB compressor series to be contaminant free as it has a proprietary coating combined with FDA approved material and closed-loop self-polishing water circuit. This eliminates any chance of corrosion or contaminant formation making the compressor ideal for applications where any form of oil or contaminants are not allowed.

ADVANCED NEURO N4 CONTROLLER

Remote management of compressor operations

TWO STAGE AIR FILTRATION

Increased life of consumables



Energy Saving - The CONSERVE Way

The In-Built ELGi CONSERVE variable frequency drive (VFD) matches compressor output with demand by varying motor speed. The power consumption reduces in line with the reduction in demand. This helps in eliminating the frequent load-unload cycle and as a result, saves energy.

A fixed speed compressor operates on a load unload band of at least 10 psi / 0.68 bar around the working pressure whereas with ELGi VFD, compressor can be operated within a band of 2 psi / 0.14 bar.

Since the compressor is not operated above higher than working pressure requirements, there is substantial energy saving. For every 2 psi / 0.14 bar reduction in operating pressure, there is 1% power saving.

ADVANTAGES:

ELECTRICAL:

- Low starting current
- High efficiency
- Improved power factor
- Reduced maximum demand

MECHANICAL:

- Minimum maintenance
- Reduced mechanical wear
- Smooth start
- Smooth control



TECHNICAL SPECIFICATIONS

AB SERIES OIL FREE SCREW AIR COMPRESSORS
50Hz Fixed Speed

Model	Nominal Power		Working Pressure		Free Air Delivery		Weight	Noise Level	Dimensions (LxWxH)
50Hz	kW	HP	bar	psi	m³/min	cfm	Kg	db(A)	(mm)
AB 11	11	15	7	100	144	51	1040	72	1985 X 1190 X 1615
	11	15	8	115	1.19	42	1040	72	1985 X 1190 X 1615
	11	15	9	125	1.10	39	1040	72	1985 X 1190 X 1615
	11	15	10	150	0.85	30	1040	72	1985 X 1190 X 1615
AB 15	15	20	7	100	2.38	84	1050	72	1985 X 1190 X 1615
	15	20	8	115	2.10	74	1050	72	1985 X 1190 X 1615
	15	20	9	125	1.93	68	1050	72	1985 X 1190 X 1615
	15	20	10	150	1.59	56	1050	72	1985 X 1190 X 1615
	15	20	12	175	0.96	34	1050	72	1985 X 1190 X 1615
AB 18	18	25	7	100	3.00	106	1125	72	1985 X 1190 X 1615
	18	25	8	115	2.72	96	1125	72	1985 X 1190 X 1615
	18	25	9	125	2.41	85	1125	72	1985 X 1190 X 1615
	18	25	10	150	2.04	72	1125	72	1985 X 1190 X 1615
	18	25	12	175	1.44	51	1125	72	1985 X 1190 X 1615
AB 22	22	30	7	100	3.54	125	1145	72	1985 X 1190 X 1615
	22	30	8	115	3.14	111	1145	72	1985 X 1190 X 1615
	22	30	9	125	2.83	100	1145	72	1985 X 1190 X 1615
	22	30	10	150	2.55	90	1145	72	1985 X 1190 X 1615
	22	30	12	175	1.78	63	1145	72	1985 X 1190 X 1615
AB 30	30	40	7	100	5.10	180	1473	72	2330 X 1241 X 1865
	30	40	8	115	4.64	164	1473	72	2330 X 1241 X 1865
	30	40	9	125	4.10	145	1473	72	2330 X 1241 X 1865
	30	40	10	150	3.82	135	1473	72	2330 X 1241 X 1865
	37	50	7	100	6.12	216	1575	72	2330 X 1241 X 1865
AB 37	37	50	8	115	5.66	200	1575	72	2330 X 1241 X 1865
	37	50	9	125	5.01	177	1575	72	2330 X 1241 X 1865
	37	50	10	150	4.59	162	1575	72	2330 X 1241 X 1865
	37	50	12	175	3.71	131	1575	72	2330 X 1241 X 1865
	45	60	7	100	7.28	257	1586	72	2330 X 1241 X 1865
AB 45	45	60	8	115	6.51	230	1586	72	2330 X 1241 X 1865
	45	60	9	125	5.89	208	1586	72	2330 X 1241 X 1865
	45	60	10	150	5.52	195	1586	72	2330 X 1241 X 1865
	45	60	12	175	4.74	167	1586	72	2330 X 1241 X 1865

