

EVOCON Solutions

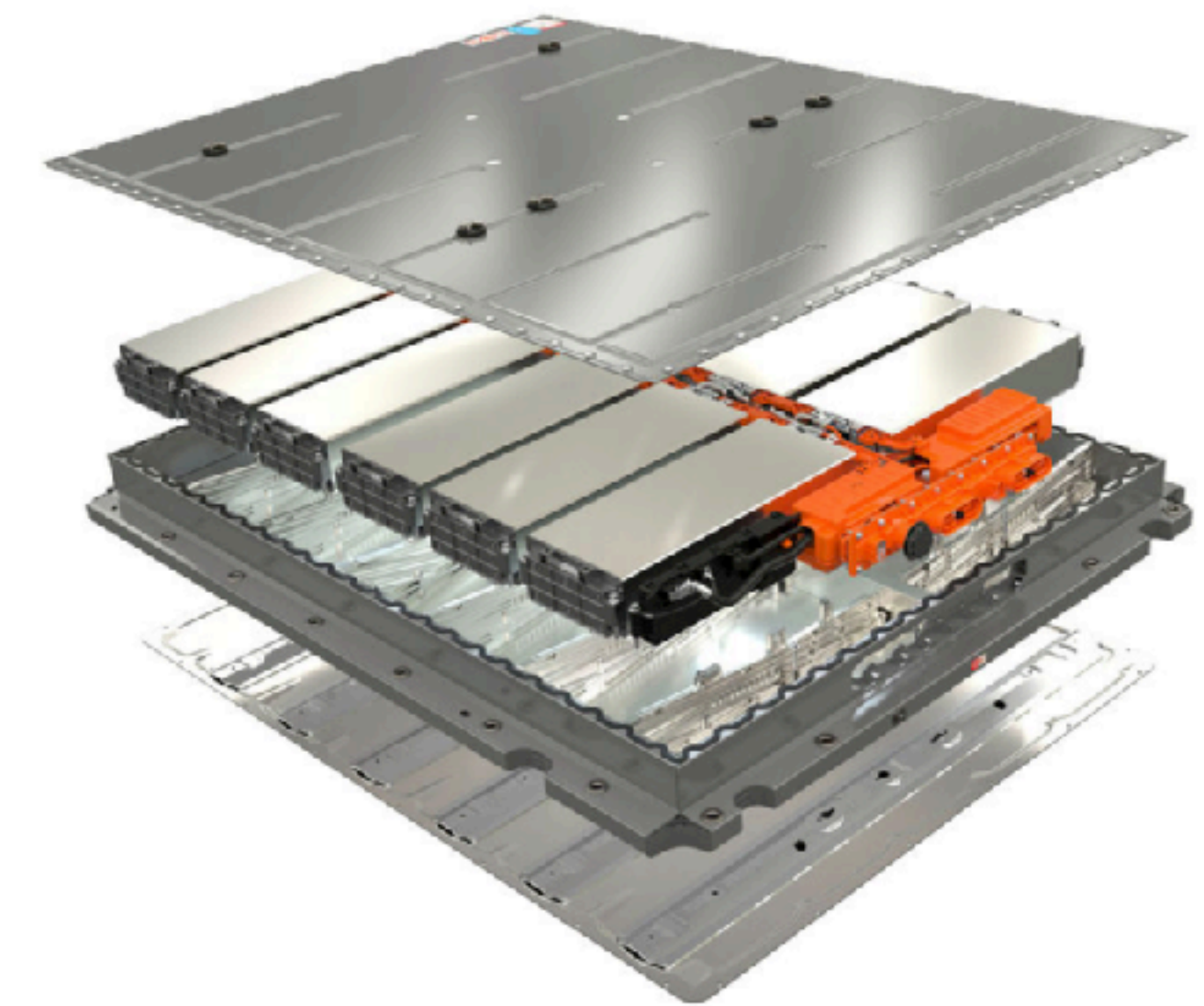


IMPC GMBH

WWW.IMPC-SCHWARZ.COM

Workshop Phi4tech Info Material

Workshop with Phi4tech Spains Battery Manufacturing Project
2022



Workshop with Phi4tech Spains Battery Manufacturing Project 2022

IMPC y EVOCON Solutions realizarán un Workshop con el equipo técnico de Phi4tech para el primer posicionamiento y análisis de necesidades para la automation de la planta piloto de producción de baterías en Noblejas.



