



TITAN PLUS

REFRIGERATION
DRYERS

WITH INTEGRATED
PRE AND POST FILTERS

METALPLAN

FIRST COMPRESSOR
MANUFACTURER IN THE
WORLD ACCREDITED

ISO 50001
ENERGY MANAGEMENT

REFRIGERATION DRYERS **TITAN PLUS**

**UNRIVALED LEADER
FOR OVER 20 YEARS**



WITH
INTEGRATED
PRE AND POST
FILTERS



Titan Plus **Laser**
high pressure,
specially designed
for laser cutting.

Titan Plus refrigerated air dryers have led the compressed air treatment market for over 20 years, as they truly simplify the user experience, with **integrated pre- and post-filters** in their cabinet, saving installation time and costs

20 to 250 cfm

**THE TITAN PLUS DRYER IS INTEGRABLE
WITH THE ROTOR PLUS COMPRESSOR**



LEGO* GENERATION
INTEGRABLE TANK,
DRYER, AND FILTERS

*LEGO GROUP TRADEMARK

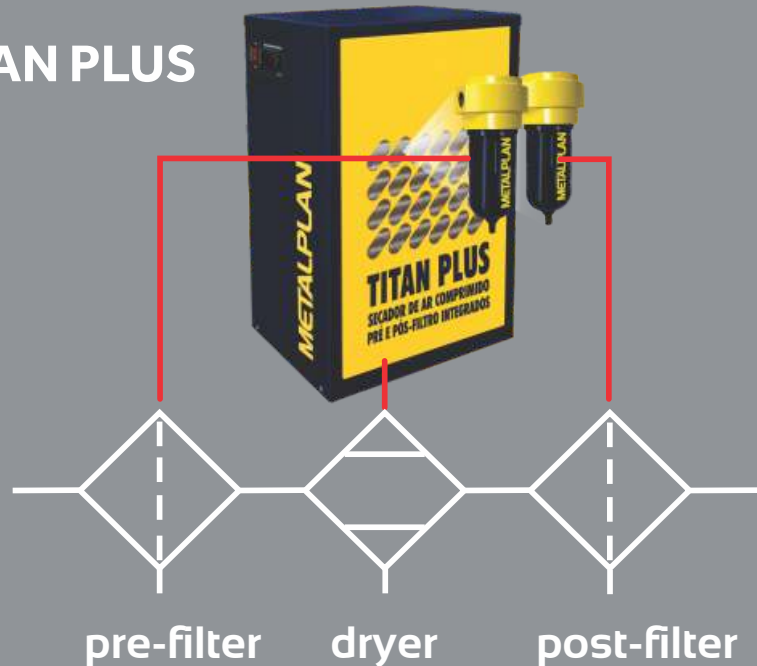
The Titan Plus is a robust and cost-effective dryer that incorporates all the technology developed by Metalplan over the last three decades. This dryer removes water, oil, and solid particles from the compressed air, improving the quality and productivity of your company.

KEY FEATURES

- Electronic panel.
- Ecological gas.
- Programmable electronic drain.
- Designed for all weather conditions.
- Compatible with any type of compressor.
- Eliminates the need for piping and installation labor.
- Hot gas by-pass valve, anti-freezing.
- Low pressure drops.
- Zero leakage of refrigerant fluid.
- Thermal insulation without environmental losses.
- Vertical construction: maximum condensate separation.

UNIQUE DRYER WITH INTEGRATED PRE AND POST-FILTERS

TITAN PLUS



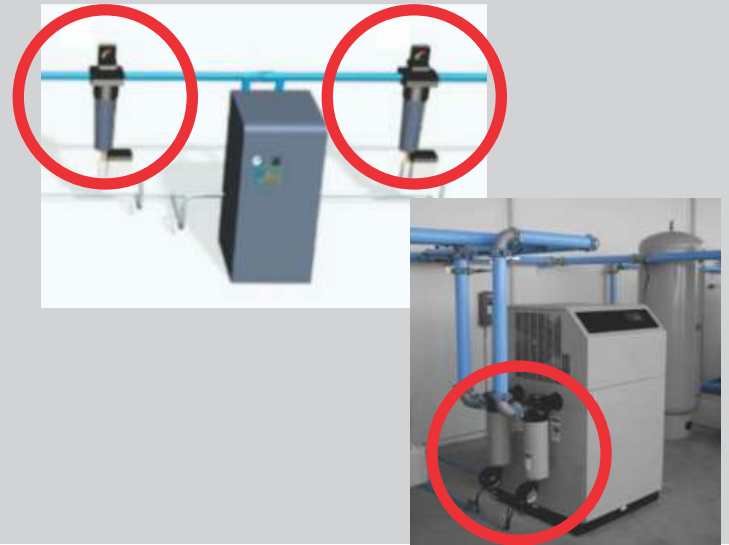
The international ISO-8573 standard requires the installation of a pre-filter and a coalescing post-filter along with the refrigeration dryer.

