

Screw Compressors SCR-APM Maxi

power range 7,5-15 kW



Sino-Japanese joint venture

for the production of efficient compressors







SCR - compressors for the 21st century

Shanghai Screw Compressor Co., Ltd (SCR) is a manufacturing company established in 2000, focusing on innovation, research, development, production, sales, and services in the field of industrial compressors. The SCR production plant is a modern facility employing more than 250 workers over an area of more than 80,000 m^2. More than 10% of the staff are part of the engineering division, focusing on research and development.

SCR's product portfolio consists of energy-efficient screw compressors, including oil-free and two-stage solutions. SCR manufactures in accordance with ISO 9001 standards and holds CE certification for the European market, UL certification for the US market, Class Zero certification for oil-free machines, and the performance of all manufactured units is audited by SGS.

After more than 20 years of development, SCR has formed strategic partnerships with many collaborators, and its products are exported to over 80 countries worldwide.

In 2018, SCR started a strategic joint venture with the Japanese manufacturer Anest Iwata, which implemented its quality control and technology management system at SCR, aiding in the development and introduction of new energy-efficient and even more reliable compressors.

80.000
square metersof production area

83
countries with a commercial presence

50.000
compressor users

140.000
units of compressors manufactured since 2000

A new generation of small compressors

In craft and workshop operations, tire and car repair shops or in industry, older screw compressors are often operated for 10 years or more. However, in the area of small screw compressors, the boundaries of technology are constantly being pushed, and even if such an old compressor is still functional, it is worth considering investing in the new generation of SCR-APM Maxi compressors, which bring a number of user benefits.



- ✓ higher energy efficiency
- ✓ display with many operating data
- ✓ less maintenance
- ✓ no V-belts
- ✓ lower risk of accidents
- ✓ significantly higher air quality



Modern energy-efficient solutions

The new generation of SCR-APM Maxi screw compressors with modern technologies offers significantly lower costs for consumed electricity compared to older screw compressors with fixed speed operation and V-belt transmission. The investment in a new compressor will quickly pay off due to high energy prices.





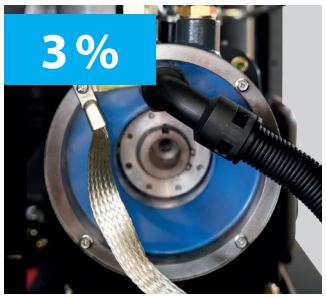
No idling

Thanks to continuous control through a frequency converter.



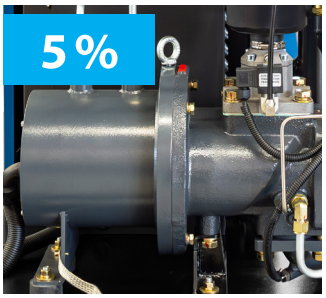
No unnecessary pressure

Set the exact pressure you need on the IT7000 control unit.



IE4 efficient motors

With permanent magnets having lower energy losses.



No transmission losses

Thanks to the direct connection of the motor to the compressor airend, as opposed to V-belts.

Annual electricity costs

The table shows annual costs in EUR for different power inputs, types of operation, and electricity prices.

Operation	1 000 MH			2 000 MH			4 000 MH		
EUR/kWh	0,15	0,20	0,25	0,15	0,20	0,25	0,15	0,20	0,25
7,5 kW	1 125 €	1 500 €	1 875 €	2 250 €	3 000 €	3 750 €	4 500 €	6 000 €	7 500 €
11 kW	1 650 €	2 200 €	2 750 €	3 300 €	4 400 €	5 500 €	6 600 €	8 800 €	11 000 €
15 kW	2 250 €	3 000 €	3 750 €	4 500 €	6 000 €	7 500 €	9 000 €	12 000 €	15 000 €

Versions

The SCR-APM Maxi screw compressor range is available either as a stand-alone compressor or in sets containing an air receiver and various air treatment devices in one machine. The TD and FF sets were designed and engineered in the Czech Republic and are assembled in the Pilsen manufacturing plant using top-quality components from leading European manufacturers.