- La nueva planta de producción de sistemas de baterías es un hito más para asegurar el futuro del empleo y la ubicación en España
- Esto convierte a la planta de Phi4tech con sede en Noblejas, Toledo, en una parte importante del futuro de la movilidad eléctrica, uno de los proyectos de desarrollo más innovadores de nuestro tiempo.
- En 2023 Phi4tech producirá baterías con una capacidad total de 2 gigavatios y en 2025 será de 10 gigavatios.

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Workshop with Phi4tech Spains Battery Manufacturing Project 2022

1 Day Preparation Workshop

2 Days Workshop with Phi4tech in Nobeljas,

EVOCON Systems, Peter Schwiedop, Hans
Schwiedop via Skype

IMPC GmbH, Armin Wunderlich



We support our customers to achieve the Project
targets – with our Expert Manpower and Network

Workshop Content:

- Company & Team Introduction
- Phi4tech Product Intro
- Workshop Goal Definition
- Prototype Production Process, Equipment & Tour
- Lesson Learned from Prototype Line
- Review Project Giga Factory, Time Plan, System Components & Supplier Partners
- SWOT Analysis Giga Factory Project
- Enabler & Blocking points
- Risk Analysis
- Possible solutions
- Opportunities - IMPC & Evocon Project Support
- Feedback discussion & Workshop summary
- Conclusion and next steps

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Workshop with Phi4tech Spains Battery Manufacturing Project 2022

breve introducción



International Management
and Productivity Consultancy

IMPC GMBH

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IMPC ofrece servicios de ingeniería y gestión provisional para la ingeniería mecánica y de plantas en el sector automotriz y para la industria metalúrgica y eléctrica.

Las innovaciones, las inversiones y las reestructuraciones cuestan dinero y tiempo. El apoyo temporal específico de gerentes de cambio externos experimentados que ya han dominado muchas situaciones comparables puede mejorar de manera sostenible el éxito de los procesos de cambio y reducir los costos al mismo tiempo.

IMPC tiene la experiencia necesaria para lograr sus objetivos corporativos como gerente temporal junto con todos los involucrados.

IMPC Objetivo principal: reducción sostenible de los costes de los componentes de production

- Integración – Función de compras administrativas
- Costos de los componentes: reconocimiento de los 10 principales generadores de costos
- Análisis y eliminación de los 10 principales generadores de costos
- Soluciones alternativas a los 10 principales generadores de costos

