RENO

INDUSTRY GUIDE AUTO

ENSURE CLEAN AIR WITH R-DRY REFRIGERATION DRYERS

Compression of the air develops heat, and on cooling condensation water is formed. A refrigeration dryer removes the water from the compressed air down to a predetermined dew point.

When compressed air is used for painting cars, high demands are placed on the quality of the air, and not least cleanliness. To obtain as dry air as possible, a refrigeration dryer should be installed. This can be installed together with both piston and screw compressors, depending on the size and needs of the workshop.

The air impurities can be post-treated with filters to achieve a cleaner compressed air.

Model	Art. no.	Effect	Capacity*		Max. pressure	Connection	Voltage	Weight	Dimensions
		kW	l/min.	m³/h	bar		V	kg	LxBxH (mm)
R-Dry 4	4102005984	0,13	350	21	16	3/4" M	230/1/50	19	493x350x450
R-Dry 6	4102005985	0,16	600	36	16	3/4" M	230/1/50	19	493x350x450
R-Dry 9	4102005986	0,19	850	51	16	3/4" M	230/1/50	20	493x350x450
R-Dry 12	4102005987	0,27	1200	72	16	3/4" M	230/1/50	25	493x350x450
R-Dry 18	4102005988	0,28	1825	110	16	3/4" M	230/1/50	27	493x350x450

CORRECTION FACTORS

Correction factors for ambient temperature							
	°C	25	30	35	40	45	
Ambient temperature	A	1,00	0,92	0,84	0,80	0,74	R-Dry 4 - 77
		1,00	0,91	0,81	0,72	0,62	R-Dry 100 - 840

Correction factors for air inlet temperature								
	°C	30	35	40	45	50	55	
Inlet temperature	B	1,24	1,00	0,82	0,69	0,58	0,45	R-Dry 4 - 77
		1,00	1,00	0,82	0,69	0,58	0,49	R-Dry 100 - 840

Correction factors for air inlet pressure														
	bar	5	6	7	8	9	10	11	12	13	14	15	16	
Operating pressure	C	0,90	0,96	1,00	1,03	1,06	1,08	1,10	1,12	1,13	1,15	1,16	1,15	R-Dry 4 - 77
		0,90	0,97	1,00	1,03	1,05	1,07	1,09	1,11	1,12	-	-	-	R-Dry 100 - 840

SELECT THE RIGHT COMPRESSOR FIRST TIME

It is crucial for any workshop that the chosen compressor fits the need optimally. An undersized solution quickly becomes an annoyance, while an oversized compressor is not profitable in the long run.

Before you decide, you should therefore consider the following elements.

Air volume and working pressure

The first thing to consider before choosing a new compressor is the amount of air you need, as well as the required working pressure. Should the compressor supply one workstation or more; how many must be able to use the compressor at the same time; and what should the compressed air be used for? If the compressor is to "only" operate smaller compressed air tools, the need is limited, but if the air is to be used for painting, for example, you need longer-lasting pressure.

Usage situation

Next, clarify the usage situation, including the physical location of the compressor. If the compressor is located close to the workstations, noise and odor nuisance must be taken into account. Should the compressor be mobile so that it can be moved around the workshop or installed in service cars?

Air quality

Finally, it is important to consider whether there are special requirements for air quality. If the compressed air is used in connection with painting, the air must be free from contamination, and finishing with e.g. filter is therefore necessary.

PISTON OR SCREW COMPRESSOR?

The choice between a piston and screw compressor depends primarily on the degree of load. In a piston compressor, the air is compressed with one or more pistons. These are suitable for compressing at intervals and the load factor should not exceed 50-60%.

The screw compressor, on the other hand, is optimized for continuous operation and can withstand a load ratio of 100%. Here the air is compressed by means of two opposite rotating screws. In addition, approx. 30% in energy by a screw compressor relative to a screw compressor.

1-3 WORKSTATIONS

In workshops with 1-3 workstations, there may be a need for both continuous or pause operation, depending on what the compressed air is used for.