Base version

✓ stand-alone compressor



TD version (4-in-1)

- ✓ compressor
- ✓ air receiver 270/500 l
- ✓ refrigeration dryer
- ✓ pre-filter

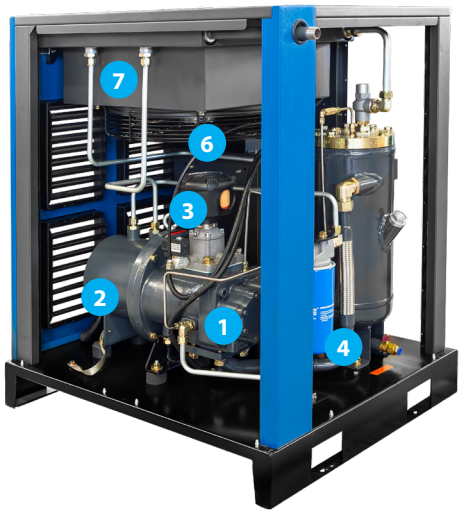


FF version (8-in1)

- ✓ compressor
- ✓ air receiver 270/500 l
- ✓ refrigeration dryer
- ✓ pre-filter
- ✓ microfilter
- ✓ activated carbon filter
- ✓ codensate drain
- ✓ water-oil separator

Design arrangement

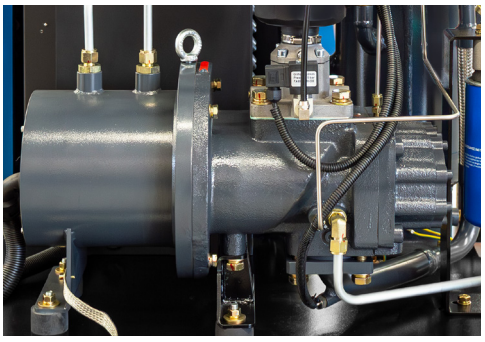
The structural layout of the individual parts of the SCR-APM Maxi compressors is designed to make the entire machine as compact as possible while ensuring good service access to all important components.





1. Airend
2. PM motor
3. Air filter
4. Oil filter
5. Oil receiver
6. Fan
7. Oil cooler
8. Control unit
9. Frequency converter

Compressor airend and drive train



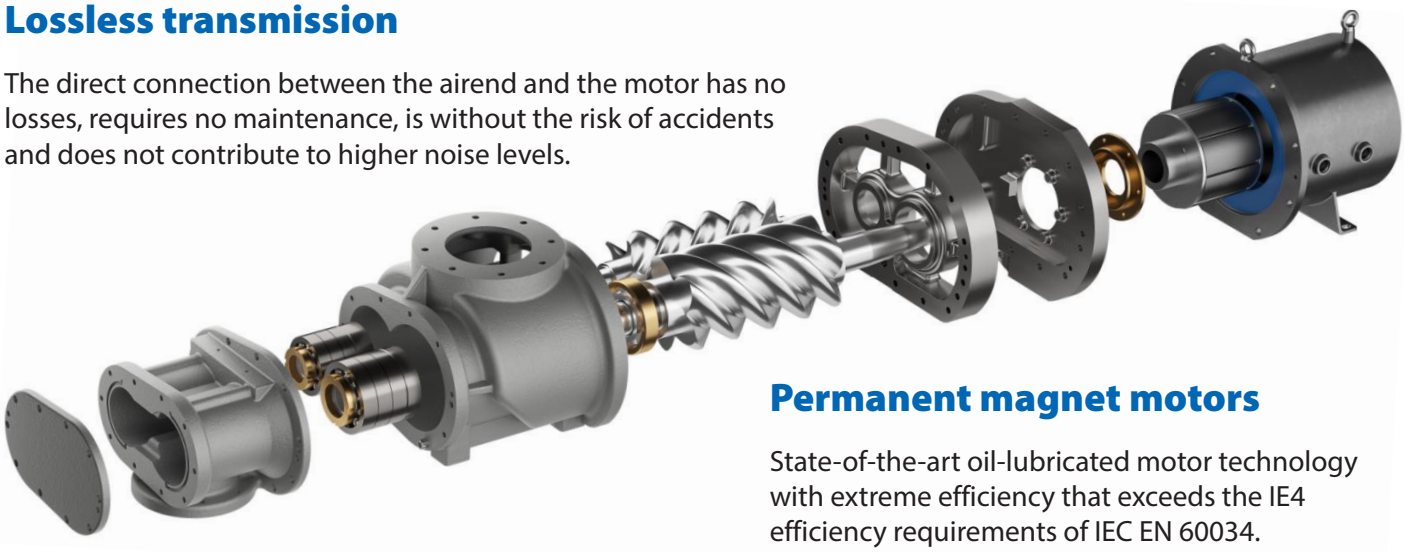
The core of every screw compressor is its drive mechanism. SCR-APM Maxi compressors use the most modern construction, where the production of compressed air is handled by a airend of our own production, which is directly connected via a conical connection to a highly efficient electric motor with permanent magnets.

