



Worthington  
Creyssensac



**AIR COMPRESSORS** **ROLLAIR®**  
**80 - 100 - 125 - 150E**

# **OUR QUALITY IS YOUR GUARANTEE OF SATISFACTION**

***Our ambition at Worthington Creyssensac is to offer compressed air solutions that ensure we are first in choice for our customers.***

***To reach this goal calls for continuous investment in our product development to ensure that we are always able to offer the most suitable solutions at peak levels of efficiency.***

***Our ROLLAIR® 80-150E range is a result of this commitment to development and offers significant advantage in minimising compressor operating costs.***



## ***Increased Capacity***

The efficiency of our screw element combined with no compromise on the quality of components enable the ROLLAIR® 80-150E to achieve higher air flows with no increase in power consumption.

## ***Extremely low noise level***

Worthington cares passionately for the environment. We have invested heavily in the latest technology and materials to minimise noise pollution. Through the constant improvement of our manufacturing processes our engineers have been able to reduce the noise level of the ROLLAIR® 80-150E to the lowest of its generation.

## ***Minimum Space Requirement***

A combination of a small footprint and extremely low noise level means that you have more opportunities for installation. Consideration can now be given to installations closer to the point of work.

## ***Simple Maintenance***

Assuming correct and regular maintenance, the useful life of your compressor can be in excess of 10 years. The ROLLAIR® range is engineered with simplicity in mind for service access to minimise service time and costs. Only top quality components are used to guarantee long component life.



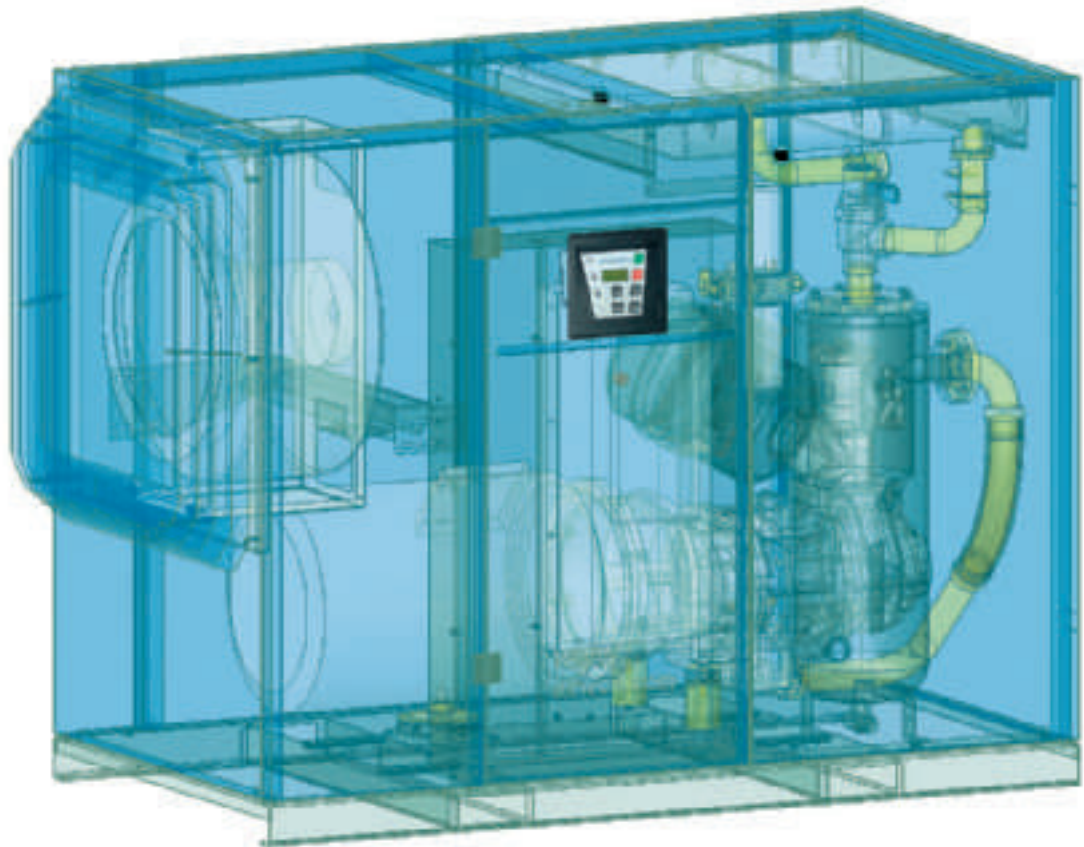
# ANTEE



**From the assembly to on site installation**, from the ordering to the maintenance of your machine, our work force is totally dedicated. Our services are operated in compliance with norm ISO 9001 and guarantee the high level of quality required by the industry. Yet, our best quality measuring tool will always be your entire satisfaction.

