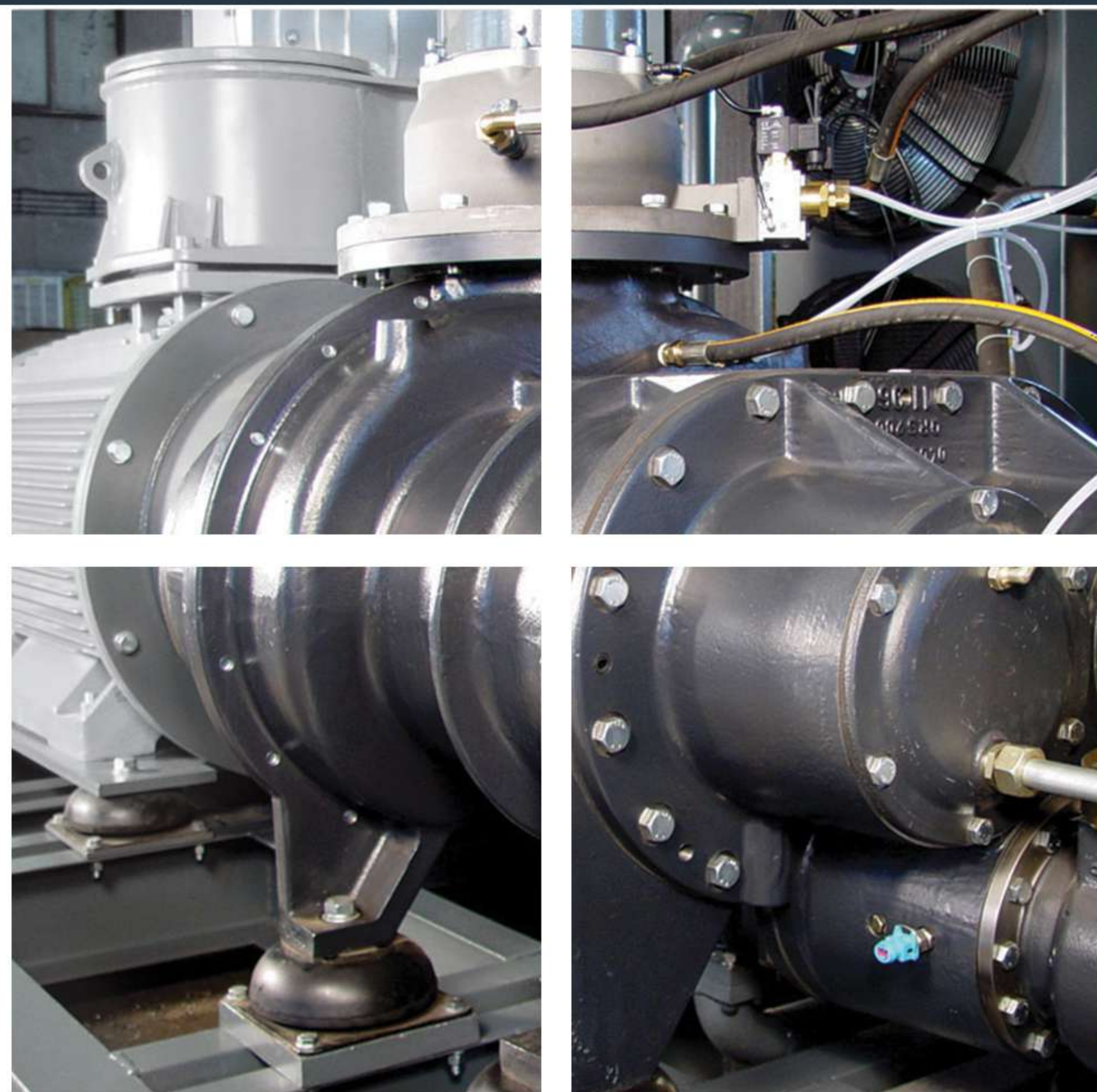
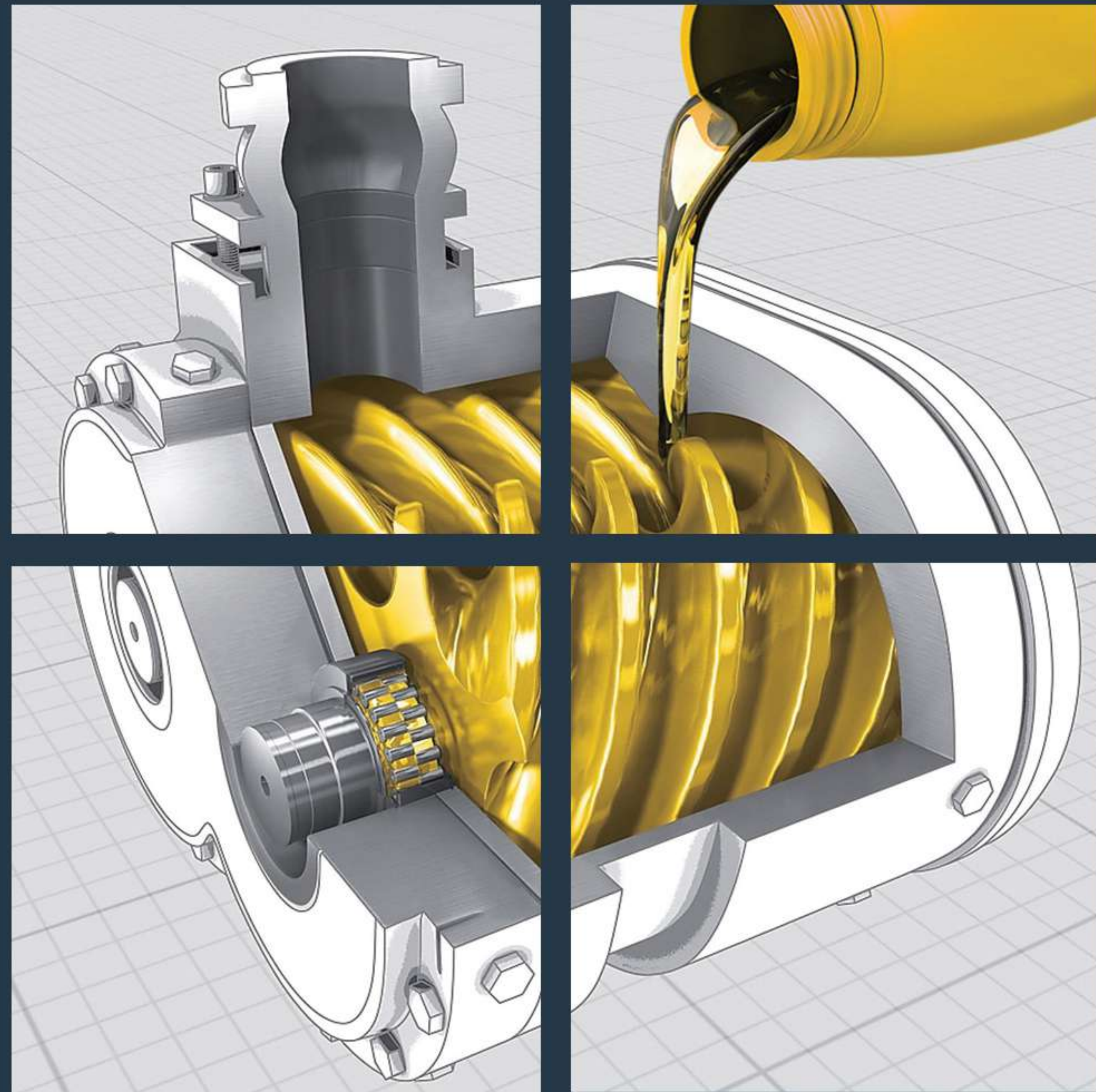


