

KOBELION

SCREW COMPRESSOR

Oil Injected Screw Compressor General Catalog

KOBELION

SCREW COMPRESSOR

KOBELCO COMPRESSORS CORPORATION

Information in this catalog such as values, photographs, evaluation is listed for the purpose of explaining the general features and performance of our products only, and it does not guarantee anything as a result. In addition, the information contained in this catalog is subject to change without notice, so please contact our sales offices above for the latest information.

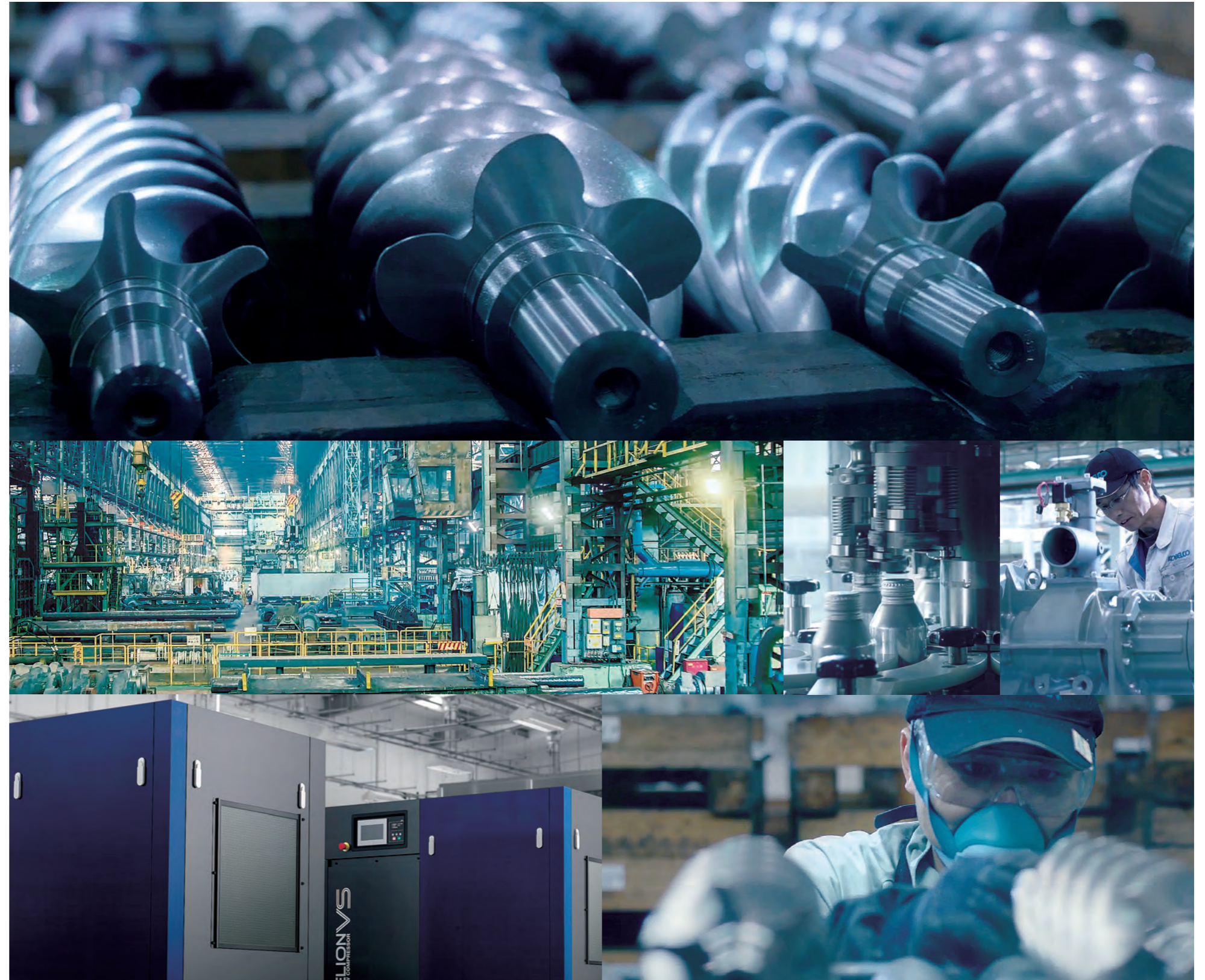
"Monozukuri" What makes it KOBELCO

"Monozukuri" literally means Production or Manufacturing in Japanese word. But this "Monozukuri" especially has meaning of integration of prowess, know-how, and spirit of Japanese manufacturing, which include sincere mind, pride for the quality backed by skill, dedication and the pursuit of innovation and perfection.

KOBELCO explores this "Monozukuri" for more than 100 years as a Japanese leading compressor manufacturer, and quality of our products are for the dedication to "Monozukuri" in the world.

Our endeavor for future technology, top quality, and for maximum customer satisfaction will not stop.

For the next 100 years...
Never ending challenge of KOBELCO just starts here.



Diverse choices for the best of your use.