**We have more than 30 years experience** in the design and manufacture of rotary screw compressors. Over this time we have engineered major innovations in the field of

noise reduction, air flow efficiency and energy control. But this is not the whole story: we have also focused our attention on the longer term with optimisation and simplification of the maintenance requirements. We offer total support and backup for the life of your investment.



Design and component integration of the ROLLAIR® studied by our engineers on a 3D software

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## REDUCING ENERGY USE

The cost of electrical energy has a direct impact on the profitability of your operation and represents about 75% of the compressor operational cost. A Rollair® 100 (75 kW) running 12 hour a day, 365 day a year, will consume more than 250 000 kWh.

To provide you with the lowest energy cost we have developed high efficiency solutions.

**Screw element manufacturing** utilizes state of the art manufacturing equipment to achieve extremely high tolerances: more air for less kWh

**High efficiency cast iron IP 55 motors** which comply with the EFF1 standard are protected against atmospheric

contamination and their cooling efficiency results in longer service life.

**Direct transmission contributes** to lower energy requirements: none of the losses associated with belt transmissions. Reliability is guaranteed for the lifetime of your investment.

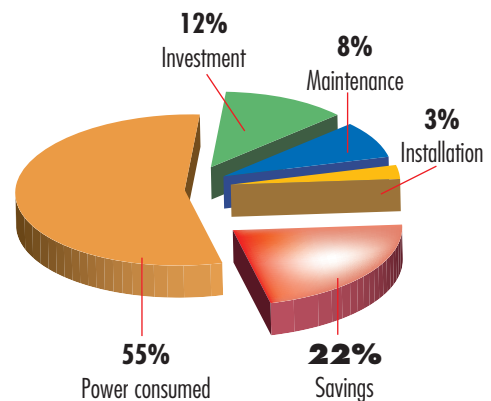
**Turbine fan reduces the energy** requirement as it uses up to half as much energy as its classical counterpart.

### EQUIPMENT THAT CAN HELP YOU ACHIEVE UP TO 30% ENERGY SAVINGS

#### **Variable speed: the most efficient way.**

Most compressed air requirements vary considerably during the production day. We can produce a comprehensive data log report on the current performance of your air system and demonstrate the potential savings achievable by adopting variable speed technology.

These savings can be as much as 30% and can result in a return on investment of less than 2 years.



## REDUCTION OF RUNNING TEMPERATURE

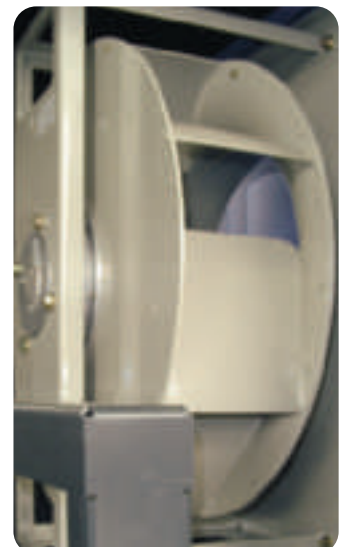
**Lower operating temperatures of electro mechanical equipment offers longer component life and reduced maintenance costs. By innovative design and selection of high quality components it has been possible to lower compression temperatures and thus increase reliability.**

Cooling air flow through the turbine fan is maximised with our exclusive pyramidal design inlet baffle due to its large inlet surface area.

This unique design inlet baffle allows the compressor to be installed close to a wall reducing the floor space requirement.

The turbine fan with an extremely low rotation speed of 930 rpm is more efficient, reliable and less noisy than its classical counterpart.