The Titan Plus is a refrigeration dryer that features coalescing filters integrated into its cabinet, providing significant savings in the acquisition,

installation, and maintenance of the system, as well as maximum energy efficiency with minimal pressure loss.

As if that wasn't enough, the coalescing post-filter operates at the coldest point of the dryer, enhancing moisture removal performance to unbeatable levels.

DRYERS CONVENTIONAL



All dryers available in the market require the separate acquisition and installation of coalescing filters, generating unnecessary additional costs. Furthermore, this configuration does not allow for the installation of the post-filter at the coldest point of the dryer, compromising the dryer's performance.

THE SUPERIORITY OF COALESCING FILTRATION AT THE COLDEST POINT OF THE DRYER



MECHANICAL SEPARATOR (CYCLONE)

Total efficiency below 70%



The efficiency of mechanical condensate separators (cyclones) is 99% in heavy condensate removal and **0% (zero percent)** in aerosol removal.

COALESCING FILTER

Total efficiency above 99.99%



The efficiency of coalescing filters is 100% in heavy condensate removal and **99.99%** in aerosol removal.

MECHANICAL SEPARATOR VS. COLD COALESCING POST-FILTER

The condensate present in the compressed air at a temperature of 3°C, pressure of 7 bar(g), and relative humidity of 100% consists of:

70% = "heavy" condensate - $vq > 0.25$ m/s.

30% = "light" condensate (aerosols) - $vq < 0.25$ m/s.

The lower the temperature of the compressed air, the more condensate forms. Therefore, all dryer manufacturers install the condensate separator at the coldest point of the dryer, between the air-to-refrigerant heat exchanger and the air-to-air heat exchanger.

In Titan Plus dryers, the coalescing post-filter is also installed at the coldest point. However, as it is a coalescing filter and not a mechanical condensate separator, the separation efficiency increases from 70% to 99.99%.

Attention: installing the coalescing post-filter at the dryer's outlet has no practical effect, as the compressed air has already been re-heated and there is no more condensate at that point, only water vapor, seriously compromising the dew point.

Request an independent laboratory to measure the dew point and compare the efficiency of the Titan Plus dryer with conventional dryers.

THE BRAZILIAN POST OFFICE CHOSE METALPLAN

The new Sorting Center for Correios is a model of innovation in order processing. All compressed air is generated and treated by a skid of Rotor Plus compressors and a Titan Plus dryer, with Integrated pre and post filters.



TECHNICAL DATA

Integrated M40 grade coalescing pre-filter	Dryer	Integrated M20 grade coalescing post-filter	Flow Rate		In/Out (BSP)	Dimensions (mm)			Weight (kg)	Power (kW)	Power Supply (V/f/Hz)	ROTOR PLUS Compressor compatible
			cfm	m³/h		length	height	width				
ND	Titan O20	ND	20	34	3/4"	380	661	318	27	0,3	220/1/60	Rotor Plus 04
MFCi-O40-M40 ⁴	Titan Plus O40 ¹	MFCi-O40-M20 ⁴	40	68	3/4"	484	661	315	34	0,3	220/1/60	Rotor Plus 06 and 10
MFCi-O70-M40 ⁴	Titan Plus O70 ²	MFCi-O70-M20 ⁴	70	119	3/4"	534	751	365	40	0,5	220/1/60	Rotor Plus 15 andy 20
MFCi-O70-M40 ⁴	Titan Plus <i>Laser</i>	MFCi-O70-M20 ⁴	70	119	3/4"	534	751	365	40	0,5	220/1/60	Rotor Plus <i>Laser</i>
MFCi-I10-M40 ⁴	Titan Plus 110 ³	MFCi-I10-M20 ⁴	110	187	3/4"	554	806	365	45	0,6	220/1/60	Rotor Plus 25
MFCi-I50-M40	Titan Plus 150	MFCi-I50-M20	150	255	1"	557	713	656	68	1,1	220/1/60	—
MFCi-200-M40	Titan Plus 200	MFCi-200-M20	200	340	1"	557	713	656	72	1,3	220/1/60	—
MFCi-250-M40	Titan Plus 250	MFCi-250-M20	250	425	2"	561	760	656	82	1,5	220/1/60	—