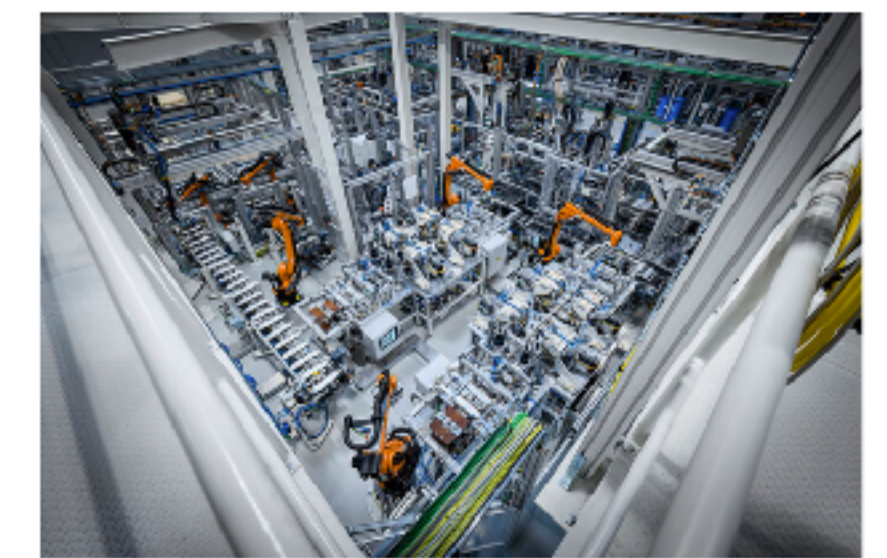
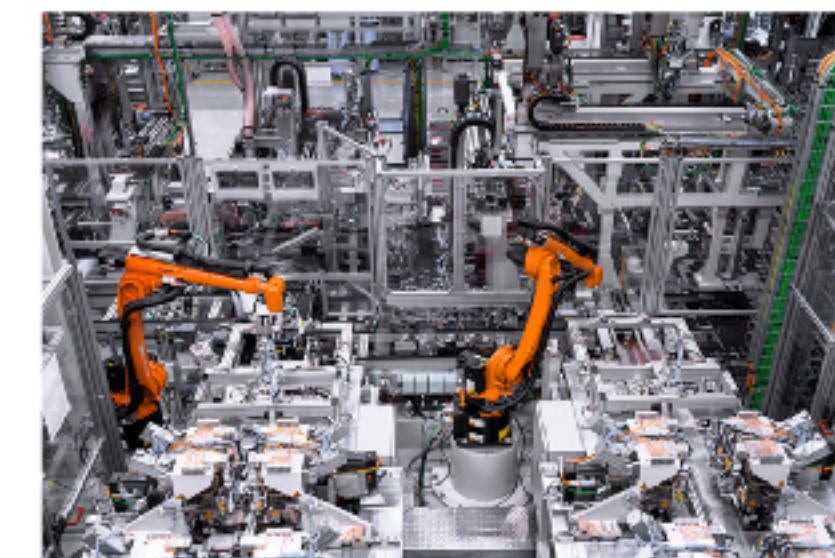