Oil-Injected Screw Air Compressors

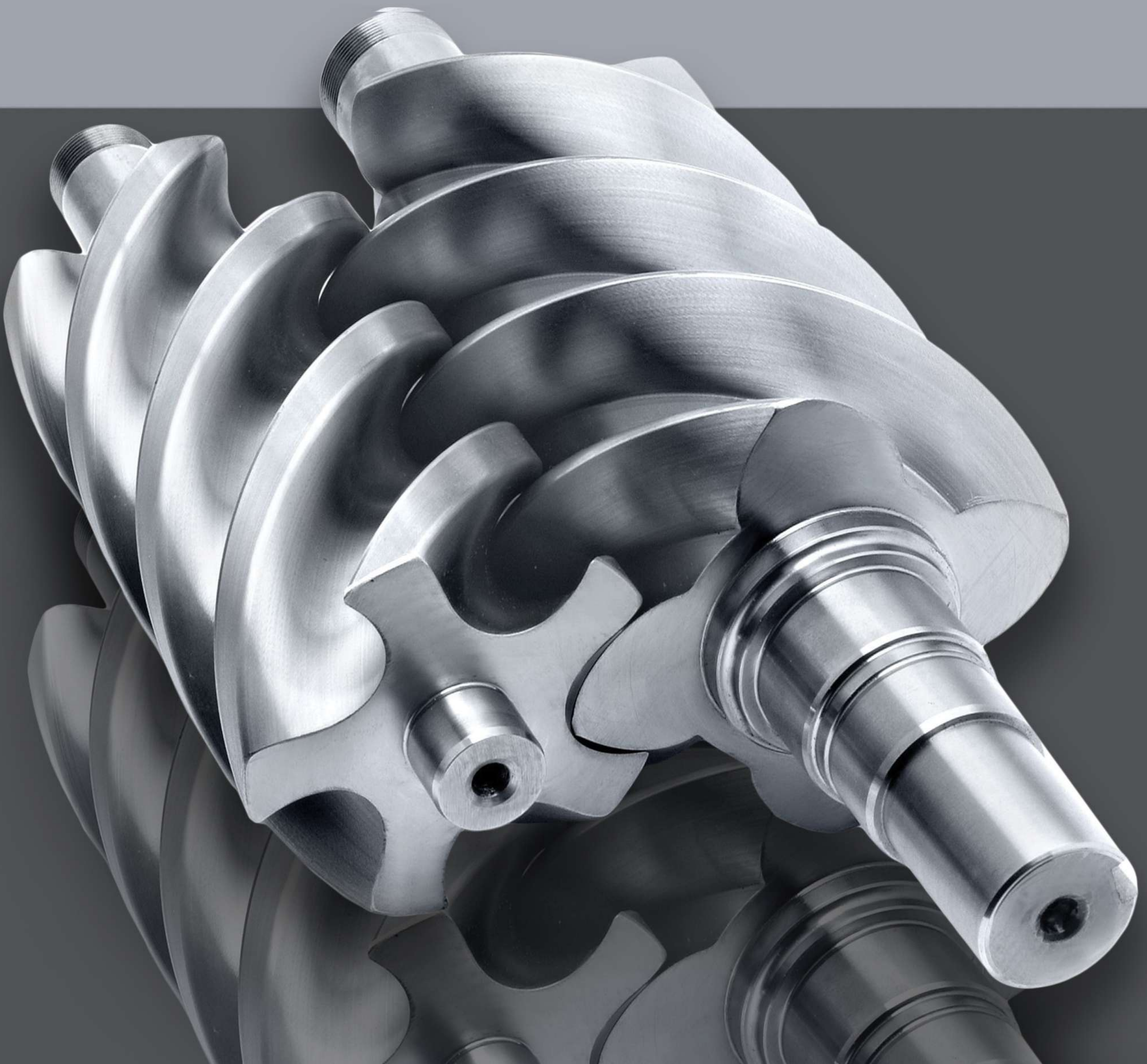
15-500 kW



Oil-Flooded Screw

High achievement always takes place in the framework of high expectation

Oil-free air compressors are not necessarily “better” than oil-injected compressors. The compressor you choose depends on your specific application requirements and the air quality that you need to achieve!



Welcome to HATCO

HATCO is a company specialized in planning, engineering, design and customization solutions for air compression and separation plants including all exclusive project's services.



Since 1997, year of its foundation, HATCO brand stands for quality, reliability, innovation and specifically in harsh circumstances, heavy industries and air separation plants. Thousands of compression packages operating across the country prove our reliability even though they are for heavy industries and air separation plants.

Our mission is to make air compression and separation plants technologically and ecologically advanced for all the most modern industries and service companies.

Our aim is to promote a constant improvement on products we manufacture and develop, enhancing the quality of life simultaneously.

Our wealth of knowledge combined with the continuous dedication to research and experimentation allows us to constantly improve our products and develop innovative and tailor made solutions



**No matter how hard is your business,
our compressors will handle it.**

Top industries for Oil-Injected Air Compressors

For most of industries and workshops, oil injected screw air compressors are economical and the best solution. From the most sensitives to the roughest situations.

