



VAZDELAR
SISTEMAS DE PINTURA



KNOW - HOW

OUR COMPANY HAS DEVELOPED A SPECIFIC KNOW-HOW FOR THE USE OF NITROGEN ENRICHED AIR IN PAINT PROCESSES

TECHNOLOGY

THE TECHNOLOGY FITS ANY KIND OF PROCESS: PNEUMATIC, ELECTROSTATIC AND ROTARY BELLS, BOTH FOR SPRAY PAINTING AND POWDER COATING. NITROGEN IS PRODUCED ON-SITE USING THE MAIN LINE COMPRESSED AIR AS SOURCE

PROCESS OPTIMIZATION

WE CAN OPTIMIZE YOUR PROCESS THROUGH THE EVALUATION OF YOUR STANDARD PRODUCTION PARAMETERS AND SETTINGS REPROGRAMMING



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NITROTHERMSPRAY

COVERED BY
INTERNATIONAL
PATENT



FEATURES

INERT CARRIER
LOW PRESSURE
CONSTANT TEMPERATURE
IONIZATION

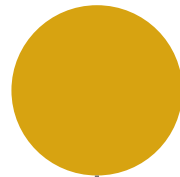
BENEFITS

PAINT SAVING
HIGHER QUALITY
INCREASED PRODUCTIVITY
ECO-FRIENDLY

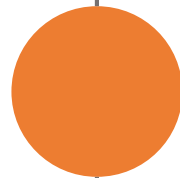




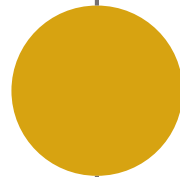
BENEFITS



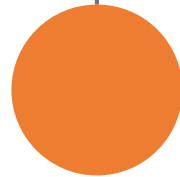
REDUCTION OF THE
OVERSPRAY
UP TP 30% OF PAINT SAVINGS



LESS MAINTENANCE
FOR BOOTH AND FILTERS



SCRAP PARTS
REDUCED

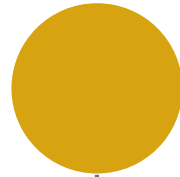


TIME CYCLE REDUCED
PRODUCTIVITY INCREASED UP
TO 20%

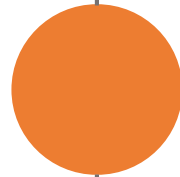




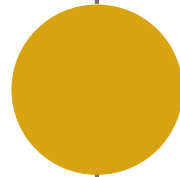
BENEFITS



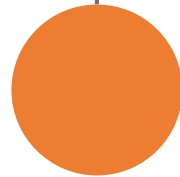
SURFACE MOISTURE
REMOVAL



REDUCTION OF
"ORANGE PEEL"



COLOR MATCHING
IMPROVEMENT



100% CONTROL OF
DELIVERY

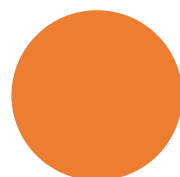


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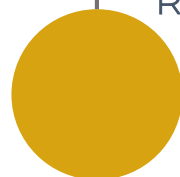




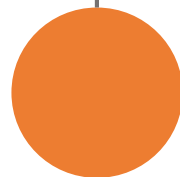
BENEFITS



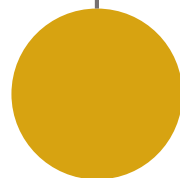
INCREASED TRANSFER
EFFICIENCY



REDUCTION OR ELIMINATION
OF THE WAITING TIME IN
COATING PROCESS
“WET ON WET”



REDUCTION OF
APPLICATION TIME
BY 25-50%



INCREASED LINE SPEED

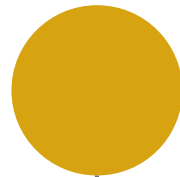


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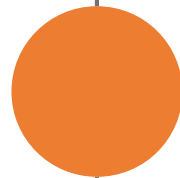




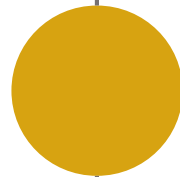
BENEFITS



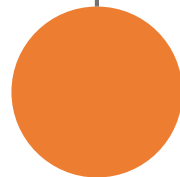
IMPROVED WORKING
CONDITIONS



UP TO 50% REDUCTION
OF SOLVENT USE



REDUCTION OF
VOC EMISSIONS



ACCESS TO "GREEN
CERTIFICATES"