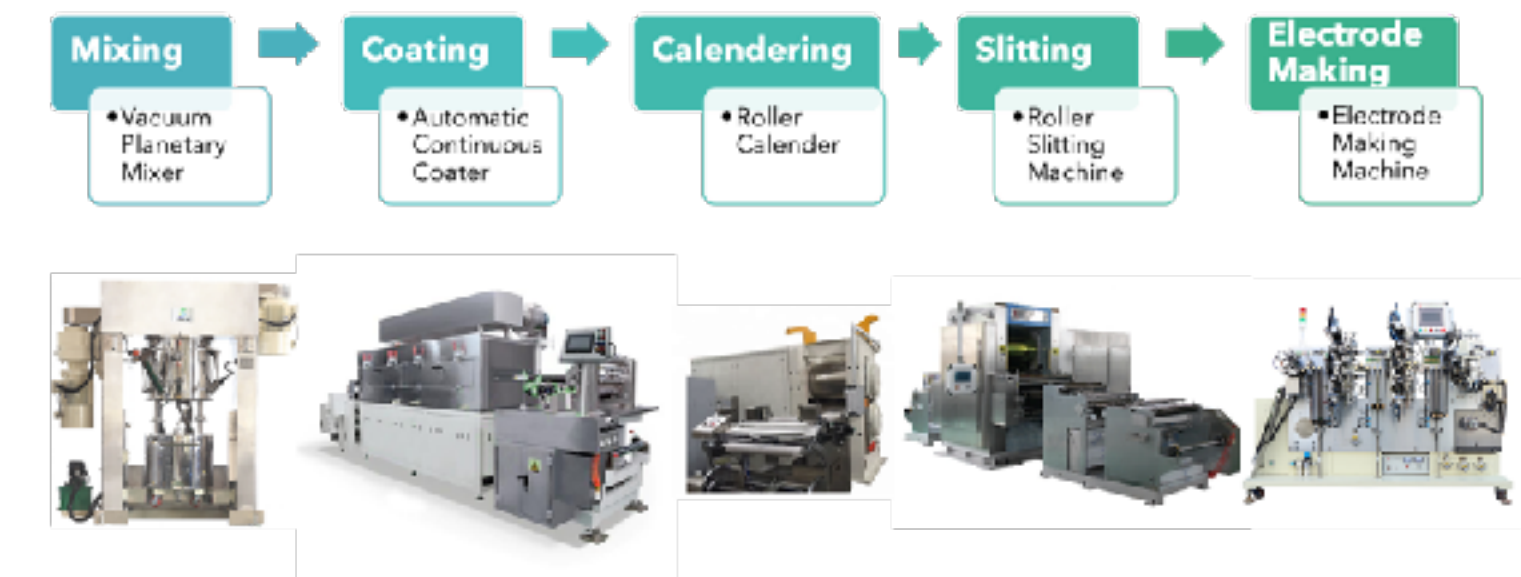
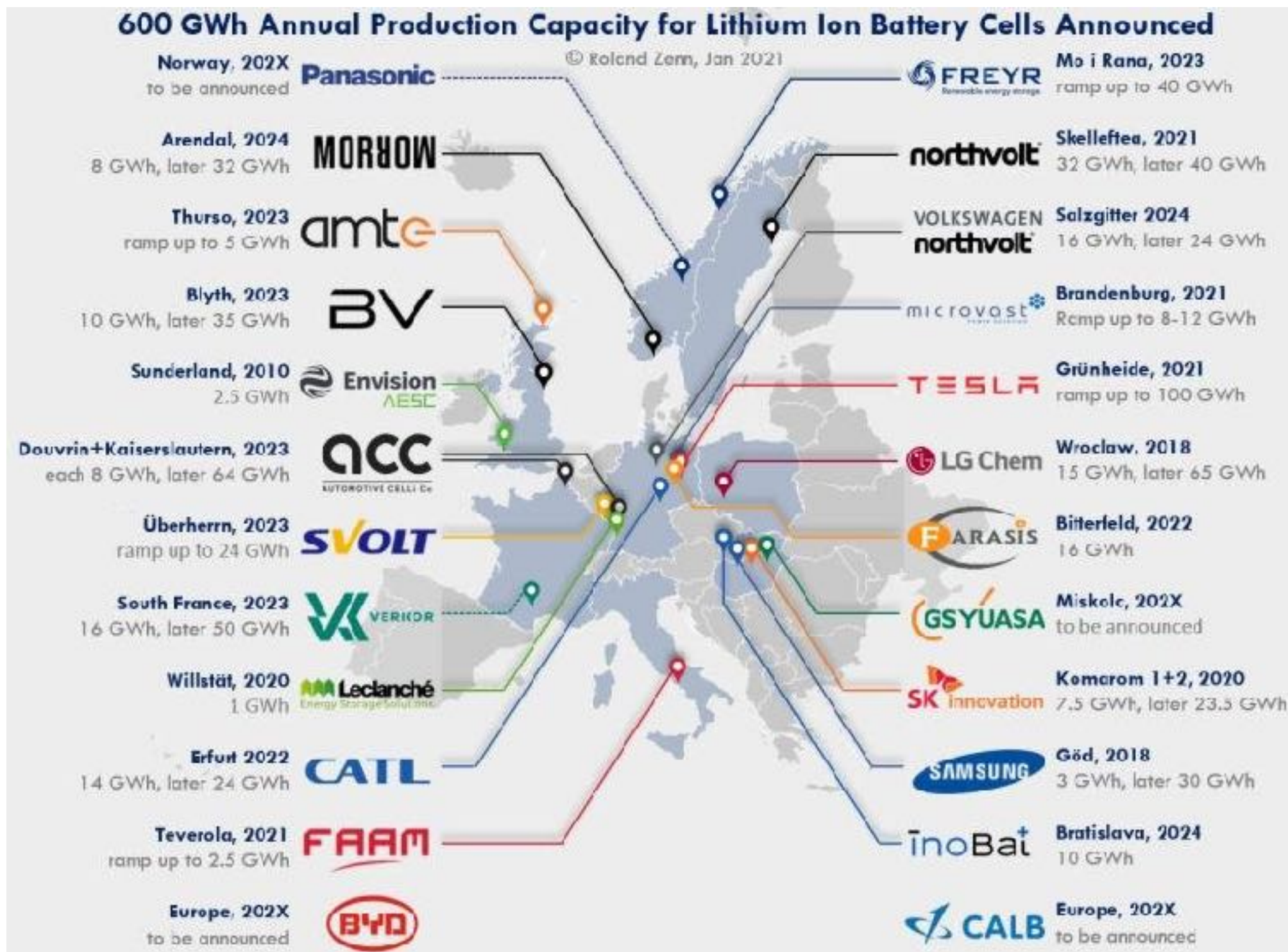
Clientes de IMPC con proyectos