Following are several examples:

- General Manufacturing
- Steel Making & Metal Fabrication
- Cement Plant Industries
- Power Tools & Assembly Lines
- Plastic, Silicon & Rubber Manufacturing
- Mining; Stone, Clay, Glass, etc.



Oil-Injected Air Compressors

Facts and Figures;

Air purity is critical for many applications where even the tiniest drop of oil, or air contaminated with oil can cause product spoilage, product recall or damage production equipment. Your specific application will determine which type of air compressor is best for you to use in your facility. In instances where the threat and consequences of oil contamination are too high, like medical procedures, having an oil-free air compressor is a must.

In applications where the consequences of oil contamination are not as great, such as general manufacturing and in industrial and small workshops, oil-injected air compressors are used. Overall, for a heavy industry with hard daily use, an oil flooded compressor is your best bet. For businesses where oil sensitivity is a challenge or use might be more intermittent, oil free could be the way to go.

Screw Compressors are commonly used in a variety of air, process gas, process refrigeration and natural gas applications, including individual wellhead boosters, Low pressure gathering systems, Low stage boosters to existing reciprocating machines, solutions gas and flare gas compression.



Oil injection screw compressor



Oil free screw compressor

We have the solution!

Today we're able to supply air compressor packages in a wide range of alternative executions, based on centrifugal technology, oil-injected and oil-free rotary screw compressors. As independent packager, HATCO, chooses the best available model and size of compressor using the product range of international well-known manufacturers such as GHH RAND, aerzen, etc.



Key features:

Our competence comes from experience and our exclusive products come from flexibility, commitment and research to provide, finally, the right solution for our customer's needs.

All units are able to compliance with dangerous or exclusive environmental condition according to customers factory requirements and international standards such as ATEX, CE, ASME, API 619 and etc.

Advantages:

- Designed for customers' requirements
- Ease of operation and maintenance
- High level of operational safety
- Low operating and maintenance costs
- Low vibration and noise operation
- No special foundation needed
- Higher efficiency
- Lower CAPEX and OPEX



Characterized of main parts:

▷ Motors and Drives:

Our compressor can be driven either by LV, MV electrical motors. The electric motors used can vary from IE1 to IE4 efficiency class, with F/B insulation/over-temperature class. Motor starters can be DOL, Soft starter, Delta/star, VSD

Compressor's electrical panels ensures the perfect start by customizing power supply equipment for an extensive range of requirements.

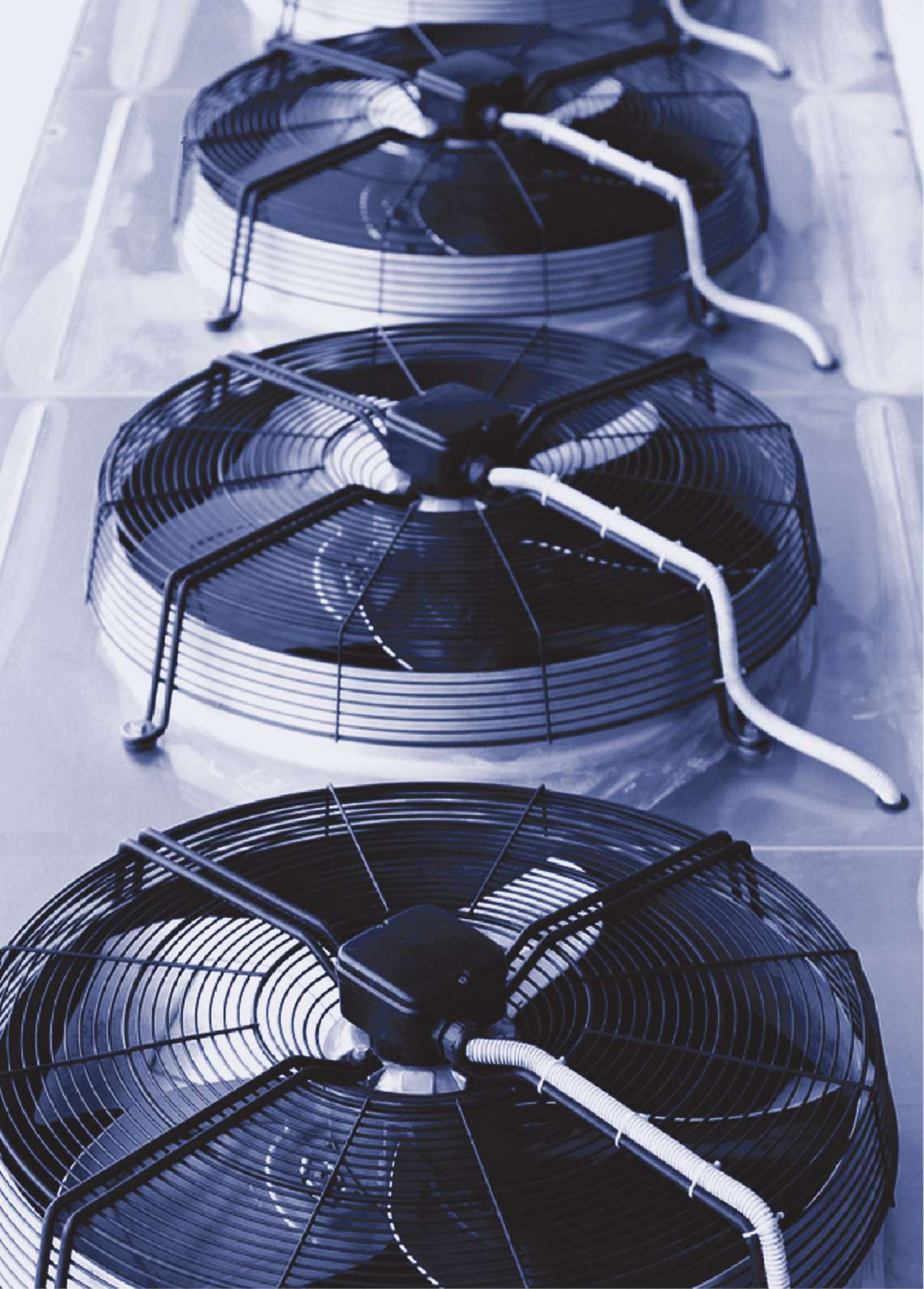
The power units can be fed via several supply panels from frequency converters, soft starter to Star/Delta or DOL (Direct on Line) relay installed internally or externally With performance range from 110 kW to 500 kW.

