

FIRST COMPRESSOR  
MANUFACTURER IN THE  
WORLD ACCREDITED

**ISO 50001**  
ENERGY MANAGEMENT



100% SYNTHETIC LUBRICANT  
FOR HIGH ENERGY EFFICIENCY  
SCREW COMPRESSORS

**METALPLAN**  
**AIRPOWER**



# METALPLAN IS NUMBER ONE IN ENERGY EFFICIENCY

As the absolute leader in screw compressors up to 25 hp in Brazil, Metalplan is the world's first\* compressor manufacturer accredited in ISO 50001 - Energy Management, demonstrating its commitment to energy efficiency, the foundation for sustainability and competitiveness of companies.

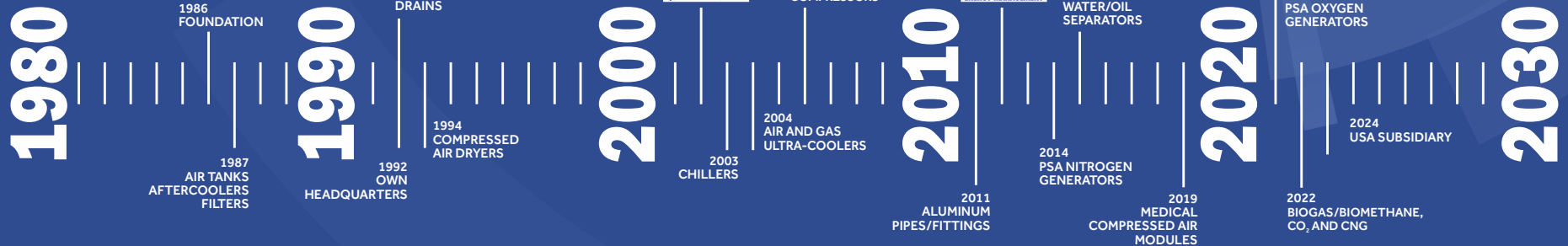
Founded in 1986, Metalplan has a production area of 6.000 m<sup>2</sup>, developing innovative equipment with a high level of nationalization, exporting to over 20 countries.

Its network of authorized distributors and service centers includes over 300 highly specialized companies with extensive geographic coverage, capable of servicing over 100.000 operating equipment.

In recent years, Metalplan has been expanding its horizons to disruptive technologies in gases and renewable energies, such as on-site generation and compression of nitrogen, oxygen, biogas, biomethane, CO<sub>2</sub> and CNG.



\*in the compressed air, gases and industrial refrigeration segment.



EcoBlue, the premium lubricant with Metalplan's blue DNA



## ROTOR OIL EXTRA *EcoBlue*

100% SYNTHETIC LUBRICANT  
FOR HIGH ENERGY EFFICIENCY  
SCREW COMPRESSORS

In 2012, ahead of other compressor manufacturers worldwide, Metalplan achieved ISO 50001 certification - Energy Management, providing Brazil with unprecedented know-how in energy efficiency.

Our determination to offer products to the market that deliver maximum performance drove the development of **EcoBlue**, an unbeatable synthetic lubricant, no matter what aspect is evaluated.

All Metalplan screw compressors are originally supplied with **EcoBlue**, ensuring absolute operational reliability and **maximum isothermal efficiency**.

**3**  
mg/m<sup>3</sup>

Minimizes residual oil content in the discharge.

**8000**  
hours

Provides long oil change intervals



Allows the compressor to operate at lower temperatures with high **isothermal efficiency**.



Reduces sludge and scale formation.



High antifoaming and antioxidant power.



Minimizes friction and provides longer life for compressor unit bearings.



Excellent stability and anticorrosive protection in the presence of moisture.