NEW GENERATION
KOBELION
SCREW COMPRESSOR

VS series

SG series



Motor output **22-75 kW**

Discharge air flow **3.82-15.2 m³/min**

INVERTER IPM Kobelink

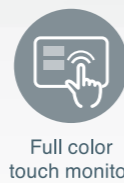
P.7

Motor output **22-75 kW**

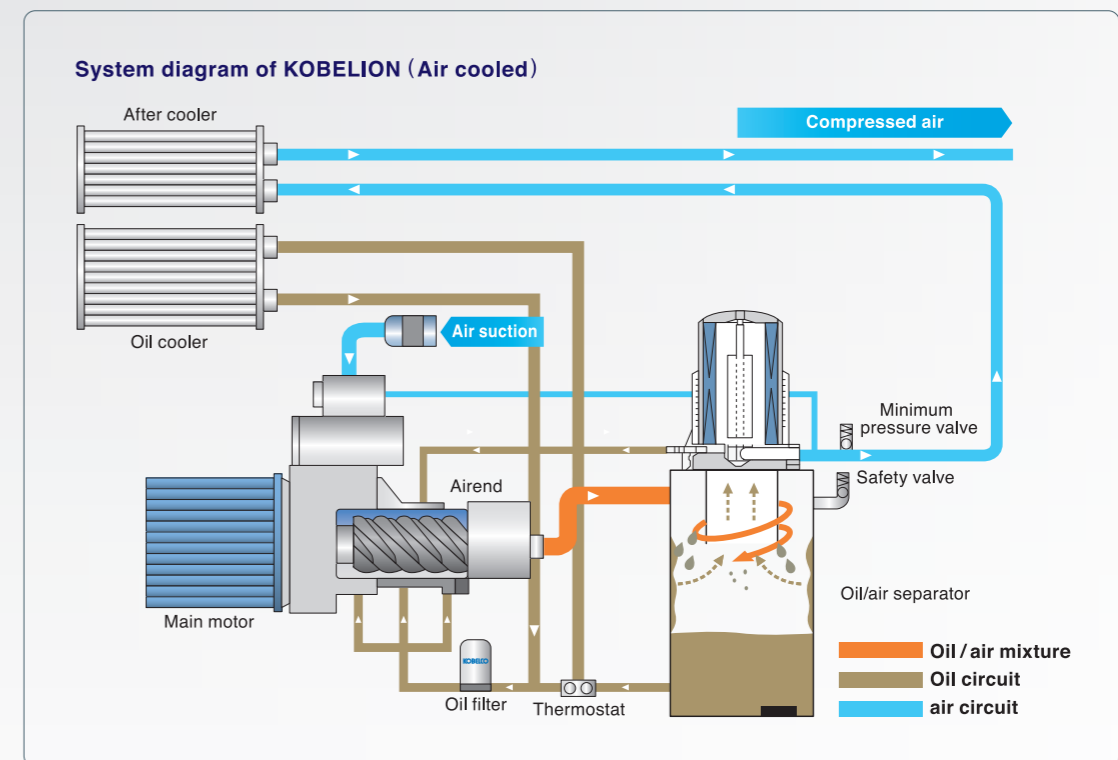
Discharge air flow **3.33-14.0 m³/min**

Kobelink

P.13



Model		Type	(kW)			
			22	37	55	75
Air cooled	VS	INVERTER	●	●	●	●
	SG	Fixed speed	●	●	●	●
Water cooled	VS	INVERTER		●	●	●
	SG	Fixed speed		●	●	●



Lineup

KOBELION

NEW GENERATION KOBELION Debut.

KOBELION-1st generation launched in 2002, presenting innovative concept in the industry. When we developed NEW GENERATION KOBELION, we redefined every key component, from screw element, inverter, cooler to controller and took the most forward-looking way to design each of them. All new are for the best, making KOBELION as masterpiece.

WHAT'S NEW



Ultimate Energy saving

With newly developed screw element from its profile, New KOBELION achieved class-leading air flow volume and specific power consumption.



Outstanding quietness

The insulation materials, flow of unit ventilation air, and frequency of noise were all reviewed and optimised for outstanding quietness.



Up to 50°C ambience

Designed with enough margin against temperature, continuous duty up to 45°C, can be operated up to 50°C.



IoT cloud service "Kobelink"

Anytime, anywhere, you can check compressor's running conditions with it. This can support sustainable operation.

*Conditions apply



Full color touch monitor

Newly developed "NGSC-430/700" is sophisticated LCD interface which enables you to figure out necessary information at a glance.

KOBELION VS

SCREW COMPRESSOR

Motor power	Discharge air flow	Specification
22-75 kW	3.82-15.2 m ³ /min	P.19

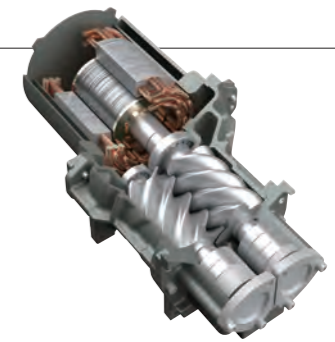


Ultimate Efficient Inverter Model.

Summit of high-tech for extreme efficiency. Premium energy saver with industrial top notch Air-End, super premium efficiency (IE4 equiv) IPM motor, built-in overhung design. Much wider range, much better usability.

Energy saving with Inverter	New Wide Range Control
Super premium efficiency IPM motor (IE4 equiv)	Kobelink compatible
Built-in overhung design	Up to 50°C ambient condition

BUILT-IN OVER HUNG DESIGN, as identity of KOBELION. Now, you can feel the GENUINE.



■ High efficiency

Motor rotor is directly mounted on the rotor shaft. No coupling, no belt and no gear design realize zero transmission loss.

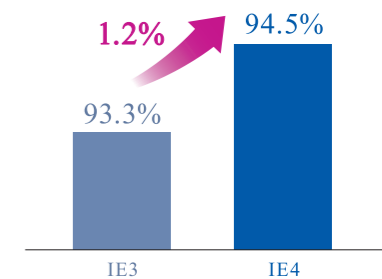
■ Easy maintenance

With built in overhung design, adjusting and replacing of v-belt is no longer necessary. It is not even required to change or re-grease motor bearings.

IPM Super Premium Efficiency IPM Motor (IE4 equiv)

New KOBELION VS series equips super premium efficiency IPM (interior permanent magnet) motor, which efficiency is equivalent to IE4 of IEC standard. IPM has better efficiency from low load to high load compare to induction motor. This IPM is with oil cooled jacket cooling system with insulation class H, which has better resistance to high ambient conditions.