* Lower range is available on request.

▷ Air End:

- First-class industry quality from leading suppliers
- Wide performance range for a wide variety of applications
- Configurable for higher pressure ranges or admission pressure operation
- Optimal efficiency through proper lubrication, cooling and rotor/housing sealing
- Compact size and low weight for easy installation
- Designed for frequency inverter operation
- Contact-free rotors, no timing gears





► Cooling System:

- Available in varieties of specified Air cooled/ Water cooled types
- Compact and efficient design with low air approach temperature and low pressure drop
- High performance ventilation electro fans
- Separate oversized oil cooler and after cooler
- Low element outlet temperatures, ensuring long oil lifetime
- Not consumables
- Eliminates possibility of thermal shocks in coolers.

Options:

- We can realize both air or water cooling systems according to API, ASME or the other customer's requirements.
- Open or closed water cooling circuits are available. if requested we can provide also water chillers.
- Removal of nearly 99% condensate by mechanical separator.

► Minimum Pressure Valve:

The minimum pressure valve will prevent a portion of a pressure system from dropping below a set minimum pressure. Initially, as inlet pressure builds, the valve will open at a preset opening pressure allowing pressure to build throughout the system. When pressure at the outlet is reduced enough, the valve closes to maintain pressure at the inlet. An independent check valve prevents back flow.

In a rotary screw air compressor, the minimum pressure valve maintains a minimum pressure in the air-oil separator. At start-up, the valve is closed to build initial pressure. At normal operating pressures, the valve is full open for minimal pressure loss. In addition, this valve has a independent poppet type check valve to prevent back flow at shut down.



▶ Minimum Pressure Valve:

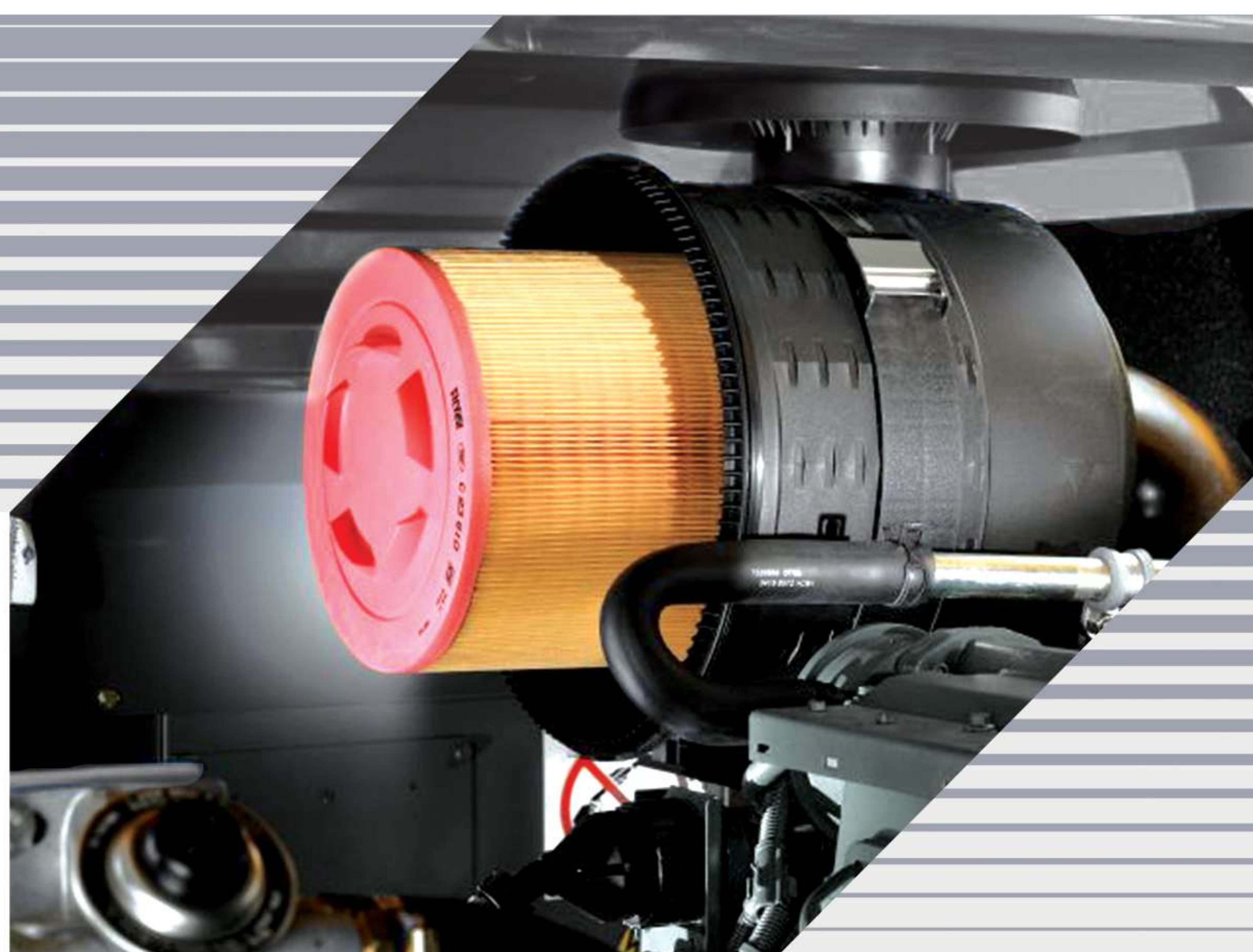
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In a rotary screw air compressor, the minimum pressure valve maintains a minimum pressure in the air-oil separator. At start-up, the valve is closed to build initial pressure. At normal operating pressures, the valve is full open for minimal pressure loss. In addition, this valve has a independent poppet type check valve to prevent back flow at shut down.



▶ Intake Filter:

- Heavy duty built-in dust collector type
- Easily replaceable
- The elements are machine mounted inside the enclosure at the suction point
- Element efficiency as per SAE J726 is available (Optional)
- System can be equipped with differential pressure alarm on the control panel (Optional)



▷ Air-Oil Separator

The standard conventional oil separator is the original design for the removal of oil mixtures $\leq 3-5$ ppm from the compressed air process. We can offer the best solutions if you want to reduce the amount of oil to achieve the highest compressed air quality via using best Oil Separator and filters

▷ Oil Filter:

Rely on us to protect your compressor, with the right oil filter in highest quality, saving money and avoiding expensive repairs.