Often a reciprocating compressor is recommended for this type of workshop, but at load rates above 60% it is a matter of continuous operation, and a screw compressor should therefore be chosen instead.

Interval operation

	Workshop
Motor (kW)	3 - 5,5
Efficient performance (l/min)	350 - 740
Options to assess	Particulate filter Oil and water separator Automatic water drainage

RENO recommends:
Model 970/500 or 710/90+90

Continuous operation

	Workshop	Workshop with painting
Motor (kW)	4 - 5,5	5,5 - 7,5
Efficient performance (l/min)	560 - 680	680 - 1000
Options to assess	Particulate filter - coarse and fine Oil and water separator Automatic water drainage	Adsorption dryer instead of refrigeration dryer

RENO recommends: FF Monsun 2 - 7

4-7 WORKSTATIONS

In workshops with 4-7 workstations, there is basically a need for continuous operation of the compressed air system. With this, a screw compressor should always be chosen, which can withstand loads up to 100% operation 24/7.

Continuous operation

	Workshop	Workshop with painting
Motor (kW)	5,5 - 7,5	7,5 - 11
Efficient performance (l/min)	680 - 1000	1000 - 1600
Options to assess	Particulate filter - coarse and fine Oil and water separator Automatic water drainage	Variable speed compressor Adsorption dryer

RENO recommends: FF Monsun Pro 5 - 7

8-12 WORKSTATIONS

In workshops with 8-12 workstations, there is basically a need for continuous operation of the compressed air system. With this, a screw compressor should always be chosen, which can withstand loads up to 100% operation 24/7.

Continuous operation

	Workshop	Workshop with painting
Motor (kW)	11	15
Efficient performance (l/min)	1600	2000 - 2500
Options to assess	Particulate filter - coarse and fine Oil and water separator Automatic water drainage	Variable speed compressor Adsorption dryer

RENO recommends: FF Monsun Pro 5 - 15

ALSO REMEMBER AN EFFECTIVE HIGH PRESSURE CLEANER

When washing and preparing vehicles and other equipment, it is important to have the right thing cleaning equipment. An efficient high-pressure cleaner makes work easier and ensures an optimal result.

When choosing the right high pressure cleaner, the two most important parameters are the type of dirt / coating to be cleaned and the quality of cleaning required.

Water temperature

In the automotive industry, a large amount of grease and oily coating is seen, which requires a high water temperature to clean. Therefore, it will often be necessary to choose a hot water purifier to achieve the best result.

Cleaning quality

The quality of cleaning must in principle be, so-called, physically or visually clean. This means that the requirement for water pressure and volume is lower than if the surface is to be bacteriologically clean.

Usage situation

Furthermore, a decision must also be made as to whether the system must be mobile or stationary.

If regular cleaning is carried out in the same place, a stationary cleaner is recommended. The advantage of this is the ability to assemble pumps so that the system can be used by several users simultaneously.

Mobile systems are traditionally used where the need for cleaning varies or where a high degree of flexibility is needed.

RENO recommends: Stationary Economic or Geyser M6

BRAKE CLEANER

Indispensable in any auto repair shop
With its ergonomic design, this handy brake washer, which quickly heats up fluid, is absolutely indispensable in any busy auto repair shop. Made of stainless steel plate and with stainless steel tank, which ensures long life.

RENO
www.reno.dk/en

THE AUTOMATIVE INDUSTRIES PREFERRED SUPPLIER

Compressed air is needed when working in an auto repair shop. Whether you need to inflate a tire, use compressed air tools or paint a car, you need the optimal compressor for the job. But which solution is best for your business?

Reno has been a supplier to the automotive industry for many years. Our expertise ensures you the best solution for your needs. With this guide, we help you on your way to finding the perfect solution, tailored to your needs.

Did you know that Reno also offers high pressure solutions? We can, as something very special, also help you in choosing a high-pressure cleaner for laundry or preparation. Read more in the guide on choosing an effective high-pressure solution.