China, Estados Unidos, Alemania

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European Battery Manufacturing Project



GROB



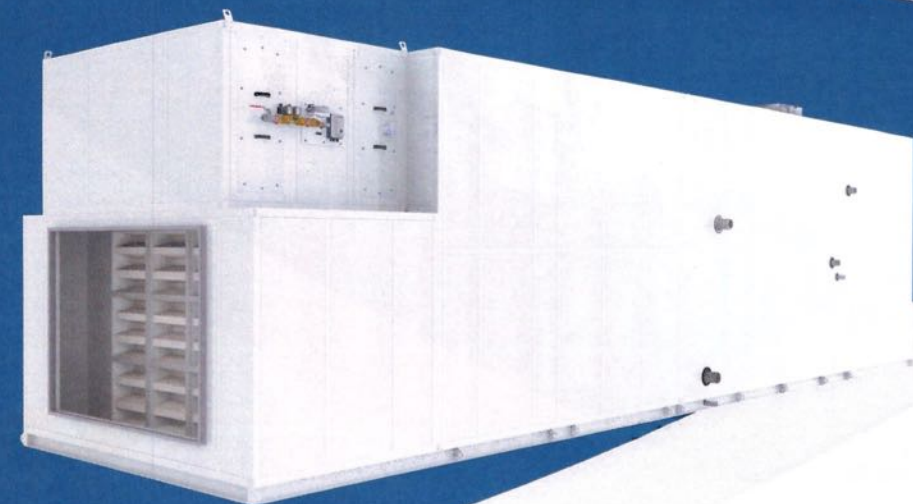
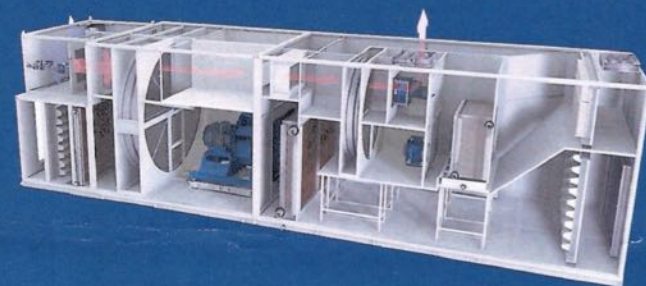
Mercedes-Benz

EVOCON Solutions fisair Luft Entfeuchte

fisair
air humidity control

DFLOW Entfeuchter mit niedrigem Taupunkt, die für eine Taupunkttemperatur von bis zu -70 °C ausgelegt sind.

- Hocheffizientes Doppelrotorsystem
- Verfügbare Kapazität von 5000 m³/h bis 56000 m³/h
- Energierückgewinnungssystem senkt die Betriebskosten
- Komplette Luftaufbereitungsanlage
- Erweiterte Steuerung mit verschiedenen Kommunikationssystemen
- Anwendungswissen mit vielen Referenzen in Europa



DFLOW series air dehumidifiers

Wenden Sie sich an unsere Experten.
Telefon: +49 6081 9665324

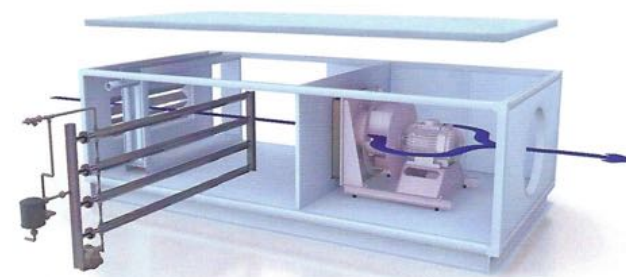
fisair.com

01

STEAM INJECTION dry / accurate / clean

diphusair FSH

Steam injection system for working with pressured boiler steam, with a double-jacket pipe and droplet separator.



diphusair MT2

Steam injection / dispersion system for working with pressured boiler steam, or unpressured steam generated by isothermal steam generators.