▷ Lube Oil:

With HATCO original rotary lube oils, a suitable solution for all operating conditions is in hand. A high temperature stability and resistance to oxidation, a consistent viscosity/temperature behavior /and an excellent low temperature pour ability, ensure full lubrication at all stages of operation and thus extend the life span of the compressors.

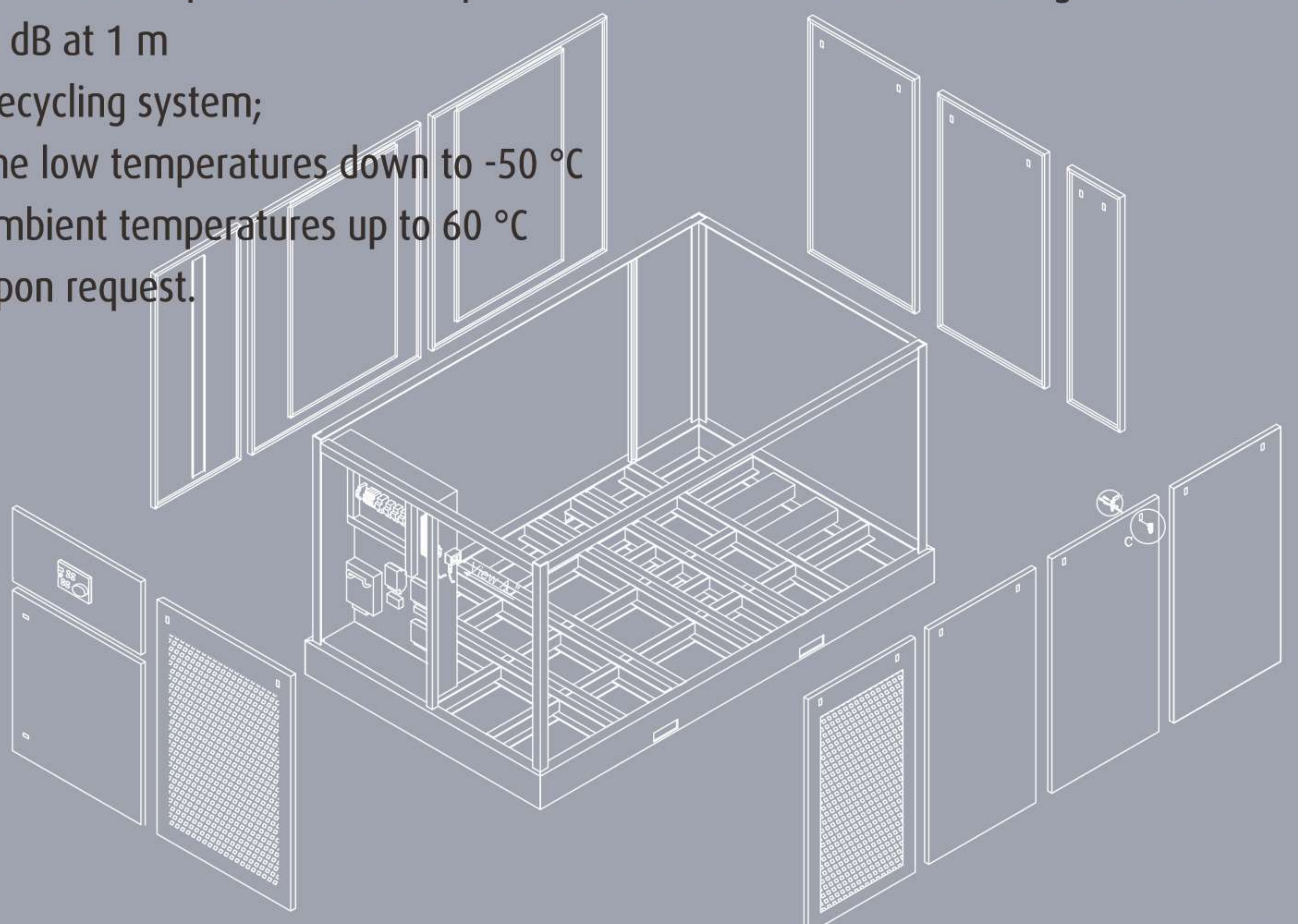


▷ Enclosure:

- Light Sound proof version suitable for indoor installation; Standard enclosures provide optimum air circulation and ventilation.

Options:

- Especial enclosures, suitable for installation; Super silenced enclosures are available on request with soundproof and increased sound adsorbing material with a noise level from 70 dB to 80 dB at 1 m
- Adjustable louvres and warm air recycling system;
- Winterization enclosure for extreme low temperatures down to -50 °C
- Tropicalization for extreme high ambient temperatures up to 60 °C
- Containerized solution available upon request.



► Plant Control:

Compressors are equipped with local controller. All controllers are factory standard (Logika Control) or upon project requirement, e.g. Air Controller AC3 or PLC. Data indications on DCS and controlling the plant's parameters remotely is available upon the request.



Unit Control Panel based on PLC:

Interface of PLC with operator is granted by a touch screen monitor, which displays the working conditions of the machine and the triggering of any alarm and shutdown. The Control System is capable of processing all signals in real time as well as the functioning parameters by means of transducers fitted inside the Package and in combination with the VSD, if present.

Instrumentation:

HATCO offers a full range of instrumentation in different versions and different applications with well-known instrumentation brands in order to exceeding the expectations.

As an extra option, all instruments can be customized according to each project specifications.

It is noteworthy to mention that our technical team are available to provide optimal consultation on your projects.



The control system makes possible to:

- Control, monitoring and sending data of the compressor working conditions to DCS.
- Connecting via Profibus protocol and adjusting the programmed working conditions remotely and locally.

PLC Functions;

- Process control
- Collects inputs (digital, analog)
- Runs the process control
 - Basic logic functions
 - Complex algorithms (PID...)
 - Safety functions
- Produces actions (outputs)
- Provides data to the supervision layer

Strength;

- Reliable. Used for safety systems
- Robust, Resistant to electrical noise, vibration, impact, dust and heat
- Extensive range of inputs/outputs and functionalities
- Various and perfect control method
- Smart and sophisticated panel
- 7-9 inch Clear color LCD display (HMI)
- Touch panel, easy operation
- Operating status and alarms displayed
- PROFIBUS (Standard)
- MODBUS RTU (Option)

Types of oil injection screw compressors

HAV series (Variable Speed Drive)

The shortest route to superior productivity is to minimize operational cost while maintaining an uninterrupted supply the exact required flow ratet.