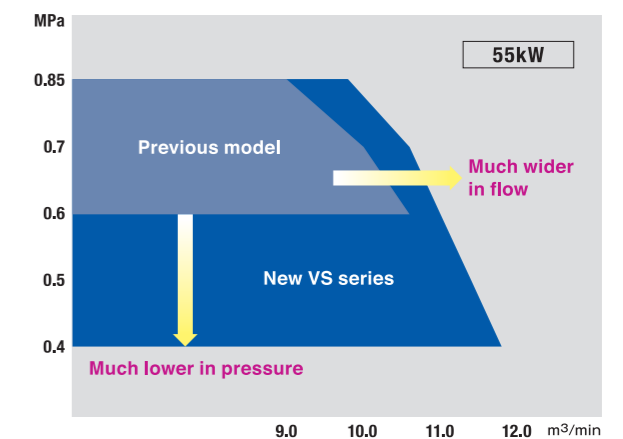
(*) Standard of motor efficiency is defined by IEC (International Electrotechnical Commission) standard and it defines IE1=Standard Efficiency, IE2=High Efficiency, IE3=Premium Efficiency, and IE4=Super Premium Efficiency for induction motor. As IPM is synchronous motor, IPM is not defined in this scheme. IPM equipped on VS series has the efficiency beyond IE4 of induction motor, and has good efficiency in wide range of the working load.



New Wide Range Control

In case that required pressure of compressor is 0.5MPa, you may be able to use one size smaller compressor. Wide Range Control of KOBELION VS can deliver much higher flow when it runs at lower pressure point. KOBELION VS senses line pressure and automatically change maximum rpm limit. New KOBELION VS achieves much higher flow and much wider pressure range. As a leading company of Inverter compressor, we can offer cutting-edge value.

■ Drastic increase in discharge air flow

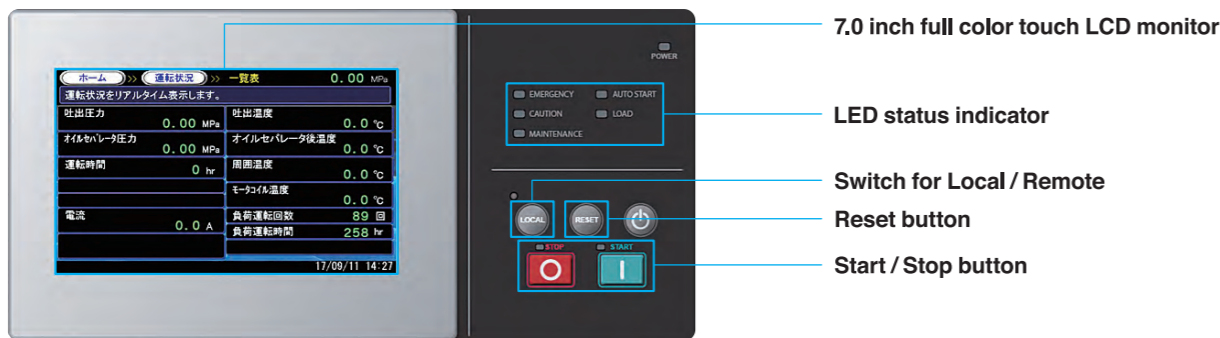


Model	0.85MPa	0.7MPa	0.6MPa	0.5MPa	0.4MPa
VS22A IV	3.82	4.25	4.51	4.75	4.75
Previous model	108%	105%	106%	—	—
VS37A IV	6.4	7.1	7.5	7.7	7.7
Previous model	106%	107%	108%	—	—
VS55A IV	9.8	10.6	11.0	11.4	11.8
Previous model	108%	105%	104%	—	—
VS75A IV	13.0	14.0	14.4	14.8	15.2
Previous model	109%	106%	103%	—	—



New Generation Smart Controller
NGSC-700 controller as standard

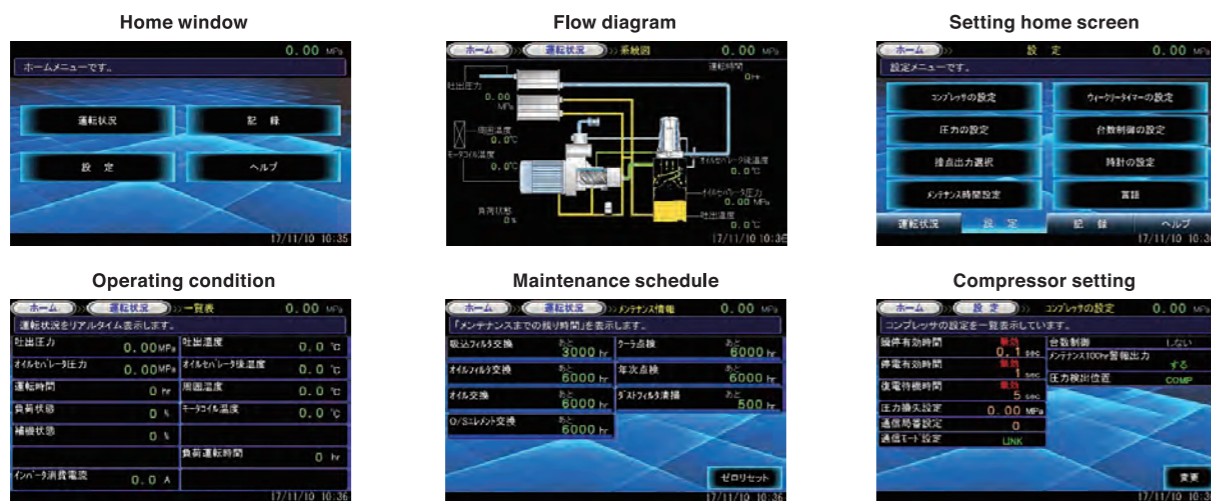
Kobelink - IoT cloud service



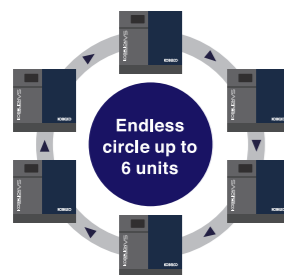
"NGSC-700 for VS series equips 7.0 inch full color touch operation monitor. Sophisticate LCD interface enables you to figure out following information at a glance."

- Operating condition
- Alarm / Interlock list
- Compressor settings
- Daily, Weekly, Monthly record
- Maintenance schedule
- Alarm / Trip history
- Flow diagram
- etc.