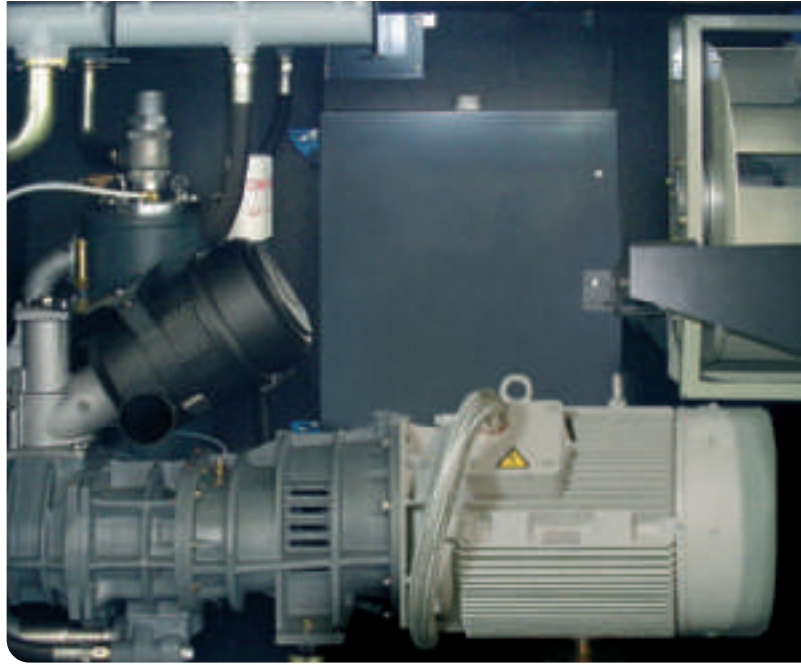
Mounted immediately above the motor, the primary source of heat, the turbine fan creates constant high capacity cooling which ensures that the operating



**The AIRLOGIC® controller:**

- An optimised management of the system pressure with precise regulation.
- The setting of 2 pressure ranges during a day to allow increased flexibility to match your compressor air flow to the fluctuation of demand within the production day.

**Reducing the generated air pressure by 1 bar will result in energy savings as high as 7 % of the power consumed.**



**LEADAIR®: total control and energy efficiency of multi compressor installations.**

*Selection of the best combination of compressors to suit your demand - Equalise running hours for efficient maintenance - Minimise energy consumption*



temperature of the motor stays low, thus contributing to a longer service life.

This unique design ensures uniform cooling air flow to all internal components.

Two generously sized aluminium coolers reduce the air temperature to 10°C above ambient and ensure a minimum oil temperature.

The coolers are positioned to allow free unobstructed flow of air across the entire cooling surface. This ensures maximum temperature reduction.

Both coolers are easily accessible to allow regular cleaning to avoid blockages that would increase the compressor operating temperature.





## MAINTAIN A CONSTANT AIR QUALITY

**Air quality is mainly influenced by the contaminants present in the atmospheric air. In addition to this, oil contamination is added as a result of the compression process. The high efficiency separation system minimises this contamination.**

The air inlet is located at a high level to prevent ingress of larger dust particles. The large surface of the inlet baffle lowers the air entry speed and limits the entry of dust particles.

The ROLLAIR® uses a two stage encapsulated filtration system. The first stage is cyclonic separation to remove the

larger particles. The air then passes through a second stage 2µ high efficiency filter media to ensure that only clean air enters the compression process.

Efficient oil separation is crucial to obtain high quality compressed air. The oil separation process follows three steps: first bulk oil is separated by cyclonic action and gravity to draw the oil to the bottom of the receiver vessel. The air/oil mixture then passes through high efficiency filter media to guarantee a residual oil level of less than 2 ppm.

Many options are available to ensure that your compressor can operate effectively in dusty conditions.

## CARE FOR THE ENVIRONMENT

**High noise levels are the cause of many problems in industry today:**

**Locating the compressor in a “compressor room” becomes a requirement. In addition to this are the necessary ventilation systems which themselves contribute to the noise problem.**

**Dedication of valuable factory floor space for this purpose reduces the available production space.**

**High noise levels can cause serious problems for people working close to it. Additional investment may be required to ensure noise levels in the workplace are within acceptable limits.**

The ROLLAIR® range is the result of a very stringent low noise level specification and complies fully with ISO14000.

The epoxy treated canopy is covered with high quality sound attenuating material.

The encapsulated filter reduces air entry speed and air inlet noise. As this is connected to the air intake it creates a barrier to any noise from the screw element.

The baffle reduces air entry speed and hence the inlet noise, but also create an obstacle to the machine noise emission.

The turbine fan has a much lower noise level than its classical counterpart.

