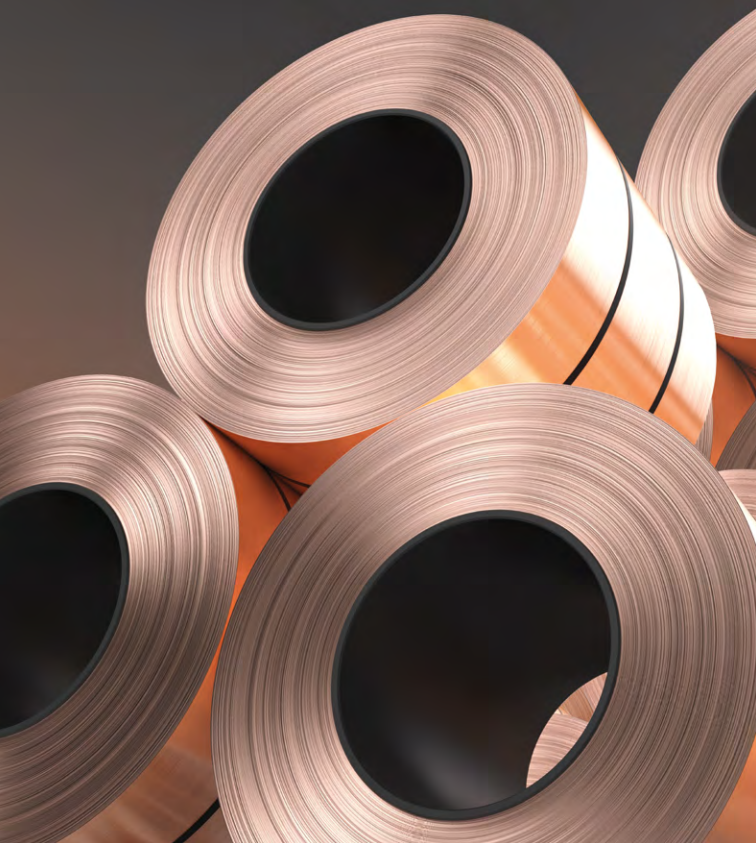


vötschoven

Efficient e-mobility.

Vacuum drying for
coil, sheet and cell baking.



weiss-technik.com

Always close by.
There for you in partnership.

vötschoven.
For perfect processes.



Innovation through passion.

With 22 companies at 40 locations in 15 different countries, we work in partnership to support customers in the areas of research, development, production and quality assurance.

We engage in strategic cooperation with our customers, from the R&D phase to the start of production. With our continuously expanding team, we ensure that reliable support and service are close at hand - wherever you may be and wherever you want to go.



From the market leader in heat treatments.

The post-drying of coated battery electrodes is one of the most important stages of battery cell production, ensuring high cell safety and high cycle stability of the battery cell. We plan, develop, produce and integrate vacuum dryers, including exhaust treatment and automation systems.

Our flexible and modular system design ensures efficient, safe and reliable drying processes.

Customised solutions from a single source.



Especially for applications in the battery industry, we have been developing, planning and producing customised systems with our experienced team for decades. Our project process comprises three steps:

- 1. Non-disclosure agreement and technical coordination**
 - Products (geometry, flammability, quantity)
 - Process parameters (time, temperature, pressure, inert gas, heating, cooling)
 - Handling concept (degree of automation)
- 2. Project planning and pre-engineering**
 - Tests in the R&D test centre in Germany
 - Definition of final process parameters and the degree of automation
 - Technical specification with detailed explanation of the system
- 3. Implementation of the solution**
 - Production support (ramp-up and optimisation phase)
 - Installation and commissioning
 - After-sales support

Our specialists for vacuum drying in the production of energy storage systems.

Vacuum dryer with moisture management.

Technical data

Temperature range: 20 - 160°C
Usable space:
W1100 H1300 D1900 (mm)
Final pressure: 0.1 mbar (abs)
Heating: convective & conductive
Cooling: convective & conductive



System description

- Vacuum pumping station including a condenser unit for the safe separation of solvents to comply with TA Luft
- Common exhaust system optimised with regard to a footprint for two dryers
- Pass-through dryer
- Siemens S7 controls with an OPC UA interface interface and a tailor-made interface to the MES system
- Loading by means of lift trucks and customised oven carriers

Highlights:

- All materials used are solvent resistant, including NMP
- Connection to the customer's MES for digital order management and complete traceability
- Patented inline moisture measurement to evaluate the drying process
- Maximum flexibility for product changes

Vacuum dryer usable as an airlock.

Technical data

Temperature range: 20 - 160°C
Usable space:
W1400 H1600 D1600 (mm)
Final pressure: 0.1 mbar (abs)
Heating: convective & conductive
Cooling: convective & conductive



System description

- Installation in a dry room with a dew point of -50°C, cleanroom class ISO 8
- Dryer with an air-lock function to avoid cross-contamination between loading and unloading rooms with different dew points
- Siemens S7 controls with an OPC UA interface interface and a tailor-made interface to the MES system
- Loading by means of lift trucks and customised oven carriers

Highlights:

- Standardised interface to the dry room installation to ensure easy and reliable integration
- Loading and unloading via a manual system and AGV possible
- Connection to the customer's MES for digital order management and traceability
- Machine digital twin

Flexible dryer for flexible products.

Technical data

Temperature range: 20 - 200°C
Usable space:
W1000 H1000 D750 (mm)
Final pressure: 0.01 mbar (abs)
Heating: convective & conductive
Cooling: convective & conductive



System description

- Vacuum vessel and outer housing made of stainless steel, suitable for installation in laboratories, clean rooms, dry rooms, etc.
- SIMPAC PLC with the option of process data evaluation via SIMPATI software on the PC
- Oil-free vacuum pump system
- External tempering unit for heating and cooling
- Oven carriers for battery electrode coils and sheets/cells

Highlights:

- Flexibility with regard to the place of use of the dryer by installing all the equipment required for operation on a base frame
- For test purposes, the temperature can be controlled either convectively or via heat conduction
- Inline moisture measurement to evaluate the drying process

We measure ourselves by our service.

Our services -
lots of good reasons:

24/7 service helpline:
+49 1805 666 556

- ▮ Global service network
- ▮ Wide range of preventive maintenance
- ▮ Reliable spare part supply
- ▮ Special deployments available at any time
- ▮ Certified proper disposal of outdated devices

Our service experts are always happy to help.



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Test it. Heat it. Cool it.