Various user interface



Compressor Group Control

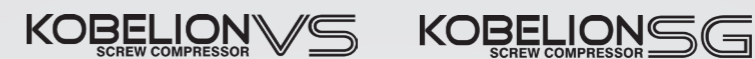


Up to 6 units of compressor can be control by inbuilt sequencing function without external control panel. (Hard wire connections are needed)

(Available only for NGSC-700/430 mounted model)

Other features

- 3 mode pressure setting
- Energy saving logic
- USB data logging
- Modbus I/O
- Kobelink - Remote monitoring
- 7500V lightning surge killer
- Multi language (JPN/ENG/CHN)
- Overload protection
- Instant power failure ride-through : [SG] ~0.3 sec [VS] ~0.5 sec
- Automatic restart : 5~20 sec
- Reverse phase protection
- etc.



Monitor can be upgrade as option

Kobelink - IoT cloud service

NGSC-700 Controller



- 7.0 inch full color touch LCD monitor
- Operation / Maintenance / Alarm / Interlock information
- Flow diagram
- Operation record / Chart display
- Weekly timer
- Compressor setting (3 pressure mode setting, output signal terminal settings)
- Group control (2 units / 6 units)
- USB data logging
- Modbus I/O
- etc.

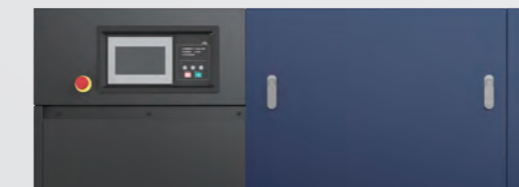
Controller can be upgrade as option



NGSC-430 Controller



- 4.3 inch full color touch LCD monitor
- Operation / Maintenance / Alarm / Interlock information
- Flow diagram
- Operation record / Chart display
- Weekly timer
- Compressor setting (3 pressure mode setting, output signal terminal settings)
- Group control (2 units / 6 units)
- USB data logging
- Modbus I/O
- etc.



Why INVERTER? Question actually should be "WHY NOT?"

INVERTER

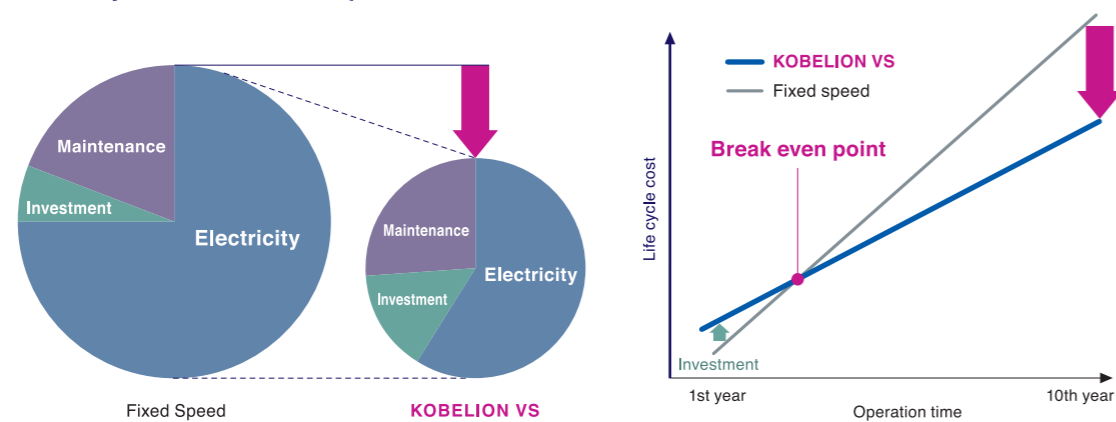
Since we firstly applied IPM motor on INVERTER compressor in 1998, we have been accumulated know-how of INVERTER compressor for nearly 20 years. Our advanced energy saving technology have been chosen by various fields of industry over the years.



Down-to-earth investment for the future

What's important is not initial cost but life cycle cost (LCC). INVERTER compressors may look more expensive than fixed speed model, but many customers choose them because they know importance of life cycle cost (LCC) & return on investment (ROI) when it comes to choosing compressors.

Life cycle cost (LCC) comparison

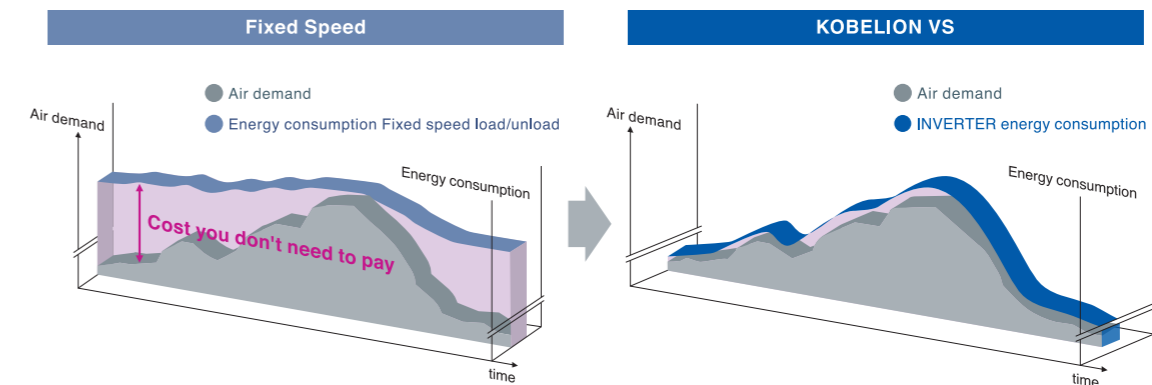
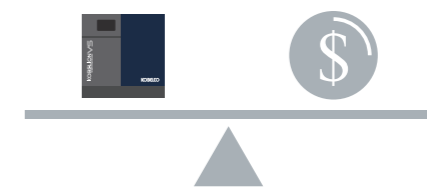


Can Save
Approx. 30%
of life cycle cost (LCC)

* **Comparison model** VS22AN (Latest INVERTER model)
SG395AIII (Previous fixed speed model Load/Unload)
* **Conditions** Yearly running hour:6,000hours, Total running year:10 years:Load ratio:30%,
Investment and maintenance cost is as per KOBELCO conditions.
* The energy saving outcome of introduction of inverter compressors can vary depending on actual running situations.