Over 80% of a compressor’s lifecycle cost is taken up by the energy it consumes. Moreover, the generation of compressed air can account for more than 40% of a plant’s total electricity bill.

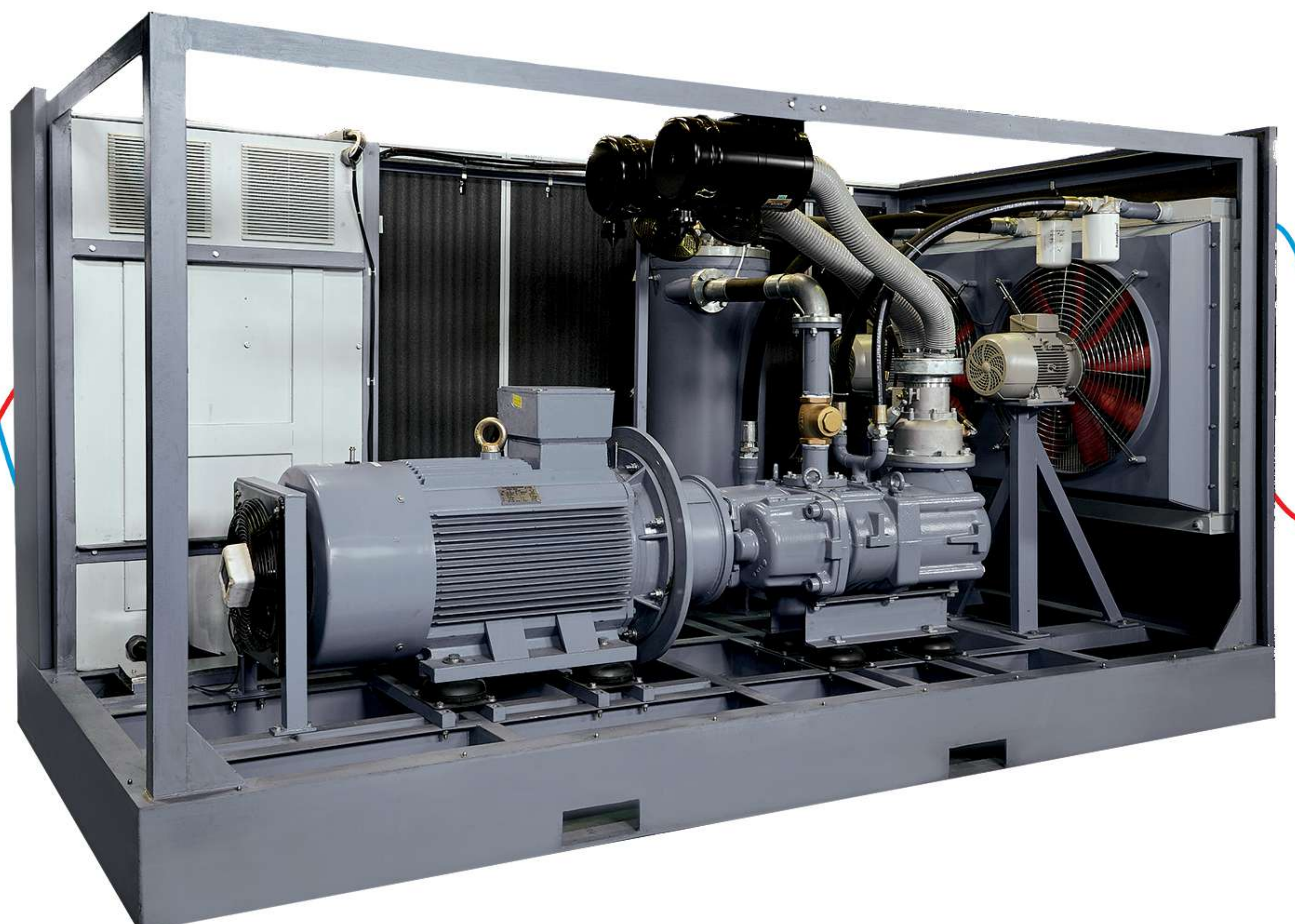
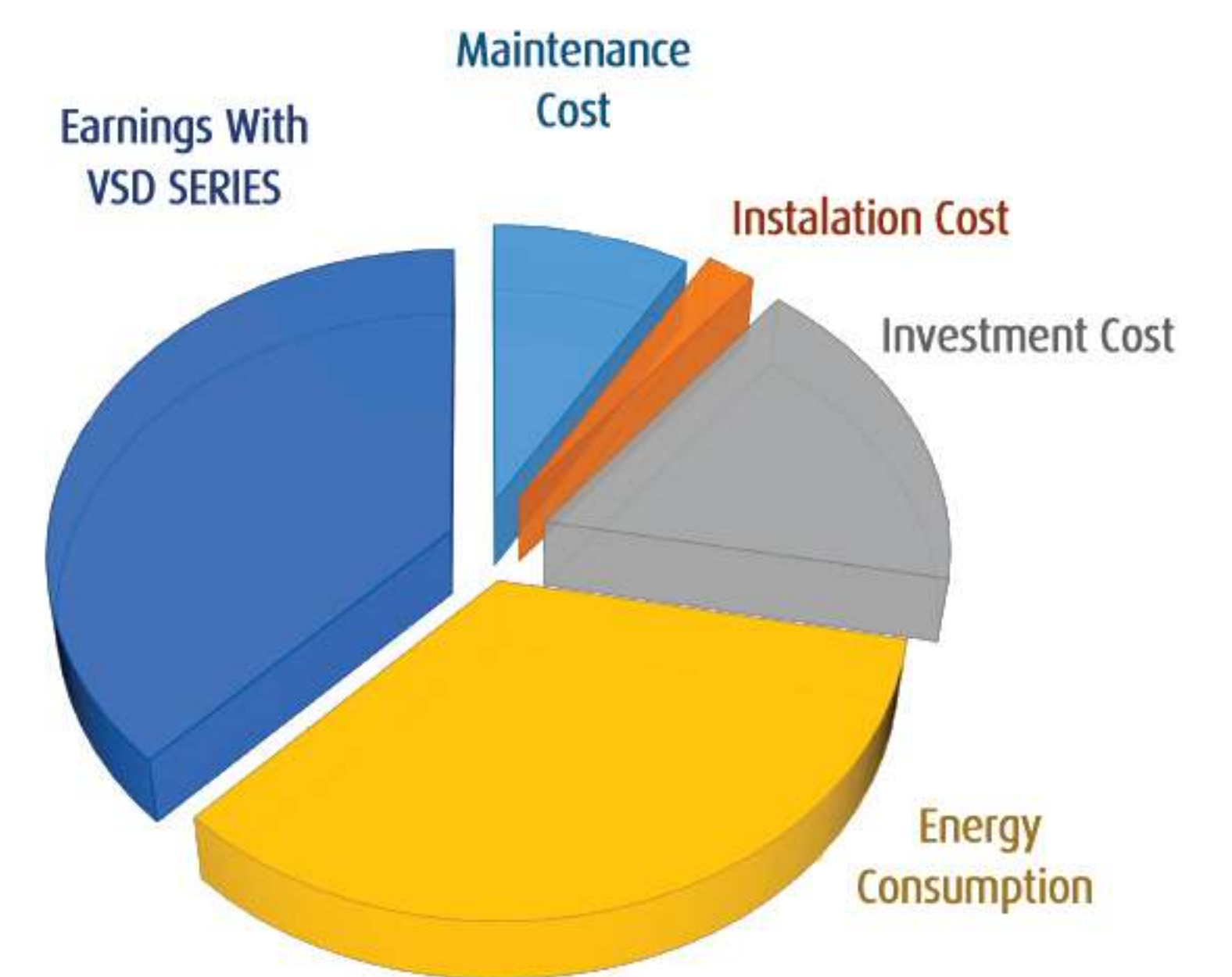
To cut your energy costs, HATCO is also developed Variable Speed Drive technology in the compressed air industry and marketing.