Innovative design engineering:



45 dB(A)



60 dB(A)

**66**  
dB(A)



70 dB(A)



85 dB(A)

Ambient contamination protection:  
Air inlet filtration panels  
High efficiency intake filtration

Compressed air treatment:  
Water separator to remove bulk water contamination  
Micronic particle filter to smaller than 1 micron and residual oil content lower than 0.1 ppm.



The foam lining of the canopy and layout of internal components are specifically designed to limit the creation and transmission of noise to minimise the noise level of our compressors.

**Care for the environment**  
**Many installation possibilities**  
**Possible installation in the workspace to minimise pressure drop**



125 dB(A)



100 dB(A)

AIR COMPRESSORS **ROLLAIR**<sup>®</sup>  
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# **AIRLOGIC®**

## **AN ERGONOMIC COMMUNICATOR**

**AIRLOGIC® is the electronic controller used to manage all the ROLLAIR® range of compressors and ancillary equipment in order to simplify control and servicing.**

**Its intuitive navigation system, standard features for control and diagnosis, as well as its modular design offer real opportunities through monitoring of reducing the time and costs associated with visual control of your installation.**

### **FEATURES**

Configuration of the running mode: load/unload, modulating control (option), variable speed.  
Weekly schedule with 2 pressure bands available per day  
Pressure assisted oil change  
Standard running parameters can be manually modified  
Cascade auto restart  
Remote control and fault report available  
Calculation of a running time % for defined load levels (only for variable speed)  
Choice of 3 languages out of 25  
LEADAIR® compatible  
MULTILOGIC function: one controller can manage up to 4 compressors by using an algorithm equalizing running time (this requires cables and an option key)

### **ALARM and SAFETY**

Main motor rotation control  
Pressure drop detection through oil separator  
Number of motor start up limitation  
Protection against under pressure start up  
Protection against temperature reaching maximum or minimum levels  
Protection against over pressure in the oil receiver  
High oil temperature control  
Protection against low temperature start up  
Test of input / output  
History of defaults (5): record of input values.  
Prevent an auto restart after a long period of stop (can be deactivated)  
Auto restart after power outage.

## **MAKE YOUR MAINTENANCE EASY**

**One of our goals was to create a very efficient ROLLAIR® 80-150E.**

**To ensure the long term satisfaction of our customers we have also focussed on the ease of use and maintenance of our compressors.**

### **Component reliability**

For example

- The turbine extra air flow lowers the running temperature of the main motor.
- Separate air and oil coolers avoid thermal shock during regulation.
- Stress on motor shafts during start up is reduced due to the elastic coupling

### **Minimum maintenance**

The elastic coupling: manufactured from extremely durable material results in no regular maintenance of the drive train.

### **Increased accessibility**

All usual maintenance operations or servicing that involve large components is quick and easy.

- Coolers can be dismantled without disassembling the duct work, special supports make handling easy: this can be done by a single person.
- The motor-compressor block can be completely removed from the back of the unit
- All the consumables components are easily accessible from the front door.

**These are the key factors for minimising maintenance costs**





### **AIRLOGIC® OPTIONS:**

Optional Input/Output for management of external equipment

Examples of pressure control:

- Network pressure
- Network filters pressure drop

Examples of temperature control:

- Water temperature
- External dryer dew point
- External cooling system temperature control

Humidity sensor

Motor vibration measurement

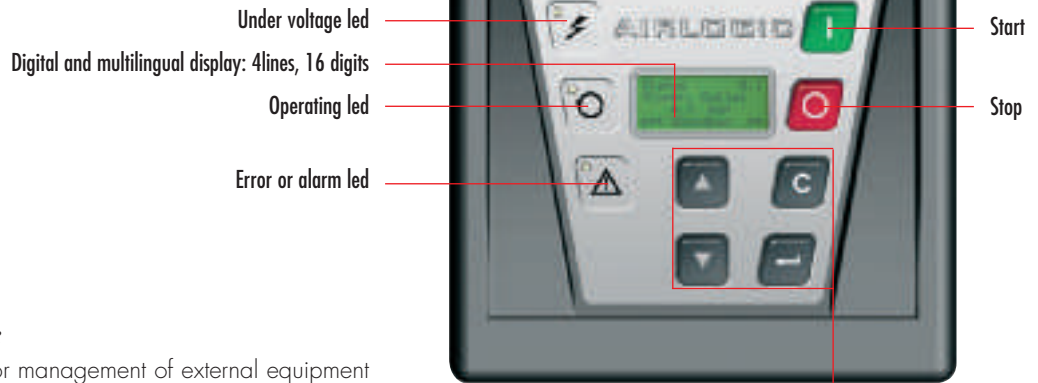
Motor winding temperature measurement

MODBUS communication module

PROFIBUS communication module

Remote control modules (intranet/Internet/network)

RS 485



Buttons for navigation and modification of parameters



To express confidence in our technology, we offer you the option of a 5-year warranty extension when the equipment is maintained in accordance with our *AIRPlus* maintenance contract— get more information from your local dealer.