What you pay should be only for what you use

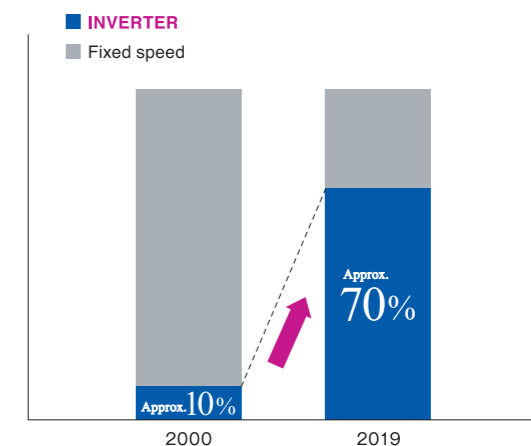
In every situation in our life, we pay only for what we eat, drink and use etc. Of course, compressors also should be that way. KOBELION VS can adjust compressor's rotating speed depends on the demand of factory load which changes from moment to moment by own developed algorithm. Thus, it can provide exact volume and pressure what customer needs and achieve maximum energy saving.



Already majority in Japan

Approx. **70%**

The percentage of INVERTER type KOBELCO*1 ships in Japanese market is approx. 70%*2. In 2000, INVERTER ratio was only approx.10%. This is a sign of fact that people are getting aware of importance of "Life Cycle Cost (LCC)" and "Return on Investment (ROI)". Now INVERTER is not special but mainstream for every industry. *1:15~75kW/oil injected type *2:As of 2019 April



KOBELION SG

SCREW COMPRESSOR

Motor power	Discharge air flow	Specification
22-75 kW	3.33-14.0 m ³ /min	P.19



Premium Fixed Speed Model.

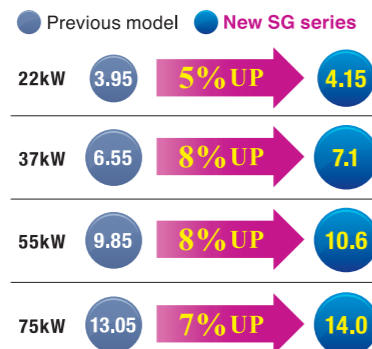
New Generation Air-end, Direct Gear Drive, IE3 premium efficiency motor standardly equips. Integration of cutting-edge technology as industrial compressor for highest reliability and simple controllability.

- Best-in-class discharge air flow
- Direct Gear Drive
- Kobelink compatible
- Premium efficiency motor (IE3)*
- Resistance to high ambient up to 50°C

*Except for 200V/60Hz, 400V/60Hz

Best in Class discharge air flow

New KOBELION SG achieves best-in-class discharge air flow, and max 13% increase from existing model, thanks to New Generation Air-end.



Model	(m ³ /min)		
	0.7MPa	0.8MPa	1.0MPa
SG22A IV	4.15	3.9	3.33
Previous model	105%	113%	106%
SG37A IV	7.1	6.4	5.85
Previous model	108%	109%	111%
SG55A IV	10.6	10	9.1
Previous model	108%	113%	—
SG75A IV	14.0	13.1	12.0
Previous model	107%	111%	—

Direct Gear Drive

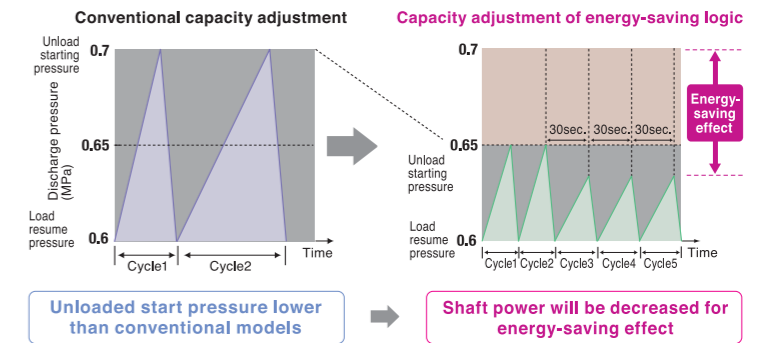
Designed to achieve best efficiency in rated load. Precise machined helical gears are directly mounted on motor shaft and eliminate coupling or v-belt. Single piece drive train minimize vibration of rotating part and mechanical losses. Also adjusting and replacing of v-belt is no longer necessary. All the model is with IE3 premium efficiency motor*.

*Except for 200V/60Hz, 400V/60Hz

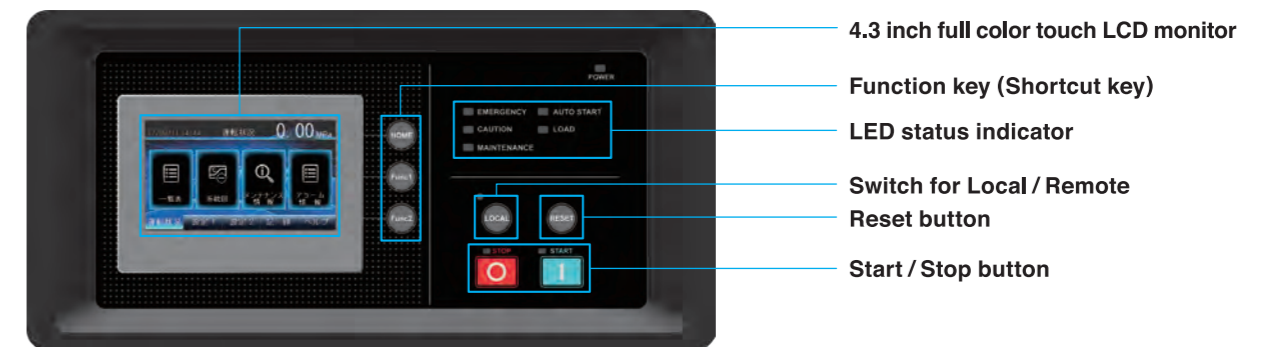


Energy saving logic

KOBELCO's "Energy saving logic" can reduce pressure band of load/un-load control to eliminate excess pressure hike.