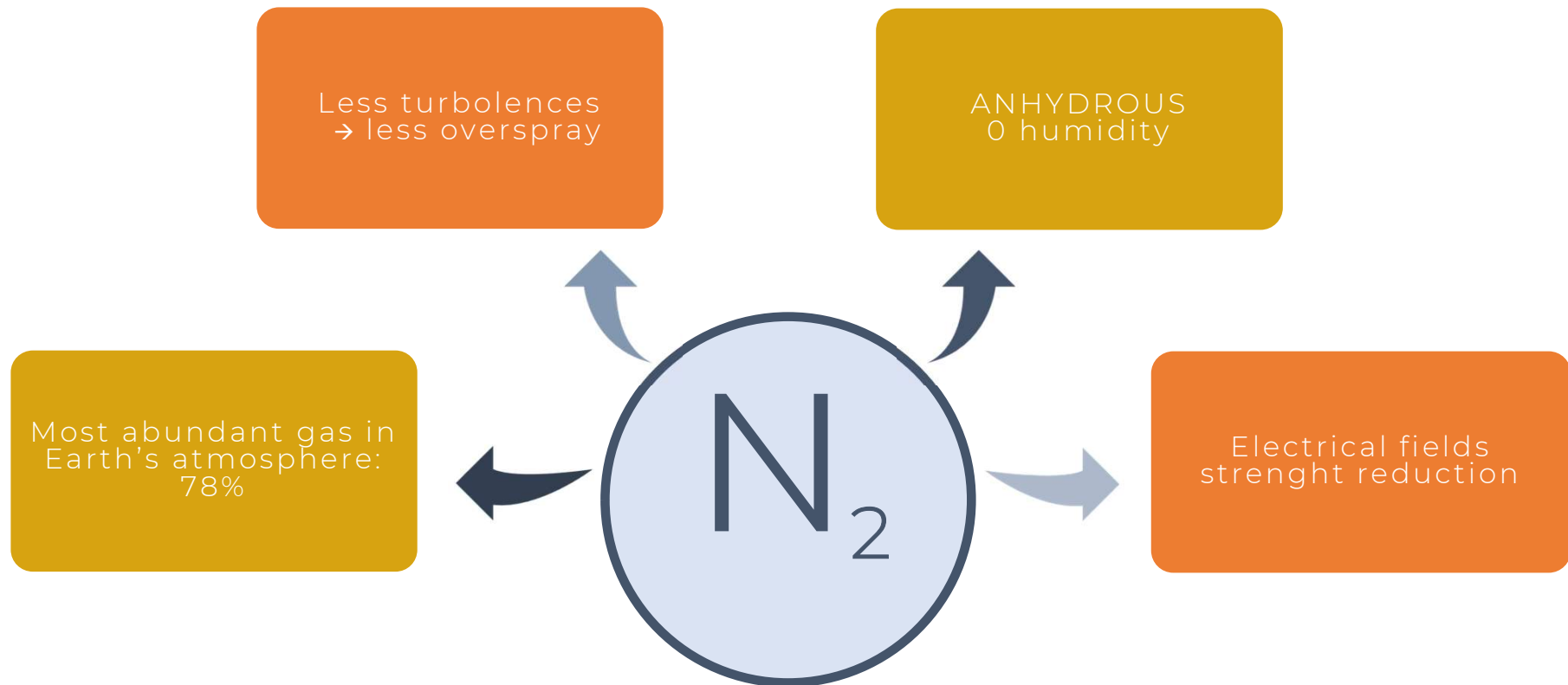
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FEATURES

NITROGEN

WHY TO PREFER N₂



FEATURES

PARTICLES SPEED COMPARISON

PNR Italia Srl, an Italian company active since 1968 in the manufacturing of spraying equipment for industrial use and in systems based on technologies for pulverisation of liquids, has carried out using special laser test equipment a comparison study between compressed air and nitrogen in spraying conditions. Particles speed: 1.8 times faster in aerosol conditions. The measurements have been carried out with application pressure of 1 bar (145 psi g). Turbulence Intensity: 7.62 p.p. less or 17.55% less).