Low-speed compressor airend

The high-precision, oil-lubricated, low-speed airend delivers a large volume of air with high compression efficiency.

Lossless transmission

The direct connection between the airend and the motor has no losses, requires no maintenance, is without the risk of accidents and does not contribute to higher noise levels.

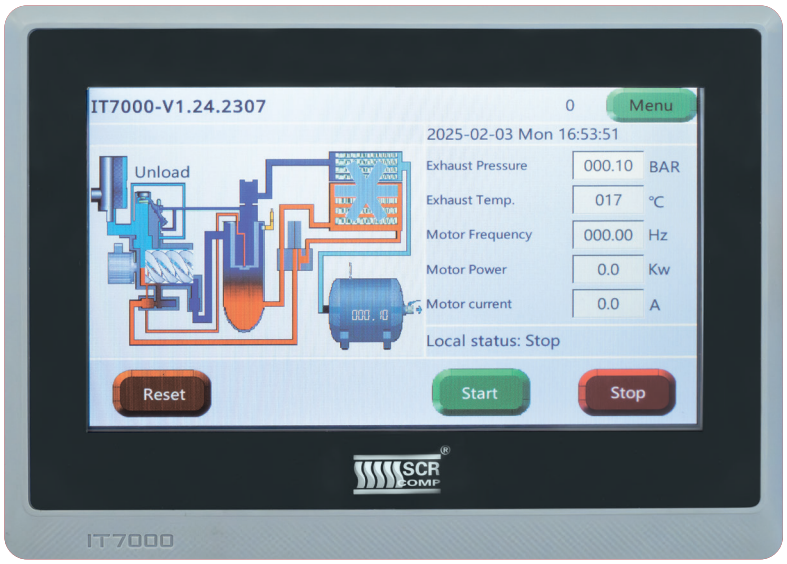


Permanent magnet motors

State-of-the-art oil-lubricated motor technology with extreme efficiency that exceeds the IE4 efficiency requirements of IEC EN 60034.

Electronic control unit

Even a small screw compressor deserves modern control these days. That is why the SCR-APM Maxi compressors are equipped with a superior control unit that has many useful functions for monitoring the compressor's status, operating and service settings, and necessary alarms.