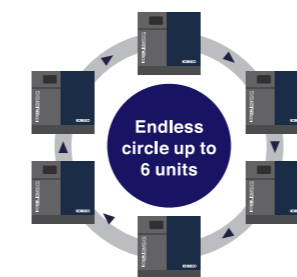
- New Generation Smart Controller NGSC-430 controller as standard
- Kobelink - IoT cloud service



"NGSC-430 for SG series equips 4.3 inch full color touch operation monitor. Sophisticate LCD interface enables you to figure out following information at a glance."

- Operating condition
- Alarm / Interlock list
- Compressor settings
- Daily, Weekly, Monthly record etc.
- Maintenance schedule
- Alarm / Trip history
- Flow diagram

Compressor Group Control



Up to 6 units of compressor can be control by inbuilt sequencing function without external control panel. (Hard wire connections are needed)

(Available only for NGSC-700/430 mounted model)

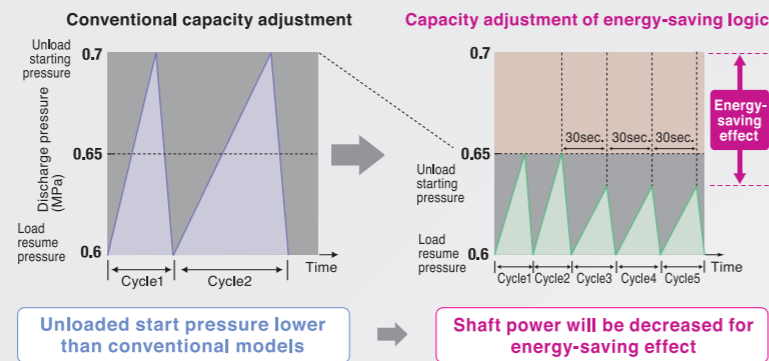
Other features

- 3 mode pressure setting
- Energy saving logic
- USB data logging
- Modbus I/O
- Kobelink - Remote monitoring
- 7500V lightning surge killer
- Multi language (JPN/ENG/CHN)
- Overload protection
- Instant power failure ride-through : ~0.3 sec
- Automatic restart : 5~20 sec
- Reverse phase protection etc.

Other features

Energy saving logic

KOBELCO's "Energy saving logic" can reduce pressure band of load/unload control to eliminate excess pressure hike.



Reliable 3-step Oil separation system

Centrifugal, Gravity, Coalescing filtration 3-step oil separation system enables to remove oil mist from compressed air efficiently. Oil vapor in the compressed air is less than 1.6 ppm (*).

(*) As per our reference condition

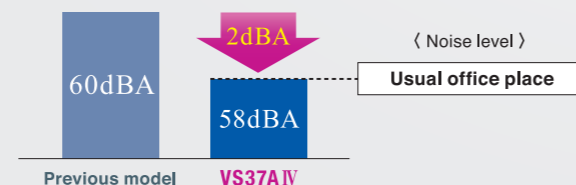
Dust filter as standard

Unit dust filter standardly equipped for all model. Prevent heavy dust enter into the compressor package.



Low noise package

New KOBELION achieves world best class low noise during operation. Latest noise simulation analysis and our package design will change the image of industrial compressor.



Up to 50°C Ambient

KOBELION is designed for operation up to 50°C ambient condition. All the component like split designed oil cooler and after cooler is designed for extreme condition. Against 45°C continuous duty, we still have safety margin.

*Maintenance interval may be changed under the surrounding condition of above 45°C.



Special design unloader valve

KOBELCO special design suction unloader valve equipped. Minimum pressure loss, high reliability. Less chance of trouble, and longer maintenance life.

More reliable bearing

New KOBELION equips bearings with stabilizing treatment. This is our endless challenge for more reliability.

Our prides

- Quality, always our first priority
- Complete in-house technologies, including screw element material
- Insatiable challenges for technology upgrade
- No compromise for every detail
- Proven experience of over 100 years

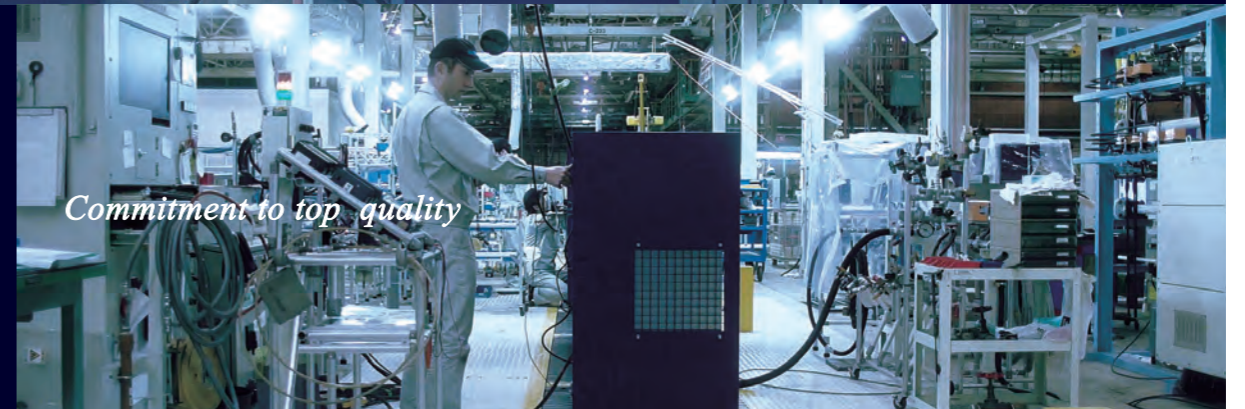
Dedication to every detail



Over 100 years history



Commitment to top quality





KOBELION SCREW COMPRESSOR

NEW GENERATION KOBELION
VS/SG series

VS series [Inverter model / Air cooled]