COMPRESSED AIR

	Channel 1	Channel 2	Channel 3
Velocity Mean (m/sec)	7.2452	0.0000	0.0000
Velocity RMS (m/sec)	3.1451	0.0000	0.0000
Turbulence Intensity (%)	43.41	0.00	0.00
Frequency Mean (MHz)	5.1257	0.0000	0.0000
Frequency RMS (MHz)	0.4886	0.0000	0.0000
Frequency TI (%)	9.53	0.00	0.00
Gate Time Mean (usec)	10.71	0.00	0.00
Gate Time RMS (usec)	10.64	0.00	0.00
Data Rate (Hz)	9033	0	0
Valid Count	5000	0	0
Invalid Count	0	0	0
Elapsed Time (sec)	0.8304		

NITROGEN

	Channel 1	Channel 2	Channel 3
Velocity Mean (m/sec)	13.1753	0.0000	0.0000
Velocity RMS (m/sec)	4.7149	0.0000	0.0000
Turbulence Intensity (%)	35.79	0.00	0.00
Frequency Mean (MHz)	6.0470	0.0000	0.0000
Frequency RMS (MHz)	0.7325	0.0000	0.0000
Frequency TI (%)	12.11	0.00	0.00
Gate Time Mean (usec)	6.08	0.00	0.00
Gate Time RMS (usec)	4.58	0.00	0.00
Data Rate (Hz)	5530	0	0
Valid Count	5000	0	0
Invalid Count	0	0	0
Elapsed Time (sec)	1.3566		

HOW DOES SPEED AFFECT PAINTING?

✓ Low paint flow application

✓ Low pressure application

FEATURES

PARAMETERS



NITROGEN
PURITY

%

A selective permeation system through a special membrane allows to reach a concentration of 97%±2 nitrogen purity

IONIZATION

+ / -
kW

The *Destatic option* allows to charge the nitrogen flow (either positive or negative charge) ±20kW