Free Air Delivery (FAD) are tested as per ISO 1217 : 2009 - Annex C | FAD indicated is for the full package measured at the outlet | All mentioned packages are air cooled models only. | Weight indicated is approximate and actual can vary | Displayed here is the standard range. For customized packages with different voltages, medium and high voltage motor, pressure variants please contact our nearest sales office |

* Due to continuous improvements, specifications are subject to change without prior notice

Model	Nominal Power		Working Pressure		Free Air Delivery		Weight	Noise Level	Dimensions (LxWxH)
50Hz	kW	HP	bar	psi	m³/min	cfm	Kg	db(A)	(mm)
AB 55	55	75	7	100	9.63	340	2436	75	255 X 1440 X 1932
	55	75	8	115	8.61	304	2436	75	255 X 1440 X 1932
	55	75	9	125	7.65	270	2436	75	255 X 1440 X 1932
	55	75	10	150	7.31	258	2436	75	255 X 1440 X 1932
AB 75	55	75	12	175	5.66	200	2436	75	255 X 1440 X 1932
	75	100	7	100	12.46	440	2675	75	345 X 1440 X 1932
	75	100	8	115	11.33	400	2675	75	345 X 1440 X 1932
	75	100	9	125	10.34	365	2675	75	345 X 1440 X 1932
AB 90	75	100	10	150	9.71	343	2675	75	345 X 1440 X 1932
	75	100	12	175	8.35	295	2675	75	345 X 1440 X 1932
	90	125	7	100	13.73	485	3400	75	345 X 1870 X 1982
	90	125	8	115	12.46	440	3400	75	345 X 1870 X 1982
AB 110	90	125	9	125	11.61	410	3400	75	345 X 1870 X 1982
	90	125	10	150	11.04	390	3400	75	345 X 1870 X 1982
	110	150	7	100	15.86	560	3625	79	345 X 1870 X 1982
	110	150	8	115	14.98	529	3625	79	345 X 1870 X 1982
AB 45	110	150	9	125	13.59	480	3625	79	345 X 1870 X 1982
	110	150	10	150	12.46	440	3625	79	345 X 1870 X 1982

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TECHNICAL SPECIFICATIONS

AB SERIES OIL FREE SCREW AIR COMPRESSORS
50Hz VFD

Model	Nominal Power		Working Pressure		Free Air Delivery		Weight	Noise Level	Dimensions (LxWxH)
50Hz	kW	HP	bar	psi	m³/min	cfm	Kg	db(A)	(mm)
AB 11	11	15	7	100	113-144	40-51	1040	72	1985 X 1190 X 1615
	11	15	8	115	105-119	37-42	1040	72	1985 X 1190 X 1615
AB 15	15	20	7	100	122-2.38	43-84	1070	72	1985 X 1190 X 1615
	15	20	8	115	119-2.10	42-74	1070	72	1985 X 1190 X 1615
AB 15	15	20	9	125	113-1.93	40-68	1070	72	1985 X 1190 X 1615
	15	20	10	150	102-1.59	36-56	1070	72	1985 X 1190 X 1615
AB 18	18	25	7	100	1.22-3.0	43-106	1150	72	1985 X 1190 X 1615
	18	25	8	115	1.19-2.72	42-96	1150	72	1985 X 1190 X 1615
AB 18	18	25	9	125	1.10-2.41	39-85	1150	72	1985 X 1190 X 1615
	18	25	10	150	1.05-2.04	37-72	1150	72	1985 X 1190 X 1615
AB 18	18	25	12	175	0.85-1.44	30-51	1150	72	1985 X 1190 X 1615
	22	30	7	100	1.47-3.54	52-125	1170	72	1985 X 1190 X 1615
AB 22	22	30	8	115	1.19-3.14	42-111	1170	72	1985 X 1190 X 1615
	22	30	9	125	1.10-2.83	39-100	1170	72	1985 X 1190 X 1615
AB 22	22	30	10	150	1.08-2.55	38-90	1170	72	1985 X 1190 X 1615
	22	30	12	175	0.91-1.78	32-63	1170	72	1985 X 1190 X 1615
AB 30	30	40	7	100	2.46-5.10	87-180	1518	72	2330 X 1241 X 1865
	30	40	8	115	2.43-4.64	86-164	1518	72	2330 X 1241 X 1865
AB 30	30	40	9	125	2.26-4.11	80-145	1518	72	2330 X 1241 X 1865
	30	40	10	150	2.21-3.82	78-135	1518	72	2330 X 1241 X 1865
AB 37	37	50	7	100	2.55-6.12	90-216	1620	72	2330 X 1241 X 1865
	37	50	8	115	2.44-5.66	86-200	1620	72	2330 X 1241 X 1865
AB 37	37	50	9	125	2.27-5.01	80-177	1620	72	2330 X 1241 X 1865
	37	50	10	150	2.21-4.59	78-162	1620	72	2330 X 1241 X 1865
AB 37	37	50	12	175	2.10-3.71	74-131	1620	72	2330 X 1241 X 1865
	45	60	7	100	3.31-7.28	117-257	1631	72	2330 X 1241 X 1865
AB 45	45	60	8	115	2.97-6.51	105-230	1631	72	2330 X 1241 X 1865
	45	60	9	125	2.49-5.89	88-208	1631	72	2330 X 1241 X 1865
AB 45	45	60	10	150	2.27-5.52	80-195	1631	72	2330 X 1241 X 1865
	45	60	12	175	2.04-4.74	72-167	1631	72	2330 X 1241 X 1865