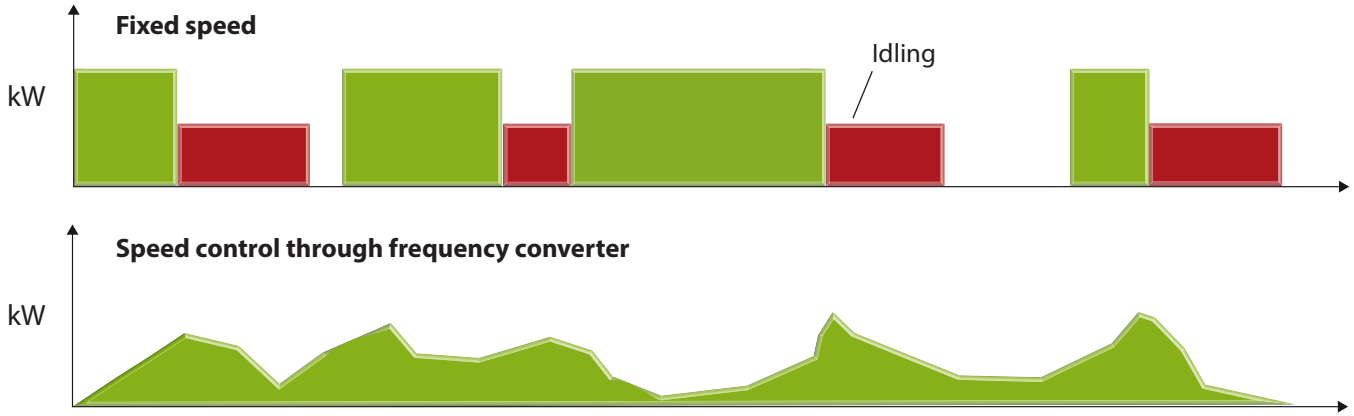


IT7000 unit features

- ✓ Colour touch screen
- ✓ Czech and Slovak menu
- ✓ 7" display
- ✓ Parameter display and setting
- ✓ Weekly machine schedule
- ✓ Error messages archive
- ✓ Automatic restart

Speed control through frequency converter

Traditional fixed speed compressors are controlled in working cycles, where the compressor alternates between running under load, running idle, or being stopped. Immediately after start-up, air compression begins and the main motor operates under load. Upon reaching the desired pressure, the compressor switches to idle, where the compressor airend is still rotated by the motor but no air is produced, resulting in energy consumption without output. Although idling facilitates machine restart on one hand, it causes unnecessary energy consumption for several tens of seconds on the other hand, typically amounting to tens of percent of total energy used. Lower air consumption increases idle ratio, presenting opportunities for significant cost savings on produced air and operating expenses.



Vector-controlled frequency converters

The SCR-APM Maxi compressors are equipped with advanced INOVANCE frequency converters, enabling maintenance of required output pressure and adapting drive train speed instantly to compressed air demand. Thanks to this modern compressor control system, idling is significantly reduced, resulting in energy savings of up to tens of percent. Further cost reductions can be achieved by quickly adjusting output pressure and control pressure zone.

The vector-controlled converters used have been developed specifically for screw compressors, offering very high torque at frequencies as low as 0.1 Hz. Conventional frequency converters cannot operate below 5 Hz or are extremely inefficient in this range.

The new generation of INOVANCE vector-controlled converters delivers very high energy efficiency throughout the speed range.



Operating status indication





The SCR-APM Maxi series screw compressors are equipped with perfect operating status signaling through effective front panel lighting.

This practical solution allows you to see at a glance whether the compressor is under load and producing compressed air or whether it is stopped or unloaded and not producing air.

Compressor is under load and producing air

The compressor is stopped or in relief

Integrated sets

The modern concept of practical sets of compressor and compressed air treatment units in one machine provides users extremely fast installation and space saving in the compressor room.

TD version with basic equipment - 4-in-1

The traditional concept of a compressor+air receiver+dryer set expanded with a pre-filter providing protection for the dryer and basic air filtration from oil and solid impurities.

FF version with max. air quality - 8-in-1

The ultimate air treatment solution with added microfilter and activated carbon filter for compressed air with minimal water, solids and oil content exceeding the requirements of class 1-4-1 according to ISO 8573-1. In addition, with electronic condensate drain without losses and with added ecological condensate separation.





Equipment	TD	FF
1 Air receiver	✓	✓
2 Refrigeration dryer	✓	✓
3 Pre-filter	✓	✓
4 Microfilter		✓
5 Activated carbon filter		✓
6 Condensate drain		✓
7 Water-oil separator		✓

Dryer

When air is compressed, water vapor contained in the air sucked from the atmosphere into the compressor condenses, forming a liquid emulsion called condensate. Condensate causes corrosion of pipes, parts of pneumatic tools, valves and pistons on production lines and machines, and can also damage final products.