TEMPERATURE

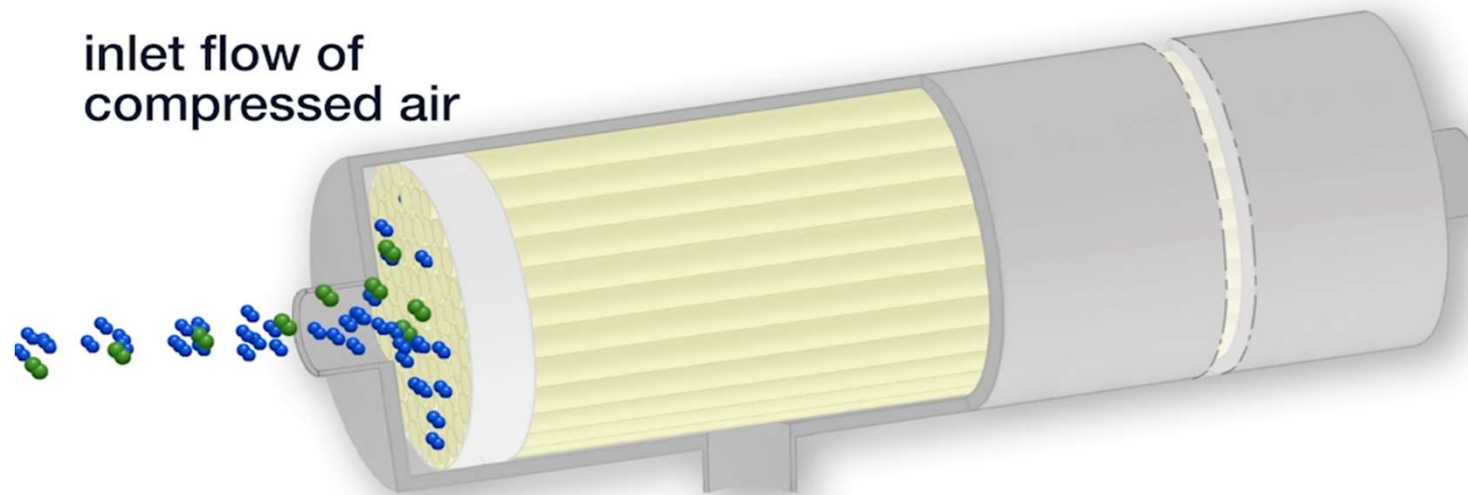
°C

A conditioning system enables temperature control between 0-80°C

FEATURES

SELECTIVE PERMEATION

HOLLOW FIBERS MEMBRANE



SELECTIVE PERMEATION

IONIZATION

TEMPERATURE CONTROL

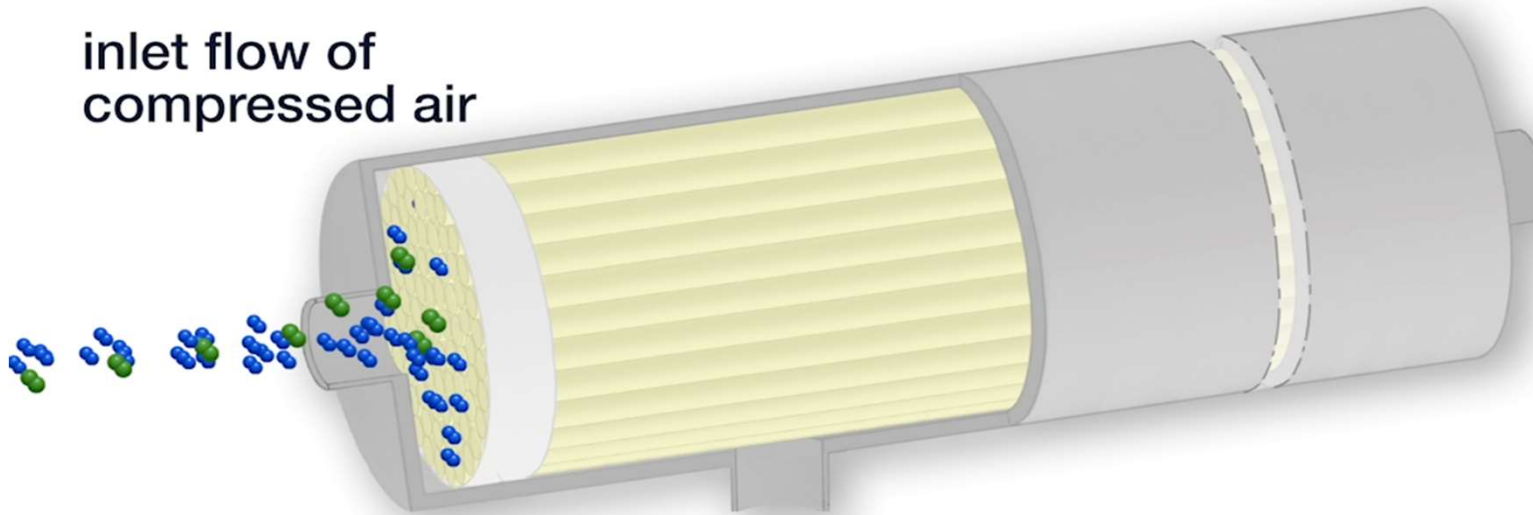
FEATURES

DESTATIC OPTION

HOLLOW FIBERS MEMBRANE



inlet flow of
compressed air



SELECTIVE PERMEATION

IONIZATION

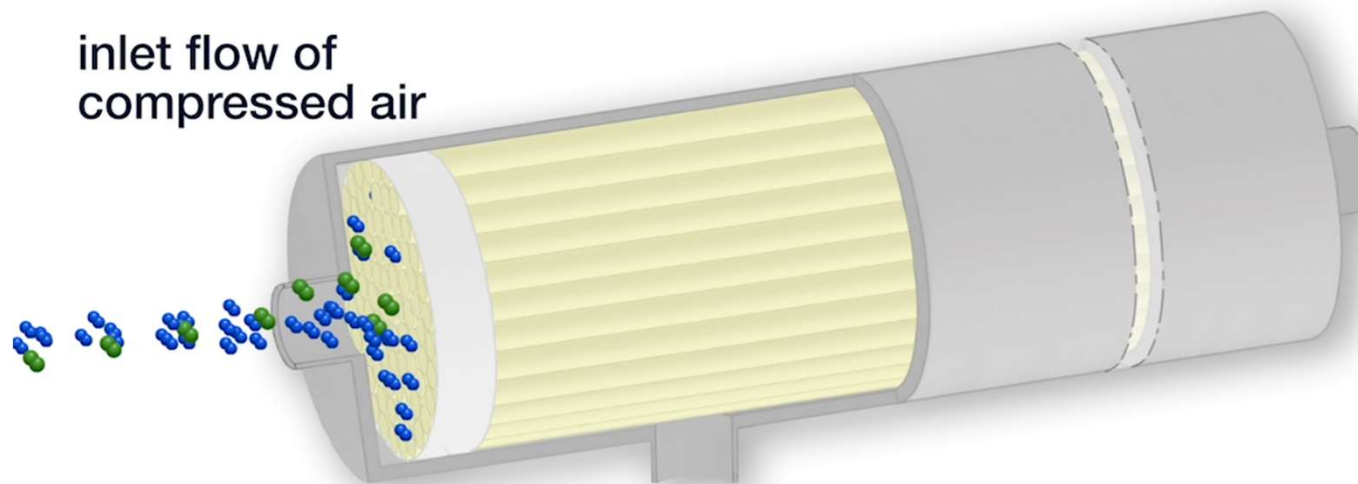
TEMPERATURE CONTROL

FEATURES

TEMPERATURE CONTROL



HOLLOW FIBERS MEMBRANE



SELECTIVE PERMEATION

IONIZATION

TEMPERATURE CONTROL

THE IMPORTANCE OF PARAMETERS CONTROL

SELECTIVE PERMEATION

FEATURES



%

NITROGEN PURITY

UNIFORMITY

NO HUMIDITY

+ / -
kW

ELECTROSTATIC CHARGE

UNIFORM DISTRIBUTION OF CHARGE

°C

TEMPERATURE

STABILITY

IONIZATION

TEMPERATURE CONTROL

e l e m e n t a r y

INSTALLATION RUNNING MAINTENANCE