**AIR+**

**AIR COMPRESSORS ROLLAIR®**

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# THE RANGE:

## ROLLAIR® 80-100-125-150E

A choice of 4 pressures  
7.5 - 8 - 10 - 13 (bar)  
Load/Unload regulation.  
AIR or WATER cooled

## ROLLAIR® V 80-100-125-150

covering a pressure band of 4 up to 9.5 bar  
or 7-12.5 bar in HP variant  
Variable speed.  
AIR or WATER cooled

### A large range of options for total flexibility.

Whether it would be harsh ambient conditions, strict environmental or safety requirements, specific air quality requirements, or cost reduction through energy recovery, the ROLLAIR range of compressors has the solution.

#### Harsh Ambient Conditions

- Air inlet filtration panels (1)
- High efficiency air inlet filter (2)
- Oil pre heating (3)

#### Energy efficiency

- Energy recovery (4)

#### Integrated filtration and treatment

- Water separator (5)
- Automatic drain (6)
- Condensate treatment (7)

#### Lubricant and servicing

- 4000h oil
- Food grade oil
- Oil retaining frame
- AIRPlus contract

#### Electronic

- Auto restart
- Phase control
- Modulating control
- Communication options of AIRLOGIC®
- LEADAIR® communication



## TECHNICAL DATA

Version	working pressure bar eff.	Output * reduced to suction conds.		Motor power		Cooling air volume		Water flow at 20°C WATER version (1) m³/h	Acoustic level **		Compressed *** air output diameter "	Weight kg
		m³/h	Cfm	kW	CV	AIR version m³/h	WATER version m³/h		AIR version dB(A)	WATER version dB(A)		
<b>ROLLAIR® 80</b>												
A	7,5	637		55	75	13000	4850	2,2	65	64	2"	1430
8 bar	8	612		55	75	13000	4850	2,2	65	64	2"	1430
B	10	536		55	75	13000	4850	2,2	65	64	2"	1430
C	13	433		55	75	13000	4850	2,2	65	64	2"	1430
<b>ROLLAIR® 100</b>												
A	7,5	882		75	100	13000	4850	4	66	65	2"	1480
8 bar	8	834		75	100	13000	4850	4	66	65	2"	1500
B	10	742		75	100	13000	4850	4	66	65	2"	1500
C	13	629		75	100	13000	4850	4	66	65	2"	1500
<b>ROLLAIR® 125</b>												
A	7,5	965		90	125	15000	4850	3	71	67	2"	1625
8 bar	8	964		90	125	15000	4850	3	71	67	2"	1625
B	10	880		90	125	15000	4850	3	71	67	2"	1605
C	13	712		90	125	15000	4850	3	71	67	2"	1625
<b>ROLLAIR® 150</b>												
A	7,5	1175		110	150	15000	4850	6	75	71	2"	1810
8 bar	8	1139		110	150	15000	4850	6	75	71	2"	1810
B	10	1025		110	150	15000	4850	6	75	71	2"	1810
C	13	880		110	150	15000	4850	6	75	71	2"	1790

\* as per ISO 1217 : 1996

\*\* as per CAGI PNEUROP PN8NTC2 \*\*\*G-thread

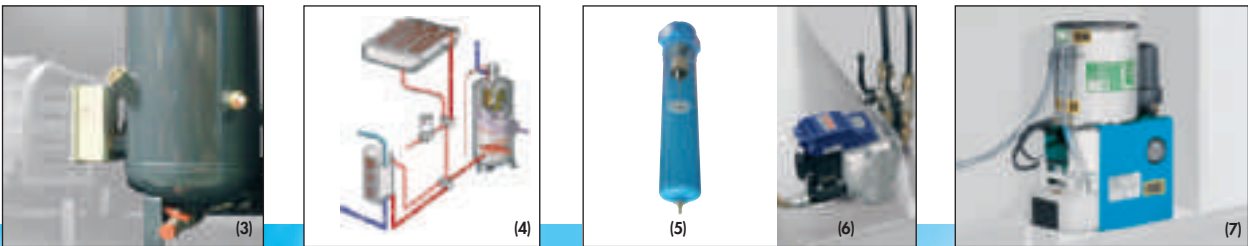
(1) WATER cooled version: Ø water inlet and water outlet: 1".  
The temperature of the air leaving the final cooling unit is 10°C higher than the input temperature.