Model	Discharge pressure MPa	Discharge air flow m³/min	Nominal output kW	Pipe connection A	Fan motor output kW	Lube Oil Quantity L	Noise level dB (A)	Dimensions	Weight kg
								W×D×H mm	
VS22A IV	0.4 ~ 0.85 (0.7)	4.75 ~ 3.82 (4.25)	22	25	0.65	12 [13]	55	1,250 × 850 × 1,500	550
VS37A IV		7.7 ~ 6.4 (7.1)	37	40	1.1	19 [21]	58	1,550 × 950 × 1,600	710
VS55A IV		11.8 ~ 9.8 (10.6)	55	50	1.5	32 [40]	63	2,200 × 1,200 × 1,700	1,350
VS75A IV		15.2 ~ 13.0 (14.0)	75	50	3.0	32 [40]	65	2,200 × 1,200 × 1,700	1,430

VS series [Inverter model / Water cooled]

Model	Discharge pressure MPa	Discharge air flow m³/min	Nominal output kW	Pipe connection A	Cooling Water		Lube Oil Quantity L	Noise level dB (A)	Dimensions	Weight kg
					Water volume L/min	Pipe connection A			W×D×H mm	
VS37W IV	0.4 ~ 0.85 (0.7)	7.7 ~ 6.4 (7.1)	37	40	65	25	13 [14]	58	1,550 × 950 × 1,600	690
VS55W IV		11.8 ~ 9.8 (10.6)	55	50	95	40	26 [28]	63	2,200 × 1,200 × 1,700	1,280
VS75W IV		15.2 ~ 13.0 (14.0)	75	50	125	40	30 [32]	65	2,200 × 1,200 × 1,700	1,330

Main motor : 6 pole, Synchronous IPM motor, Oil cooled, Class H, Inverter drive
Electrical spec : Three-phases, 200/200 - 220V (380 · 400 · 415/400 · 440V)
Constant pressure setting can be 0.85MPa at maximum [] for initial charge

SG series [Fixed speed model / Air cooled]

Model	Discharge pressure MPa	Discharge air flow m³/min	Nominal output kW	Pipe connection A	Fan motor kW	Lube Oil Quantity L	Noise level dB (A)	Dimensions	Weight kg
								W×D×H mm	
SG22A IV	0.75	4.15	22	25	0.65	12 [13]	55	1,250 × 850 × 1,500	720
	0.85	3.9							
	1.05	3.33							
SG37A IV	0.75	7.1	37	40	1.1	18 [19]	58	1,550 × 950 × 1,600	960
	0.85	6.4							
	1.05	5.85							
SG55A IV	0.75	10.6	55	50	1.5	30 [37]	64	2,200 × 1,200 × 1,700	1,690
	0.85	10.0							
	1.05	9.1							
SG75A IV	0.75	14.0	75	50	3.0	32 [40]	66	2,200 × 1,200 × 1,700	1,800
	0.85	13.1							
	1.05	12.0							

SG series [Fixed speed model / Water cooled]

Model	Discharge pressure MPa	Discharge air flow m³/min	Nominal output kW	Pipe connection A	Cooling Water		Lube Oil Quantity L	Noise level dB (A)	Dimensions	Weight kg
					Water volume L/min	Pipe connection A			W×D×H mm	
SG37W IV	0.75	7.1	37	40	65	25	12 [13]	58	1,550 × 950 × 1,600	950
	0.85	6.4								
SG55W IV	0.75	10.6	55	50	95	40	26 [28]	64	2,200 × 1,200 × 1,700	1,640
	0.85	10.0								
SG75W IV	0.75	14.0	75	50	125	40	30 [32]	66	2,200 × 1,200 × 1,700	1,720
	0.85	13.1								

Main Motor : 2-pole, TEFC induction motor, Class F, Star-delta drive
Electrical spec : Three-phases, 200/200 - 220V (380 · 400 · 415/400 · 440V) [] for initial charge

*Suction conditions : Atmospheric pressure / 2 ~ 45°C
*Discharge condition : below 45°C (ambient temperature : 30°C)
*Discharge air volume is converted to suction conditions.
*Discharge pressure are measured after coolers.
*Air produced by compressors should not be used in respiratory equipment furnishing air for direct inhalation.
*Nominal working pressure is as per below ;
0.75MPa variant : 0.7MPa
0.85MPa variant : 0.8MPa
1.05MPa variant : 1.0MPa

*Noise values are based on the height of 1.0m and at the distance of 1.5m in front from the compressor package in anechoic chamber and under full-load operation.
*Since the cooling for the compressor air, lubricant, and the inside of the compressor unit depends on the surrounding air condition, the surrounding air must be properly ventilated to prevent the ambient temperature from rising above 45°C.
*Specifications and descriptions are subject to change without notice.
*Weight values are based on 220/220V model for air cooled type, 380/415V model for water cooled type.
*For water cooled model : If the head of water supply and drain exceeds 10m, erosion may happen inside a heat exchanger. In that case, please adjust a hydraulic pressure with a water supply valve.

Group Controller Model EM

Efficient utilization of multiple compressors and accessories with energy saving.

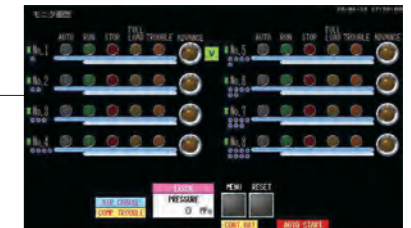
Your merits are ;



- ▶ Saving electricity consumption by optimizing the number of running compressor.
- ▶ Minimizing pressure band compare with conventional cascade pressure setting.
- ▶ Maximizing energy saving merit of variable speed compressor.
- ▶ Equalizing compressor running hours.
- ▶ Integrating auxiliary equipment control for further energy saving.

Enhanced operability with LCD touch operation monitor

- Operating conditions can be captured at a glance with 4.3 inch (for EM 42) and 7 inch (for EM 44 / EM 48) full color LCD monitor.
- Easy-to-set via touch operation monitor for all the range.
- Chart base display can be selected.