Model	Max Working Pressure		Flow Rate		Motor Power		Sound Level	Connection	Dimension			Weight
	barg	psig	m ³ /min	cfm	kw	hp	dB (A)	Inch / DN	L	W	H	kg
HAV 50	4.5 - 13	65 - 190	4.5 - 7.4	160 - 261	37	50	82	1-1/4 / (32)	1400	950	2020	1080
HAV 60	4.5 - 13	65 - 190	5.5 - 8.7	195 - 306	45	60	70	1-1/2 / (40)	1600	1150	2300	1380
HAV 75	4.5 - 13	65 - 190	6.6 - 8.7	235 - 306	55	75	70	1-1/2 / (40)	1600	1150	2300	1580
HAV 100	4.5 - 13	65 - 190	9.7 - 15.6	343 - 551	75	100	72	2 / (50)	2600	1500	2100	2200
HAV 125	4.5 - 13	65 - 190	11.4 - 17.4	404 - 615	90	125	74	2 / (50)	2600	1500	2100	2680
HAV 150	4.5 - 13	65 - 190	13.5 - 17.4	479 - 615	110	150	75	2 / (50)	2000	1500	2100	2840
HAV 180	4.5 - 13	65 - 190	16.4 - 27.3	580 - 968	132	180	78	3 / (80)	3000	1700	2100	3280
HAV 220	4.5 - 13	65 - 190	19.6 - 27.3	695 - 968	160	220	78	3 / (80)	3000	1700	2100	3585
HAV 270	4.5 - 13	65 - 190	24.8 - 44.4	879 - 1570	200	270	78	3 / (80)	3500	2080	2100	4595
HAV 340	4.5 - 13	65 - 190	31.6 - 53.1	1117 - 1879	250	340	78	4 / (100)	4100	2080	2200	5995
HAV 400	4.5 - 13	65 - 190	39.8 - 54.5	1410 - 1930	315	400	80	4 / (100)	4100	2450	2200	6700
HAV 450	4.5 - 13	65 - 190	44.7 - 54.5	1581 - 1930	355	450	78	6 / (150)	4100	2450	2200	7160
HAV 500	4.5 - 13	65 - 190	50.5 - 71.5	1788 - 2531	400	500	82	6 / (150)	4100	2450	2200	8000
HAV 600	4.5 - 13	65 - 190	56 - 71.5	1982 - 2581	450	600	82	6 / (150)	4100	2450	2200	8000

Energy savings up to 35%

The initial investment offsets the cost.

HATCO's VSD technology closely follows the air demand by automatically adjusting the motor speed. This results in large energy savings of up to 35%. The Life Cycle Cost of a compressor can be cut by an average of 22%. In addition, lowered system pressure with VSD minimizes energy use across the production dramatically.



The initial investment offsets the cost

HAD series provide a wide range of capacity from small to large. This type is equipped with an electro motor nominal speed up to 3000 rpm and the power is transmitted to the air end via a direct coupling.

Model	Max Working Pressure		Flow Rate		Motor Power		Sound Level	Connection	Dimension			Weight
	barg	psig	m ³ /min	cfm	kw	hp	dB (A)	Inch / DN	L	W	H	Kg
HAD 20	13	190	1.5	54	15	20	82	3/4 / (20)	1200	1100	1350	600
HAD 21	7.5	110	2.8	97	15	20	82	3/4 / (20)	1200	1100	1350	600
HAD 25	10	146	2.7	96	18.5	25	82	3/4 / (20)	1200	1100	1350	750
HAD 30	7.5	110	3.3	118	22	30	82	3/4 / (20)	1400	950	2020	1050
HAD 31	13	190	2.6	93	22	30	82	3/4 / (20)	1400	950	2020	1050
HAD 40	13	190	3.2	114	30	40	82	1-1/4 / (32)	1400	950	2020	1050
HAD 41	7.5	110	5.4	193	30	40	82	1-1/4 / (32)	1400	950	2020	1050
HAD 50	11	161	5.2	183	37	50	82	1-1/4 / (32)	1400	950	2020	1080
HAD 60	7.5	110	6.7	238	45	60	70	1-1/2 / (40)	1600	1150	2300	1350
HAD 61	13	190	5.3	189	45	60	70	1-1/2 / (40)	1600	1150	2300	1350
HAD 75	13	190	6.5	231	55	75	70	1-1/2 / (40)	1600	1150	2300	1550
HAD 100	10	145	11.1	392	75	100	72	2 / (50)	2600	1500	2100	2140
HAD 125	13	190	10.9	387	90	125	74	2 / (50)	2600	1500	2100	2610
HAD 180	8	117	22.4	793	132	180	78	3 / (80)	3000	1700	2100	3250
HAD 220	11	161	22.1	781	160	220	78	3 / (80)	3000	1700	2100	3550
HAD 270	13	190	21.9	773	200	270	78	3 / (80)	3500	2080	2100	4550
HAD 340	8	117	44.1	1563	250	340	78	4 / (100)	4100	2080	2200	5950
HAD 400	7.5	110	47.8	1691	315	400	80	4 / (100)	4100	2450	2200	6600
HAD 401	11	161	43.5	1540	315	400	80	4 / (100)	4100	2450	2200	6700
HAD 450	13	190	43.1	1525	355	450	80	6 / (150)	4100	2450	2200	7100
HAD 600	8	117	70.5	2497	450	600	82	6 / (150)	4100	2450	2200	8000