# STANDARD INSTALLATION

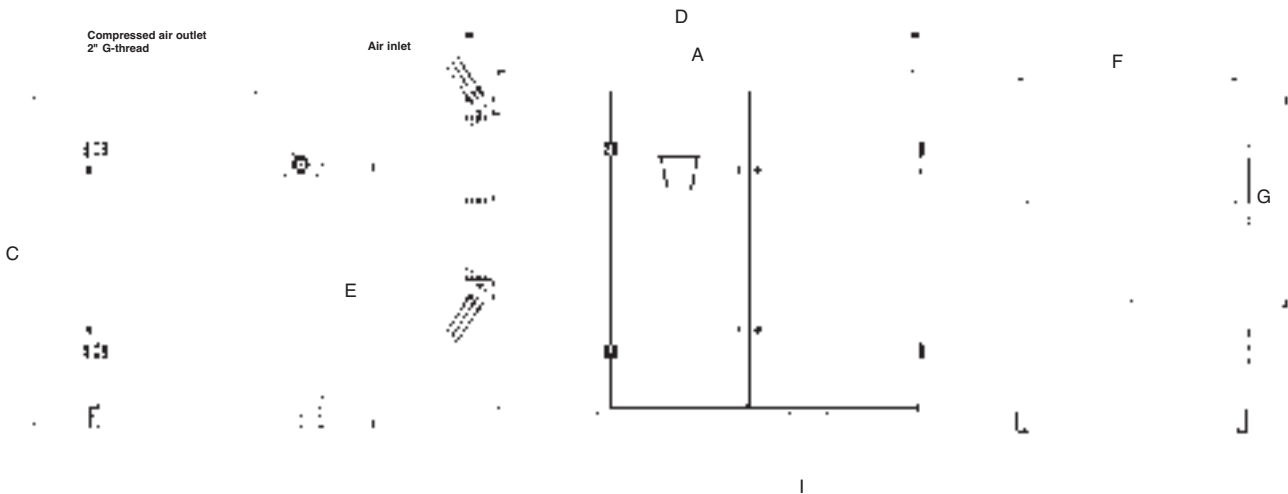
Thanks to its minimum footprint, its low noise level, and many integrated options, ROLLAIR® 80-150E can be installed directly in the workspace hence minimising piping work and pressure drop.



Water separator, condensate treatment and electronic drain integrated as options.



# DIMENSIONS



## ROLLAIR® 80-100-125-150E

Ref. marks	Version cooled by	
	AIR	WATER
A	2000	2000
B	1060	1060
C	1600	1600
D	2160	2120
E	1255	1255
F	1000	740
G	950	770

Ref.	Ducting opening drawing (calories extraction)			
	Air cooled version			
	RLR 80	RLR 100	RLR 125	RLR 150E
H	832	832	832	832
I	586	838	899	1054

# SHARING OUR VALUES



## **PARTNERSHIP**

Close working partnerships form the foundation of our corporate culture. This identity has grown from our strength in developing long term partnerships with our distribution and sales networks that have local knowledge and experience to provide a total compressed air solution service, tailored specifically to our customers' requirements.

Our business approach has earned us a reputation of trust and loyalty committed to achieving success through partnership.

## **COMPETENCE**

Personnel skill development is a vital part of our success: by a continuous improvement process we improve the ability of our personnel to maintain and improve the service to our customers.

We carry this process through for our partnership distributors to ensure that we create a motivated and enthusiastic team working together for the benefit of our customers.

## **EVOLUTION**

Our strategy in product and service development is based on continuous improvement of our products and services in order to meet the requirement of the market and our customers. Continued investment in the design of new products and the use of innovating technologies keep our compressed air solutions amongst the most competitive. This is our mission to guarantee the satisfaction and trust of our customers.

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### **YOUR DISTRIBUTOR**



**[www.airwco.com](http://www.airwco.com)**