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TECHNICAL SPECIFICATIONS

AB SERIES OIL FREE SCREW AIR COMPRESSORS
50Hz VFD

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50Hz	kW	HP	bar	psi	m³/min	cfm	Kg	db(A)	(mm)
AB 55	55	75	7	100	5.24-9.63	185-340	2481	75	2555 X 160 X 1932
	55	75	8	115	5.15-8.61	182-304	2481	75	2555 X 160 X 1932
AB 75	55	75	9	125	5.04-7.65	178-270	2481	75	2555 X 160 X 1932
	55	75	10	150	4.87-7.31	172-258	2481	75	2555 X 160 X 1932
AB 75	55	75	12	175	4.56-5.66	161-200	2481	75	2555 X 160 X 1932
	75	100	7	100	6.99-12.46	247-440	2720	75	2555 X 160 X 1932
AB 75	75	100	8	115	7.13-11.33	252-400	2720	75	2555 X 160 X 1932
	75	100	9	125	6.59-10.34	233-365	2720	75	2555 X 160 X 1932
AB 90	75	100	10	150	6.25-9.71	221-343	2720	75	2555 X 160 X 1932
	75	100	12	175	4.87-8.35	172-295	2720	75	2555 X 160 X 1932
AB 90	90	125	7	100	6.63-13.73	234-485	3498	75	3045 X 180 X 1982
	90	125	8	115	5.75-12.46	203-440	3498	75	3045 X 180 X 1982
AB 90	90	125	9	125	5.21-11.61	184-410	3498	75	3045 X 180 X 1982
	90	125	10	150	4.98-11.04	176-390	3498	75	3045 X 180 X 1982
AB 110	110	150	7	100	7.53-15.86	366-560	3723	79	3045 X 180 X 1982
	110	150	8	115	6.85-14.87	242-525	3723	79	3045 X 180 X 1982
AB 110	110	150	9	125	6.12-13.59	216-480	3723	79	3045 X 180 X 1982
	110	150	10	150	5.41-12.46	191-440	3723	79	3045 X 180 X 1982