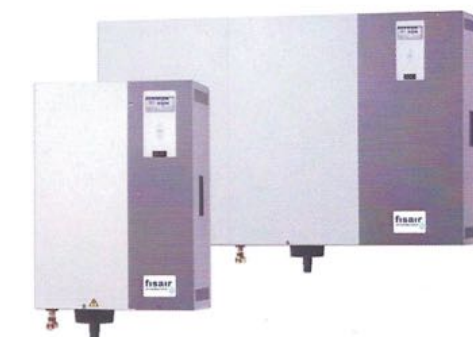


02

ELÉCTRICOS simple, precise

diphusair Electrode

Auto-generator of clean steam using submerged electrodes. Resistant, compact, economic and accurate. Stainless steel chassis, controller and wide range of dispersion systems depending on the absorption distance.



diphusair Resistance

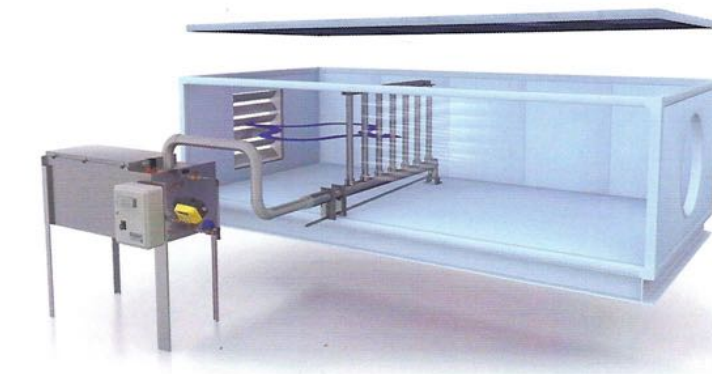
Auto-generator of clean steam using heaters. Similar to the electrode option but with any kind of supply water quality. Proportional control.



03

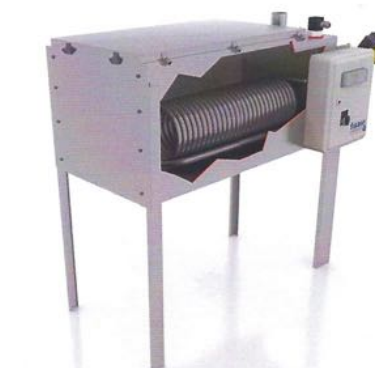
HEAT EXCHANGER clean for steam and environment

Diphusair ASC/VxV connection with Diphusair MT1 steam disperser in the AHU



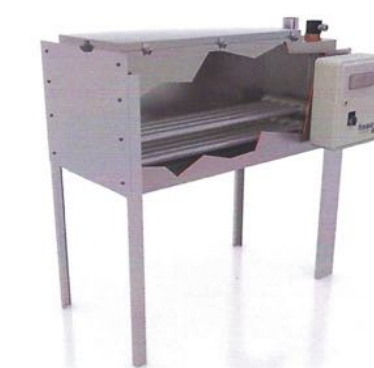
diphusair ASC

Humidifiers auto-generating steam by heat exchange with superheated water.



diphusair VxV

Heat exchange humidification system using boiler steam.



04

DIPHUSAIR MT0 AND MT1 ACCESSORIES

For the Electrode, Resistance, ASC and VxV series

Steam dispersion systems for working with unpressured steam generated by the isothermal steam auto-generators.