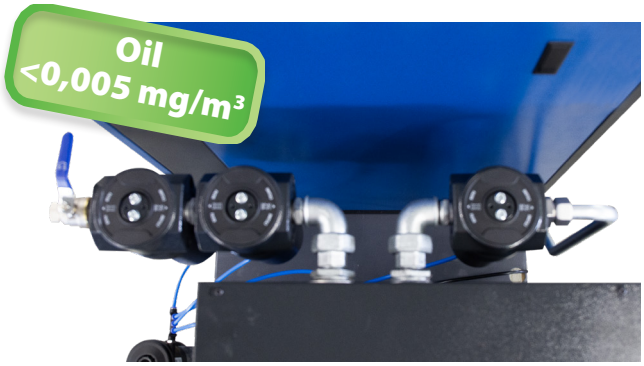


Both versions of the SCR-APM Maxi screw compressor assemblies are equipped with RDL condensation dryers with modern ecological refrigerant R513a, ensuring a pressure dew point of +5 °C, to eliminate humidity.



RDL dryers are equipped with their own electronic control unit with a segment display designed for operation control and signaling of operation and alarms.

Three-stage filtration system



The FF version with extended air treatment equipment is equipped with a three-stage filtration system that effectively removes solid impurities and oil from the compressed air. Thanks to the AAFM pre-filter located before the dryer for higher protection, the AAFS microfilter for eliminating residual liquid oil and residual solid impurities and the AAFA2 activated carbon filter for removing oil mists and vapors, the compressor delivers compressed air with a minimum content of water, solid impurities and oil in a quality exceeding the requirements of class 1-4-1 according to ISO 8573-1.

Condensate management

Lossless condensate drainage

All condensate generated during air compression is centrally drained from the air receiver, dryer and filters using lossless condensate drains operating on the float or electronic principle.

Integrated water-oil separation

To drastically reduce condensate disposal costs, the SCR-APM Maxi compressor in the FF version is equipped with an ecological WOSM separator, which separates oil from water from the condensate. The residual water can then be poured into the waste and the condensate does not need to be disposed of in an expensive way within the oil management system.



Quality original parts & available service

To ensure the compressor maintains continuous peak performance and to minimise the risk of failure throughout its lifetime, maintenance must be performed at prescribed intervals using only genuine spare parts and lubricants.

All necessary spare parts are available for each SCR-APM Maxi compressor and can be easily selected either according to the provided documentation or by their markings directly on the parts inside the machine.

Maintenance and servicing of SCR-APM Maxi compressors are provided by an extensive network of service partners to ensure that all necessary services are as easily and quickly available as possible, without unnecessary technician call-out costs.



Low maintenance costs

The concept of the SCR-APM Maxi compressors allows for a significant reduction in the costs of performing regular maintenance. Compared to traditional compressors on the market, many service operations are eliminated, such as replacing and tensioning V-belts, replacing rubber hoses, maintaining bearings on the main electric motor or the entire transmission system.

This eliminates the costs of unnecessarily replacing parts, and if to the overall low prices of spare parts and SCO oils you also add less work by technicians, you will get really significant savings on the maintenance of the SCR-APM Maxi compressor.

LOWER MAINTENANCE COSTS

- ✓ No need to V-belts replace or tension
- ✓ No cracked or leaking hoses
- ✓ No need to replace engine bearings
- ✓ No clutch or transmission maintenance



Extended 5-year warranty

We are confident in the quality of the technical design of the SCR-APM Maxi series compressors, the components used, and our production quality system. We therefore offer all customers the option to extend the standard warranty period to 5 years for an additional charge. Our extended warranty concept is not limited by the number of operating hours and does not require signing service contracts or shortening preventive maintenance intervals.

Rent a compressor for 5 years!

Thanks to the SCRent program, you no longer need to invest large sums in purchasing a new energy-efficient compressor. In cooperation with Raiffeisenbank, we offer a modern financing option through a 5-year long-term lease of the machine, with repayment made via monthly instalments.

Why choose SCRent?