Reference Conditions: ISO 7183-A2

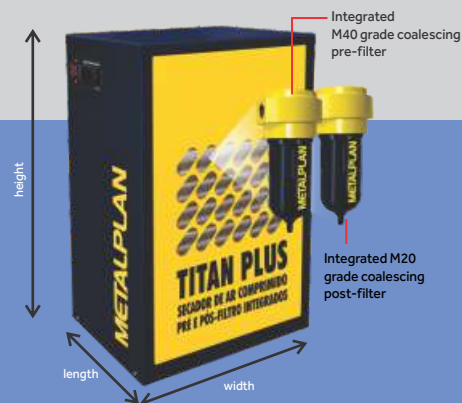
Maximum working pressure: 12.5 bar(g) - 16 bar(g) in the Laser model.

Air quality: ISO-8573, Classes 1.4.1 / 1.6.1

- 1 - Integrable with Rotor Plus 10
- 2 - Integrable with Rotor Plus 15 and 20
- 3 - Integrable with Rotor Plus 25
- 4 - With Hi-Flux Gemini element
- ND - Not available



Prior to the dryer, the compressed air temperature should not exceed 42°C.
The dryer capacity should be reduced if operating conditions differ from design conditions.



MARKS OF OUR HISTORY



ROTARY SCREW COMPRESSORS



4 to 25 hp

OIL INJECTED ROTARY SCREW COMPRESSORS



10 to 250 hp

OIL FREE SCROLL COMPRESSORS



5 up to 50 hp

BOOSTERS



20 up to 250 bar

REFRIGERATED DRYERS



20 to 9.600 cfm

DELIQUESCENT DRYERS



6 up to 32 cfm

DESICCANT DRYERS



15 up to 20.000 cfm

BREATHING AIR PURIFIERS



15 up to 800 cfm

COALESCING / ADSORBENT MICROBIOLOGICAL FILTERS



25 to 10.000 cfm

AUTOMATIC DRAINS



ELECTRONIC & MAGNETIC

WATER/OIL SEPARATOR



<5 mg/m³

AIRLINE



PIPES & FITTINGS
100% ALUMINUM
25 up to 160 mm

OXYGEN PSA GENERATORS



PURITY FROM
93% up to 95%

NITROGEN PSA GENERATORS



PURITY FROM
95% up to 99.999%

ISO TOWER CLASS ZERO



60 up to 2.000 cfm

CHILLERS



1.000 up to 720.000 kcal

AIRCARE



**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 SENAI for mechanic training, making our After-Sales Service the most acclaimed in the market.



Typical store

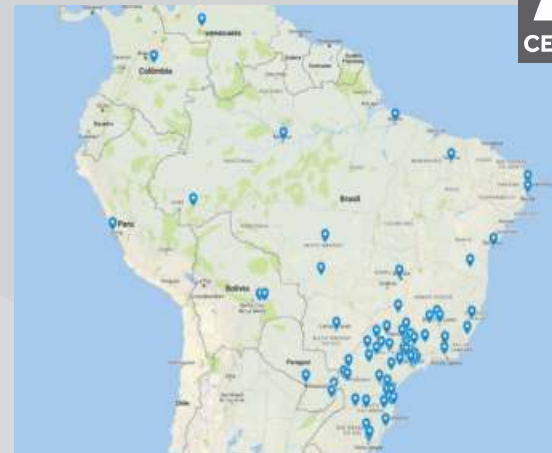
COMPREHENSIVE INVENTORY OF ORIGINAL PARTS



**MAXIMUM EFFICIENCY
IN AFTER-SALES SERVICE**

70
CERTIFIED
WORKSHOPS

200
SPECIALIZED
TECHNICIANS



METALPLAN IS NUMBER ONE IN ENERGY EFFICIENCY

As the absolute leader in rotary 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 m², 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, CO₂ and GNV.

ISO 9001

ISO 50001



METALPLAN

www.metalplan.com
export@metalplan.com.br

55 11 4448-6900 |    

FIRST COMPRESSOR
MANUFACTURER IN THE
WORLD ACCREDITED

ISO 50001
ENERGY MANAGEMENT