Diphusair MT0



Diphusair MT1

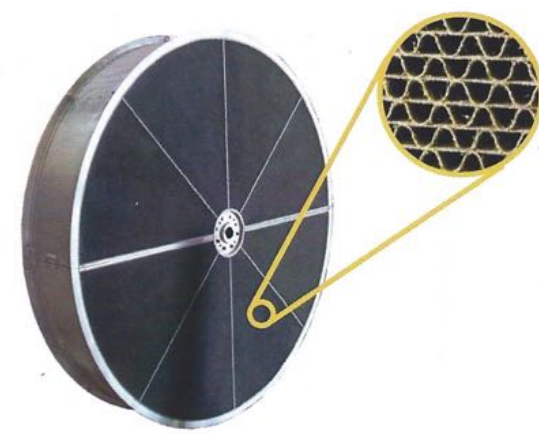
EVOCON Solutions fisair Luft Entfeuchter

The operating principles of FISAIR desiccant rotor air dehumidifiers are based on an exclusive high performance water vapour retaining silica gel desiccant rotor.

A large number of industrial materials and processes require dry air. Desiccant rotor technology has a proven track record providing the best combination of low installation costs, a wide range of applications, and low operating costs, out of all kinds of air drying processes.

The following series come from experience in the different industrial applications. These are series proven in quality by years of operation in a multitude of clients around the world.

The wide range tries to add value with low CAPEX and OPEX.

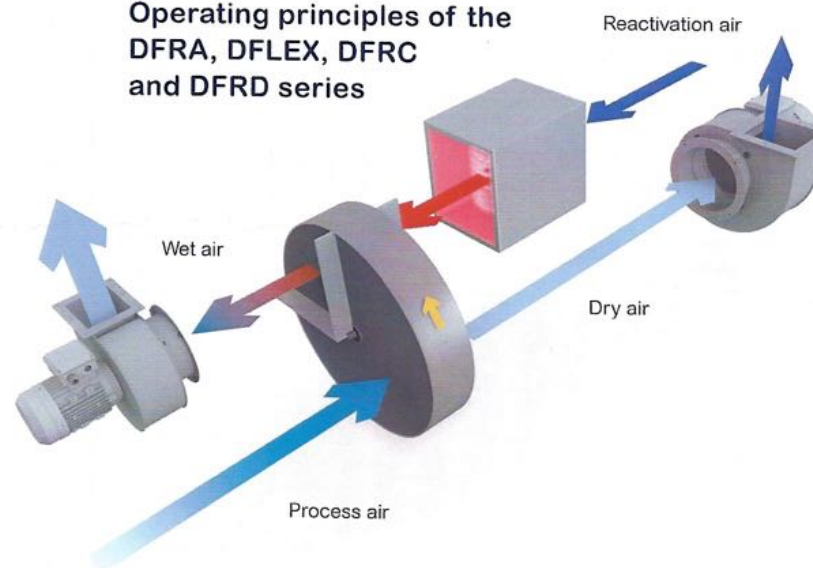


DFRA series a wide range of solutions

Highly reliable units with drying capacities



Operating principles of the DFRA, DFLEX, DFRC and DFRD series



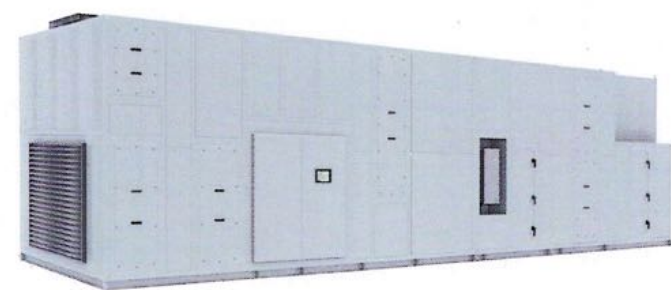
DFLEX series flexible range

Highly reliable units with drying capacities. Higher efficiency equipment with the same reliability and high drying capacities.



DFLOW series high operability and minimal energy consumption

Able to reach incredibly low dew points required for certain applications. Its design optimizes energy efficiency and connectivity.



DFRB series the compact solution

The B series made from stainless steel provides a range of highly compact, robust and portable dehumidifiers for use in the most demanding applications while meeting high reliability and low energy consumption needs.



DFRD series a wide range of configurations

This range completes the B series with an additional fan to increase the specific drying capacity and the available wet air pressure.



DFRC series mobile and heavy duty drying

Series aimed at temporary drying with a robust chassis and finish to protect against corrosion. Ideal for surface treatment and rental applications.