EASY INTEGRATION

The generator does not require any equipment substitution. It perfectly fits the existing lines

ADAPTABILITY TO EXISTING LINES

Installation only requires connection from compressed air line to nitrogen generator

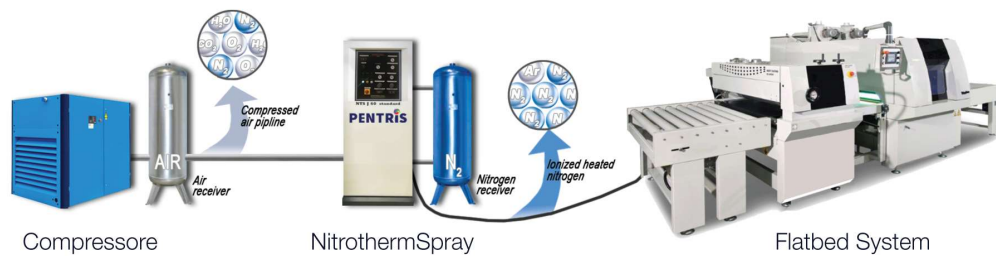
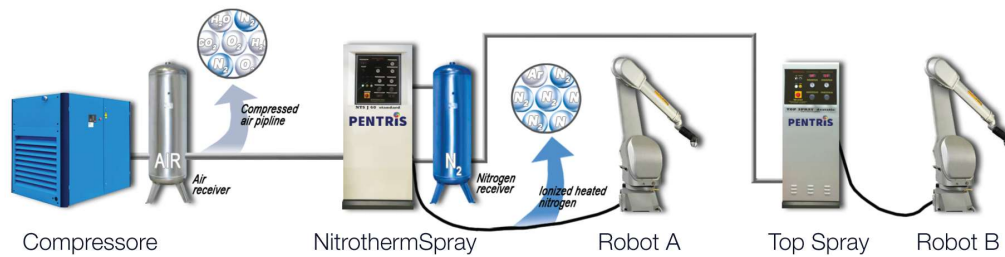
EFFORTLESS MAINTENANCE

The only maintainace needed is substitution of filters every 2.000 working hours

LONGER LIFETIME

With compressed air free from oil and other pollutant particles the membrane has a 10 years life time

INSTALLATIONS



NITROGEN GENERATOR
FOR BODY SHOP
MANUAL BOOTHS

NITROGEN GENERATOR
FOR ANTROPOMORPHIC
ROBOT

NITROGEN GENERATOR
FOR RECIPROCATORS



VAZDELAR
SISTEMAS DE PINTURA

GET IN TOUCH WITH US

LOCATION

- PUEBLA, PUE, MÉXICO.
- MONTERREY, NL, MÉXICO.

CONTACT US

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