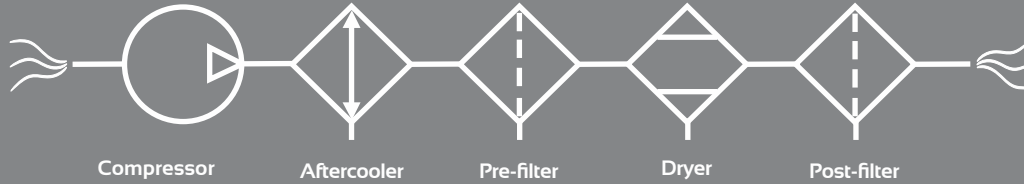
For situations where the slightest presence of oil is not tolerable, a synthetic, non-toxic, colorless, odorless lubricant of the food-grade type approved and recommended by: National Health Surveillance Agency



# COMPRESSED AIR FUNDAMENTALS



## ISO 8573 STANDARD INSTALLATION



Compressor

Aftercooler

Pre-filter

Dryer

Post-filter

## CONTAMINANTS & QUALITY CLASSES

class	SOLID PARTICLES maximum number of particles per m <sup>3</sup> (d = particle size)			class	WATER moisture dew point (°C)	class	OIL - total concentration (liquid/aerosol/vapor) (mg/m <sup>3</sup> )
	0,1µm < d ≤ 0,5µm	0,5µm < d ≤ 1µm	1µm < d ≤ 5µm				
<b>0</b>	<b>CLASS ZERO - as specified by the user or equipment supplier and stricter than Class 1</b>						
<b>1</b>	≤ 20.000	≤ 400	≤ 10	<b>1</b>	-70	<b>1</b>	≤ 0,01
<b>2</b>	≤ 400.000	≤ 6.000	≤ 100	<b>2</b>	-40	<b>2</b>	≤ 0,1
<b>3</b>	-	≤ 90.000	≤ 1.000	<b>3</b>	-20	<b>3</b>	≤ 1
<b>4</b>	-	-	≤ 10.000	<b>4</b>	+3	<b>4</b>	≤ 5
<b>5</b>	-	-	≤ 100.000	<b>5</b>	+7	<b>5</b>	-
	Mass concentration - C <sub>p</sub> (mg/m <sup>3</sup> )	<b>6</b>	+10	<b>6</b>	-		
		Liquid Water C <sub>w</sub> g/m <sup>3</sup> )					
<b>6</b>	0 < C <sub>p</sub> ≤ 5						
<b>7</b>	5 < C <sub>p</sub> ≤ 10	<b>7</b>	C <sub>w</sub> ≤ 0,5	<b>7</b>	-		
<b>8</b>	-	<b>8</b>	0,5 < C <sub>w</sub> ≤ 5	<b>8</b>	-		
<b>9</b>	-	<b>9</b>	5 < C <sub>w</sub> ≤ 10	<b>9</b>	-		
<b>X</b>	C <sub>p</sub> > 10	<b>X</b>	C <sub>w</sub> > 10	<b>X</b>	> 5		

## ISO 8573 COMPRESSED AIR FOR GENERAL USE

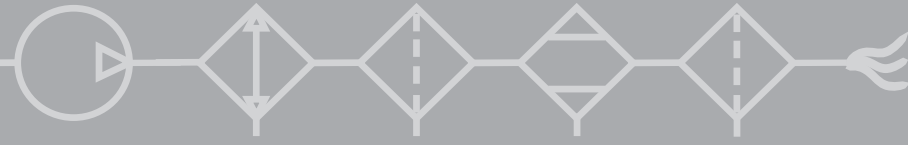
ISO 8573 is the international reference for compressed air systems, focusing on contamination levels.

The standard has various quality classes that serve multiple applications in industry and services, excluding human breathing and medicinal use.

Published in 1991, it was translated by Metalplan in 1992, positioning Brazil at the forefront of its utilization.

Its 3rd edition is from 2010, when Class Zero was introduced, with purity levels stricter than those found in Class One.