- You can get **a new compressor right away** without having to allocate large sums of money for investment.
- Monthly lease payments are treated as **direct business expenses** and are not depreciated for accounting purposes.
- **Transparent costs for 5 years** - SCRent instalment is "all inclusive" of all compressor expenses except energy.
- And above all, thanks to the modern and energy-efficient machine, **YOU START SAVING ON ENERGY RIGHT AWAY**.



What does the lease payment cover?

SCRent is a comprehensive financial service that includes all costs related to the operation of the compressor and compressed air treatment technology. The only expense the customer is responsible for is the electricity consumed. **The monthly lease payment is not simply the price of the machine multiplied by 60 instalments; SCRent covers everything you will incur during the 5 years of the compressor's operation:**

- price of the selected model **of SCR screw compressor**
- **regular maintenance** throughout the rental period is already included in the price without limitation of the number of operating hours
- price of selected types **air treatment equipment**
- we will take care of free **ecological disposal** of oils and filter cartridges
- attractive **discounts** on purchased equipment, **spare parts and oil** are included in the lease
- the rental also includes the necessary **pressure vessel inspections**
- the price includes **transport of** all equipment to the installation site
- all **breakdown** costs during the rental period are our responsibility; emergency service is included in the rental
- all compressors and air treatment equipment are professionally **installed**
- compressors and air treatment equipment are **insured** against damage or theft at all times
- **we will train** the operators to ensure proper operation and basic maintenance of the technology
- ... and **after 5 years you can buy the compressor** at the residual price

Technical data

Basic information

Model	Power	Max. pressure	FAD output (Nm³/h)		Ventilation	Noise level
	(kW)	(bar)	min.	max.	(m³/h)	db(A)
SCR 7,5 APM	7,5	10	36,0	57,0	2 100	66 ± 3
SCR 11 APM	11	10	48,0	90,0	3 500	70 ± 3
SCR 15 APM	15	10	60,0	120,0	3 500	70 ± 3

Dimensions and weights







Version	Model	Tank	Output	Dimensions (mm)			Weight
		(l)		Length	Depth	Height	(kg)
Base	SCR 7,5 APM	-	1/2"	890	720	930	220
	SCR 11 APM	-	3/4"	900	820	1 040	295
	SCR 15 APM	-	3/4"	900	820	1 040	300
TD	SCR 7,5 APM	270	1/2"	1 517	747	1 520	352
	SCR 11 APM	270	1"	1 517	847	1 632	474
		500	1"	1 938	847	1 736	550
	SCR 15 APM	270	1"	1 517	847	1 632	479
		500	1"	1 938	847	1 736	555
FF	SCR 7,5 APM	270	1/2"	1 517	873	1 520	359
	SCR 11 APM	270	1"	1 517	973	1 632	481
		500	1"	1 938	973	1 736	557
	SCR 15 APM	270	1"	1 517	973	1 632	486
		500	1"	1 938	973	1 736	562

Other data

Electrical voltage:	compressor 400V/50Hz/3ph, dryer and condensate drain 230V/50Hz/1ph
Dryer power:	SCR 7,5 APM - 370 W, SCR 11 APM and SCR 15 APM - 460 W power is not included in the power in the table for individual compressor models
Pressure dew point:	+3 °C (only for TD and FF versions) under reference conditions
Outlet air quality:	TD version - class 2-4-2, FF version - class 1-4-1 according to ISO 8573-1
Oil content in condensate:	< 20 ppm (FF version only)

FAD performance is measured in accordance with ISO 1217 and specified for the maximum pressure of the respective model; further FAD performance values at various frequencies and pressures are available in the technical data-sheets upon request. Noise level is given at 1 meter from the machine.



www.scr-kompresory.cz

Distributor of SCR compressors
for the Czech and Slovak Republics:

VSK Profi, s.r.o.
Hřbitovní 1324/27a
312 00 Plzeň - Doubravka

Phone +420 377 152 230
+420 377 152 211
E-mail info@scr-kompresory.cz

Your expert dealer:

©2026 SCR Shanghai Screw Compressors Ltd. - all rights reserved. All trademarks, product and company names, logos, images, graphics, and designs are the property of their respective owners. Our products are continuously developed and improved. We reserve the right to change product specifications without prior notice. Images are for illustration only.