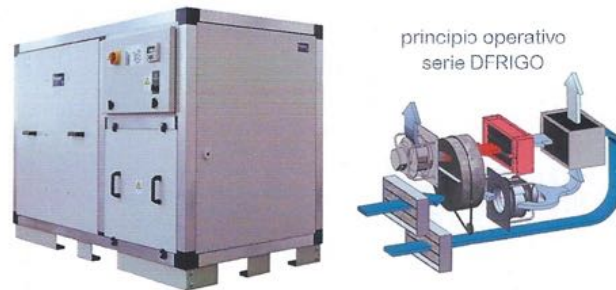
DFRM series modular solutions

Custom-made solutions for a large number of industrial processes requiring air drying. Robust construction and wide ranging setup possibilities.



DFRIGO series the flexible, high-performance solution

Units designed to reduce humidity in refrigerated areas and processes. Leader in its field in terms of its thermal insulation, robust design and energy efficiency.

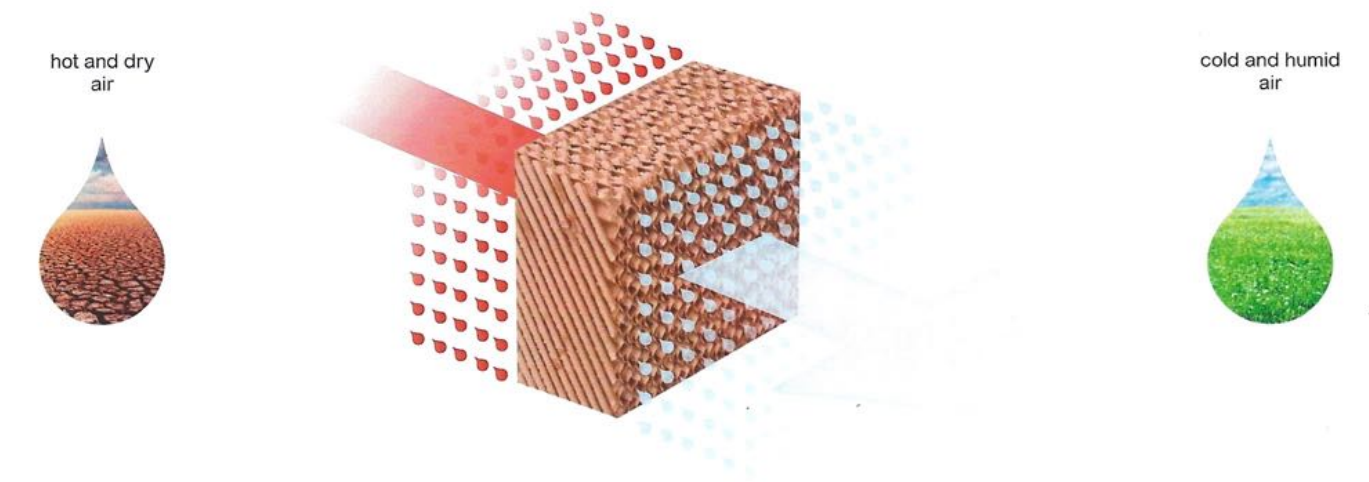


DFC series condensing dehumidifiers

Wide range of equipment for dehumidification and ventilation of swimming pools and industrial processes.



Low energy consumption operating principle



HEF2E series the most hygienic and the most efficient

Contact panel evaporative humidifiers with the highest performance on the market by high efficiency to low pressure drop, and certified hygiene.



HEF3-CAD series low height solution

The hygienic range for low heights to enable the use of these systems in false ceilings in commercial premises and offices. The lost water design reduces energy consumption and is a huge aid to maintenance.



AtomSpray series room direct unit

Adiabatic humidification and cooling system that uses compressed air as the fluid to drive water atomization. Low water consumption (reduces water consumption by up to 55%, compared with other high-pressure humidifiers), minimum energy consumption, hygienic, low maintenance and easy to install.



HEF7 series to cool the cooling

Evaporative cooler for air-condensed water chillers. High-efficiency and minimal pressure drop panel. Prevention of the deterioration of the batteries of the direct water atomization systems.