HAS series (Direct Drive-Low Speed)

HAS series provide an applicable range of capacity from small to large. This products are equipped with a low speed electro motor which does not exceed 1500 rpm. This arrangement provides more reliable operation over a long period even in a harsh environment. Lower levels of the noise and vibration are outstanding characteristics of these machines.

Model	Max Working Pressure		Flow Rate		Motor Power		Sound Level	Connection	Dimension			Weight
	barg	psig	m ³ /min	cfm	kw	hp	dB (A)	Inch / DN	L	W	H	Kg
HAS 50	11	161	5.2	183	37	50	82	1-1/4 / (32)	1400	950	2020	1080
HAS 60	13	190	5.1	180	45	60	70	1-1/2 / (40)	1600	1150	2300	1400
HAS 100	11	161	10.1	359	75	100	72	2 / (50)	2600	1500	2100	2140
HAS 125	13	190	10.0	345	90	125	76	2 / (50)	2600	1500	2100	2850
HAS 180	8	117	20.8	735	132	180	76	3 / (80)	3000	1700	2100	3250
HAS 220	10	145	23.8	843	160	220	78	3 / (80)	3000	1700	2100	3550
HAS 221	12	175	20.1	712	160	220	78	3 / (80)	3000	1700	2100	3550
HAS 270	7	102	35.7	1264	200	270	78	3 / (80)	3500	2080	2100	4750
HAS 271	14	204	22.6	801	200	270	76	3 / (80)	3500	2080	2100	4550
HAS 272	13	190	20.0	707	200	270	76	3 / (80)	3500	2080	2100	4600
HAS 340	10	146	34.7	1227	250	340	76	4 / (100)	4100	2080	2200	5950
HAS 400	14	204	33.2	1174	315	400	78	6 / (150)	4100	2450	2200	6700

All above data measured and stated in accordance with ISO 1217, (Suction condition: 1barA & 20°C & 0%R.H)

* These models are available in case of defining in special projects.

HAG series (Gear Drive)

HAG series provide a dynamic capacity in specified range through of an integrated gearbox. This arrangement provides higher performances at the air end while the motor performance running in normal condition. So, increasing the machine performance in avoidance the energy consumption is the way With this series, different FAD will be achieved by the same machine without any drive for fixed consumption.

Model	Max Working Pressure		Flow Rate		Motor Power		Sound Level dB (A)	Connection Inch / DN	Dimension			Weight Kg
	barg	psig	m ³ /min	cfm	kw	hp			L	W	H	
HAG 125	7.5 - 13	110 - 190	10.6 - 16.5	374 - 584	90	125	76	2 / (50)	2600	1500	2100	2960
HAG 150	7.5 - 13	110 - 190	13.1 - 19.7	461 - 696	110	150	77	2 / (50)	2600	1700	2100	2800
HAG 180	7.5 - 13	110 - 190	15.9 - 22.1	564 - 783	132	180	80	3 / (80)	3000	1700	2100	3550
HAG 220	7.5 - 13	110 - 190	19.1 - 27.6	676 - 975	160	220	80	3 / (80)	3000	1700	2100	3550
HAG 270	7.5 - 13	110 - 190	22.6 - 36.3	799 - 1286	200	270	80	3 / (80)	3500	2080	2100	4850
HAG 340	7.5 - 13	110 - 190	29.3 - 43.7	1037 - 1546	250	340	79	4 / (100)	4100	2080	2200	5950
HAG 400	7.5 - 13	110 - 190	37.5 - 44.1	1326 - 1560	315	400	80	4 / (100)	4100	2450	2200	6600
HAG 450	7.5 - 13	110 - 190	42 - 61	1787 - 2159	355	450	80	6 / (150)	4100	2450	2200	7100
HAG 500	7.5 - 13	110 - 190	47 - 66	1664 - 2334	400	500	84	6 / (150)	4100	2450	2200	8000
HAG 600	7.5 - 13	110 - 190	52 - 62	1841 - 2195	450	600	86	6 / (150)	4100	2450	2200	8000
HAG 700	7.5 - 13	110 - 190	56 - 64	1982 - 2266	500	700	85	6 / (150)	4100	2450	2200	8000



Sales engineering solutions:

From small point of use plants to large, custom engineered compressed air for the most demanding industrial applications, let's let our specialist assist in meeting your requirements.

We have the capabilities to customize products for even the most unique applications.

Our engineering team will assist in the custom design, engineering and build of your compressed air equipment to fit your applications to exact specifications for superior performance and energy savings.

Customization options;

- Hazardous area classification
- Special metallurgy for components
- Customized Coolers and Fans
- Weather protection
- Global Standards compliances (e.g. API Codes)



If you want to extend how long your compressor will last, good maintenance is your best friend.

Services:

Our Commitment:

Our mission is simple; to flourish by helping our customers to achieve their business goals.

HATCO has been building custom air compression and separation plants for many years. We take pride in our work and make every effort to meet and exceed the customers' expectations. In global vision and as a domestic market's leader, our aim is to impress with the quality and professionalism of our own duty. We are here to make complexity into simplicity.

With over 25 years of engineering excellence, the HATCO brand offers an extensive range of highly reliable, energy efficient compressors and related accessories to suit all applications.

In HATCO, a dedicated customer service department provides expertise truly local service, ensuring our advanced technology is backed up with the right support.

As part of a wide operation, HATCO has consistently been at the forefront of compressed air & gas systems development, culminating in some of the most energy efficient and low environmental impact compressors on the market today, helping customers achieve or surpass their sustainability targets.

Major Services;

- Factory Acceptance Test
- Site Acceptance Test
- Punch Clear Services
- Commissioning Services
- Spare Parts
- Warranty Claim
- Customer Training



HATCO is "Where Complexity Becomes Simplicity."

HATCO

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