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**CII AWARD**

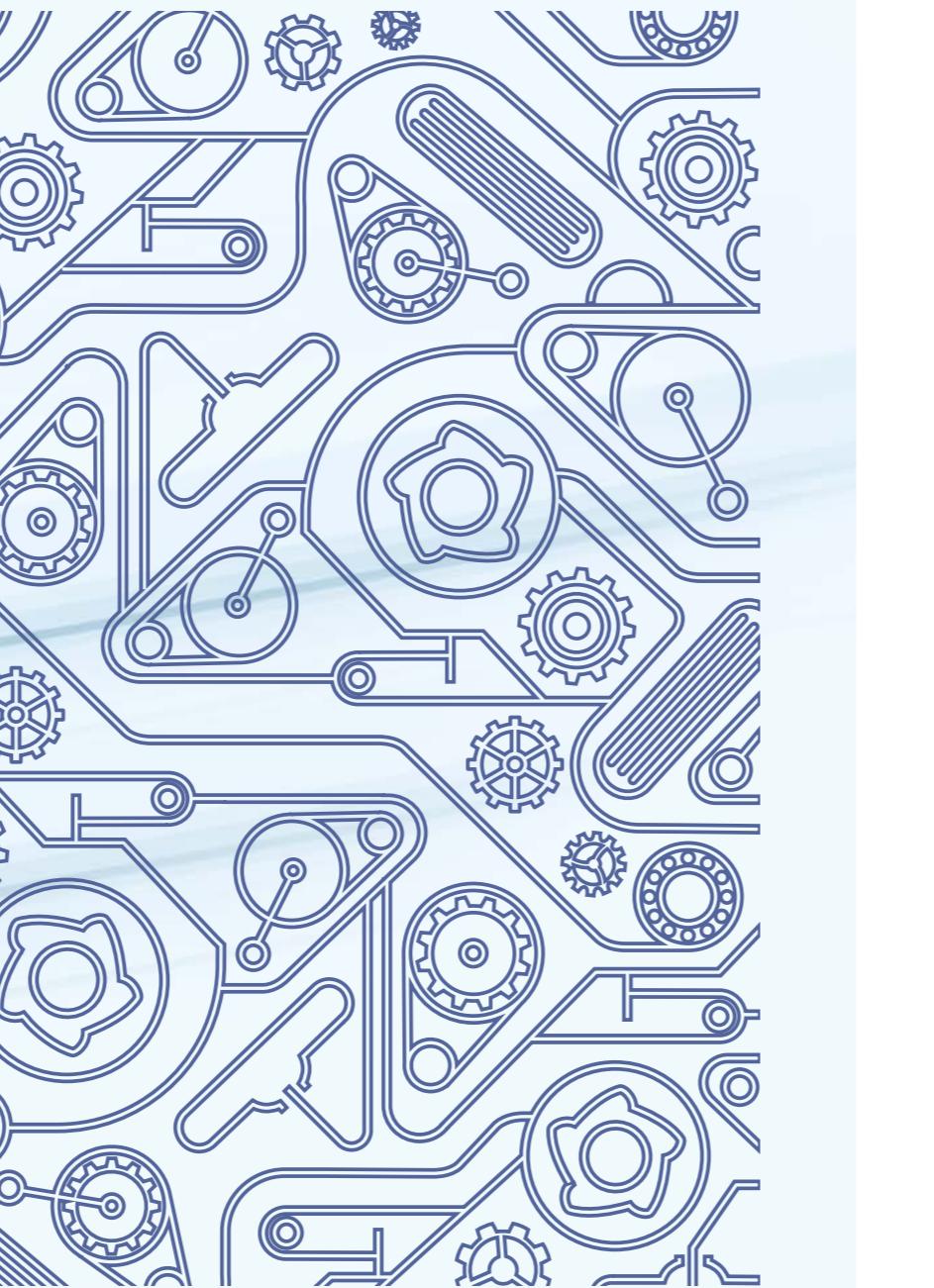
The ELGi AB 'Always Better' series, won the CII Design Excellence Award in the Industrial Design, capital goods category, earlier this year. The CII Design Excellence Awards, endorsed by the India Design Council, acknowledge and celebrate design and innovation in India, while aiming to create new paradigms of design and promoting a unique amalgamation of traditional and contemporary design. The award was granted based on innovation, originality, distinctiveness, use of new materials & technology & user friendliness.

DEMING QUALITY AWARD

JUSE in Japan recognizes organizations that follow principles of total quality management in driving organization culture & business results. ELGi is now the first globally established industrial air compressor manufacturer to be awarded the Deming prize for excellence in Total Quality Management.

CAGI MEMBERSHIP

ELGi is a member of the CAGI which is the united voice of the compressed air industry, serving as the unbiased authority on technical, educational, promotional and other matters that affect the industry. Members comply with norms of performance testing & publishing.





ELGi®
Always Better.