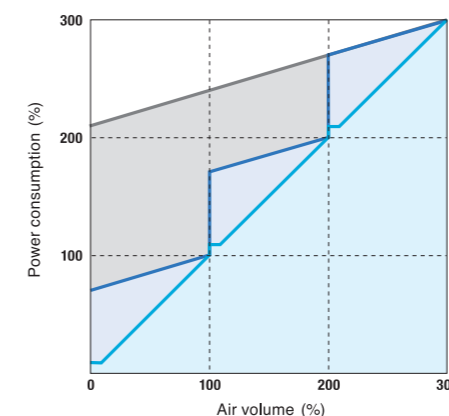
Heavy electrical protection and control

- Voltage dip protection (up to 0.5 sec), Black out auto restart (up to 15 min).
- Easy-to-set via touch operation monitor for all the range.
- Weekly timer (7 days preset operation).
- Timer base advance switch over for running hour equalization standardly equipped.
- Remote command for START and STOP standardly equipped.
- Machine under trouble will be automatically skipped to maintain system operation.

Control model

- Fixed speed × 3units without group control
- Fixed speed × 3units with group control
- Inverter × 1unit Fixed speed × 2units with group control

*Fixed speed : Inlet modulation



Specification

Model	EM 42	EM 44	EM 48
Max No. of compressor	2	4	8
Display	4.3 inch	7 inch	7 inch
Dimensions (mm)	Width	500	600
	Depth	200	200
	Height	600	900
Control pressure	0~1.5MPa		
Installation style	Wall mount		
Weight (kg)	30	50	70
Power supply	AC 100V to 240V 50/60Hz 1Φ		

KOBELCO Filters



Different types of products requires different grades of compressed air. KOBELCO offers a diverse selection of filtration solution to meet your every demand.

Filter used	Application	Effects
<p>Dry air → KOP</p>	General applications Protection of main pipes from contamination, removal of larger solid contaminants, removal of particulates in dryer system, large air pressure tool, automation of equipment, etc.	Removal of moisture and oil ● Particle removal size: 1m ● Maximum residual oil: 0.5PPM
<p>Dry air → KOP KAP</p>	Paint applications and precision facilities Robotics, precision air pressure tools, instruments, spray painting, air transport, air bearing, air motor, etc.	Removal of moisture and oil ● Particle removal size : 0.01m ● Maximum residual oil : 0.01PPM
<p>Dry air → KOP KAP KCSP</p>	Food, pharmaceutical and electronics industries High quality clean air, plastic molding, film processing, as well as the manufacture of sophisticated instruments, precision air compressors, cosmetic products, food products, dairy products, etc.	Filtration of odors (oil mist and hydro carbons) *Carbon monoxide, carbon dioxide and methane cannot be removed.

*Above example is for an air temperature of 21°C.

Filter specification table

Model	Air capacity (m ³ /min)	Connections (Inch)	Applicable compressor
KOP/KAP/KCSP 120	1.2	3/4"	CM6Ⅲ SG100Ⅲ
KOP/KAP/KCSP 180	1.8	3/4"	SG155Ⅲ
KOP/KAP/KCSP 360	3.6	1"	SG235Ⅲ
KOP/KAP/KCSP 660	6.6	1-1/2"	VS22Ⅳ SG22Ⅳ
KOP/KAP/KCSP 960	9.6	2"	SG37Ⅳ
KOP/KAP/KCSP 1320	13.2	2"	VS37Ⅳ SG55Ⅳ
KOP/KAP/KCSP 1980	19.8	2-1/2"	VS55Ⅳ SG75Ⅳ
KOP/KAP/KCSP 2590	25.9	2-1/2"	VS75Ⅳ

*Air capacity is based on inlet pressure of 0.7MPa. Other than this condition, please contact us for proper sizing.

KOBELCO Energy Audit

How much can you cut your energy cost by optimizing air system? We will let you know.

3 simple steps of Energy Audit

1 Collecting the running data

KOBELCO visits customer site to collect existing compressors' running data with a small equipment.

2 Analyzing the collected data

KOBELCO analyzes the collected data with KOBELCO's original software and considers the best suited air system.

3 Learning with KOBELCO

KOBELCO submits a read friendly report on analyzed existing compressors' data and energy saving potential by air system optimization.



Why KOBELCO Energy Audit ?

- No production interruptions
- Rich experience all over the world
- Simulation & recommendation based on actual data measured
- Can be conducted at any time
- Can be applicable to any brands of air compressor



The strong partnership with our customers is producing fruitful results throughout the world.

KOBELCO COMPRESSOR sales and production locations are based in the regions of Asia and North America, in response to expanding demand overseas. Domestically KOBELCO responds to customer requirements in a meticulous manner through sales offices and service centers nationwide, which provide support for customers in a coordinated manner, covering all their needs ranging from daily support work to proposals for the implementation of new technologies.



Japan

KOBELCO COMPRESSORS CORPORATION

China

KOBELCO COMPRESSORS MANUFACTURING (SHANGHAI) CORPORATION

< Shanghai > KOBELCO COMPRESSORS (SHANGHAI) CORPORATION

< Beijing > KOBELCO COMPRESSORS (SHANGHAI) CORPORATION BEIJING BRANCH

< Guangzhou > KOBELCO COMPRESSORS (SHANGHAI) CORPORATION GUANG DONG BRANCH

Singapore

KOBELCO COMPRESSORS ASIA (SINGAPORE) PTE. LTD.

Thailand

KOBELCO COMPRESSORS (THAILAND) LIMITED

Vietnam

KOBELCO COMPRESSORS VIETNAM CO., LTD

Malaysia

KOBELCO COMPRESSORS MALAYSIA SDN. BHD.

Philippines

KOBELCO COMPRESSORS AND MACHINERY PHILIPPINES CORPORATION

Cambodia

KOBELCO COMPRESSORS (CAMBODIA) CO., LTD.

Indonesia

PT. KOBELINDO COMPRESSOR

India

KOBELCO COMPRESSORS INDIA PVT. LTD.

United States

KOBELCO COMPRESSORS MANUFACTURING INDIANA, INC.

Safety Precautions

1. Before operating, be sure to read the entire instruction manual and follow all safety directions.
2. Never attempt to perform unauthorized equipment modifications. Doing so could cause accidents resulting in injury.
3. The compressors are designed to compress air. Never use them with other gases. Doing so could result in accidents or breakdowns.
4. Never directly inhale the compressed air or use it for respiration systems of any kind. Doing so could cause pulmonary injury.