# COMPRESSED AIR FUNDAMENTALS



ISO 8573 TYPICAL SYSTEMS	quality class	APPLICATIONS
	[1:6:1] <sup>2</sup>	Dry air, with dew point between 5°C and 15°C. Ideal for low flows and protection of valves, cylinders, pneumatic tools, automation, blasting, painting, etc.
	[1:6:1] <sup>2</sup> [1:6:0] <sup>2</sup>	Activated carbon filter eliminates odors, with residual oil of 0.003 mg/m <sup>3</sup> , suitable for dental clinics and similar applications, except for human breathing.
	[1:4:1]	This is the most used treatment system in the industry. Its level of protection meets various sectors such as automotive, plastic, textile, paper, mechanical, metallurgical, etc.
	[1:4:0]	Quality similar to the previous system, with odor elimination and lower residual oil (0.003 mg/m <sup>3</sup> ), important in N <sub>2</sub> and O <sub>2</sub> generation and in the food, chemical, pharmaceutical industries, etc.
	[1:4:0]	Quality similar to the two previous systems, in terms of "water" and "solid particles". Meets Class Zero for the "oil" contaminant with total safety.
	[1:2:1]	Prevents vapor absorption when air comes into direct contact with hygroscopic materials (cement, resins, powdered or freeze-dried foods and pharmaceuticals). Prevents freezing when air is subjected to negative temperatures. Applied in the generation of gases of very high purity.
	[1:2:1] [1:1:1]	Low dew point and maximum particle retention are essential in the manufacture of optical fibers, chips, critical instrumentation, steelmaking, nuclear reactors, etc.
	[1:2:0] [1:1:0]	Quality similar to the two previous systems, in terms of "water" and "solid particles". Meets Class Zero for the "oil" contaminant with total safety.

1 Energy Plus and Titan Plus dryers have integrated pre and post-filters  
2 only if the compressed air inlet temperature is < 25°C

Install an AQUA + condensate treatment system.

IMPRINTS OF OUR HISTORY





# AFTER-SALE SERVICES



96% OF CUSTOMERS FULLY SATISFIED

In an Annual ISO 9001 Audited Survey, we achieved a 96% customer satisfaction rate for Technical Assistance. This percentage corresponds to the evaluations above 7 (seven), on a scale of 0 (zero) to 10 (ten).

This success is due to over 70 authorized workshops and 200 accredited technicians throughout American continent, supported by an exclusive partnership with National Service for Industrial Training for mechanic training, making our After-Sales Service the most acclaimed in the market.

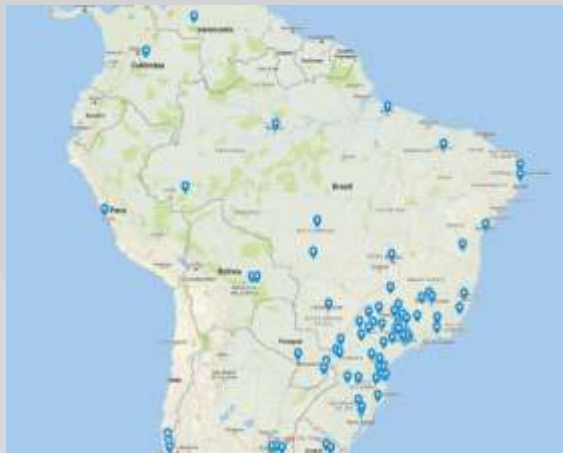


Typical facade

## COMPREHENSIVE INVENTORY OF ORIGINAL PARTS



MAXIMUM EFFICIENCY IN AFTER-SALES SERVICE



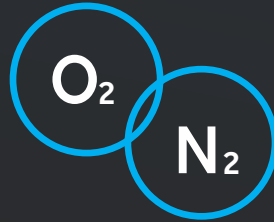
**70** WORKSHOPS CERTIFIED  
**200** SPECIALIZED TECHNICIANS

# OUR SOLUTIONS



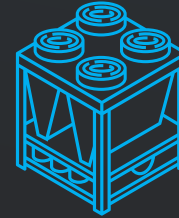
## COMPRESSED AIR

- COMPRESSORS
- DRYERS AND FILTERS
- RESERVOIRS
- 100% ALUMINUM PIPING



## OXYGEN & NITROGEN

- OXYGEN GENERATORS  
PSA / VSA ON SITE
- NITROGEN GENERATORS  
PSA ON SITE



## INDUSTRIAL REFRIGERATION

- WATER CHILLERS
- ULTRA AIR AND GAS COOLERS (-35°C)
- THERMOCHILLERS
- DRY COOLERS



## BIOGAS & CNG

- COMPRESSORS FOR BIOGAS, BIOMETHANE AND CNG
- BOOSTERS
- CHILLERS
- DISPENSERS

e-line

### ROTARY SCREW COMPRESSORS



4 to 25 hp

### REFRIGERATION DRYERS



20 to 250 pcm

### ABSORPTION DRYERS



6 to 32 pcm

### COALESCING FILTERS



25 to 300 pcm

### AUTOMATIC DRAIN VALVES



electronic & magnetic

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