



## PRODUCT PURITY AT THE HIGHEST LEVEL

### STREICHER CLEANROOM

- Design & Development of Vacuum Systems
- Inhouse Manufacturing up to 50 t
- Electrical Measurement and Control Technology
- Assembly & Testing up to ISO 5
- On-Site Installation & Service



# STREICHER GROUP – 40 YEARS OF COMPETENCE IN PLANT ENGINEERING



LOGISTICS



DESIGN

TESTING



MATERIALS

EMSR  
TECHNOLOGY



MANU-  
FACTURING



ASSEMBLY



CLEANING



High-precision production, assembly and commissioning under clean room conditions are essential for the specialised industries of the future. You will benefit from our more than 40 years of experience in component and special plant engineering as a system supplier.

With the process-specifics of STREICHER Cleanroom, we can offer customised solutions for the duration of your entire project that will ensure the highest standards of quality and flexibility.

Our corporate values – **partnership, stability, quality and innovation** – are reflected in every aspect of our work.



**STREICHER CLEANROOMS –  
FLEXIBILITY FOR EVERY PROJECT**



## ASSEMBLY & COMMISSIONING POSSIBILITIES

The modern cleanrooms of the STREICHER Group offer ideal conditions for the assembly, commissioning and packaging of large individual components and assembly groups. Up to 50 tons of material can be moved under clean and controlled conditions. To maintain and ensure the highest standards of cleanliness, the cleanroom air is regularly tested for suspended particles (in accordance with DIN EN ISO-14644-1) and for organic floating particles.

## FACTS

### Component dimensions:

- Dimensions (L x W x H):  $\leq 10 \text{ m} \times 6 \text{ m} \times 6 \text{ m}$
- Component weight:  $\leq 50 \text{ t}$

### STREICHER cleanrooms: 1,407 m<sup>2</sup>

- Clean room class ISO 5: 43.5 m<sup>2</sup>
- Clean room class ISO 6: 103.5 m<sup>2</sup>
- Clean room class ISO 7: 475 m<sup>2</sup>
- Clean room class ISO 8: 785 m<sup>2</sup>
- Additional FFUs for local use
- Ceiling height:  $\leq 8 \text{ m}$
- Crane capacity:  $\leq 50 \text{ t}$



**CLEANING AND TESTING –  
PRECISION IN EVERY PROCESS STEP**

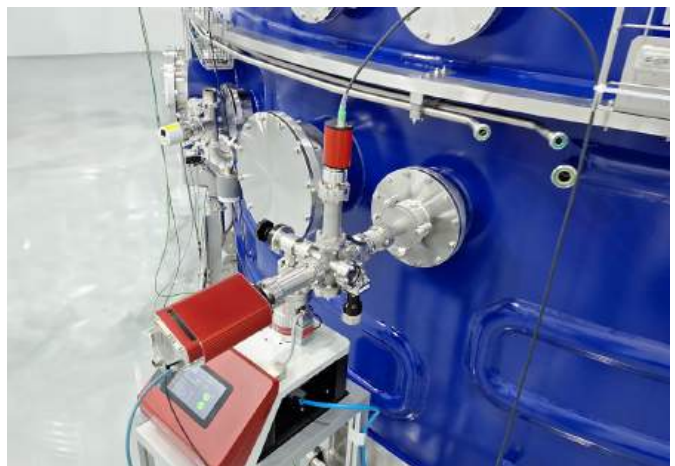
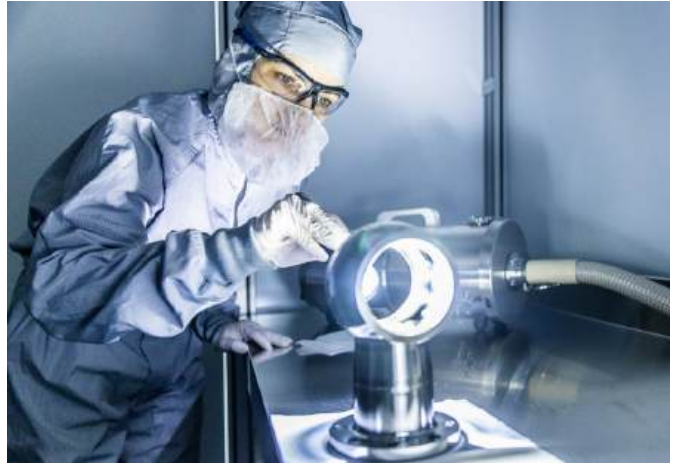
## CLEANING AND TESTING METHODS

The set of standardised and sequential cleaning steps which are in combination with the subsequent inspection activities will ensure the highest standards of cleanliness for your components – already during the production process.

- Intermediate cleaning during the manufacturing process
- Cleanroom-compatible pre-cleaning activities
- High purity cleaning
- Bake-out

In addition to visual test methods for qualitative cleanliness evaluation, the STREICHER Group also uses testing methods to quantify residual contamination that may remain on the component surfaces.

- Wipe test
- UV and white light inspection
- ORK/SCP measuring probe
- Residual gas analysis (RGA)
  - Residual gas analysis on vacuum chamber
  - Residual gas analysis of individual parts
- Fourier transform infrared spectroscopy (FTIR)

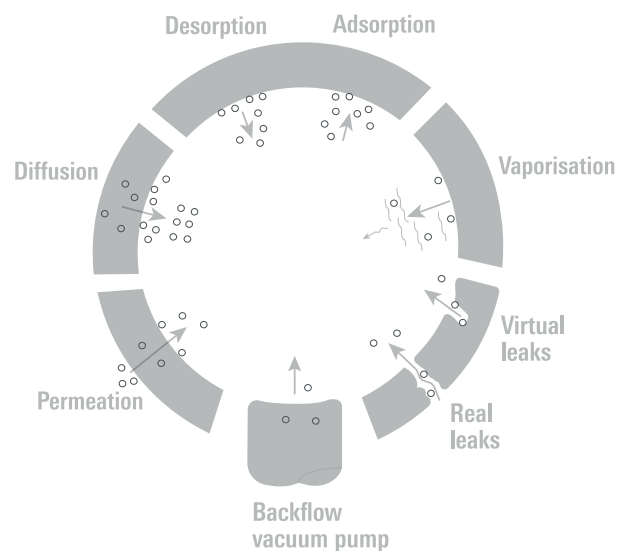


The ORK/SCP measuring probe can be used to measure residual particulate contamination down to a particle size of 0.3  $\mu\text{m}$ . Residual gas analysis is a non-destructive test method for the quantitative determination of the chemical composition after ultra-fine cleaning of volatile and semi-volatile organic molecular compounds which remained on vacuum surfaces. FTIR analysis is an indirect test method that involves washing component surfaces with a high-purity solvent. The residues dissolved in the solvent are then analysed by using an FTIR spectrometer.



## VACUUM TECHNOLOGY

The vacuum performance of our UHV systems is influenced by the factors shown below. Vaporisation plays a decisive role in the process due to the low operating pressures of our UHV chambers. Residual film of cooling lubricants, grease or cleaning agents that remain on the vacuum surfaces make it impossible to achieve the required operating pressures. Our standardised production and high purity cleaning processes, and the careful selection of auxiliary and operating materials ensure, that no molecular compounds remain in the vacuum chamber which may disrupt our customers' process operation due to the continuous adsorption and desorption processes. Bake-outs are carried out to prevent undesirable diffusion processes during the plant operation.





HIGH  
PURITY



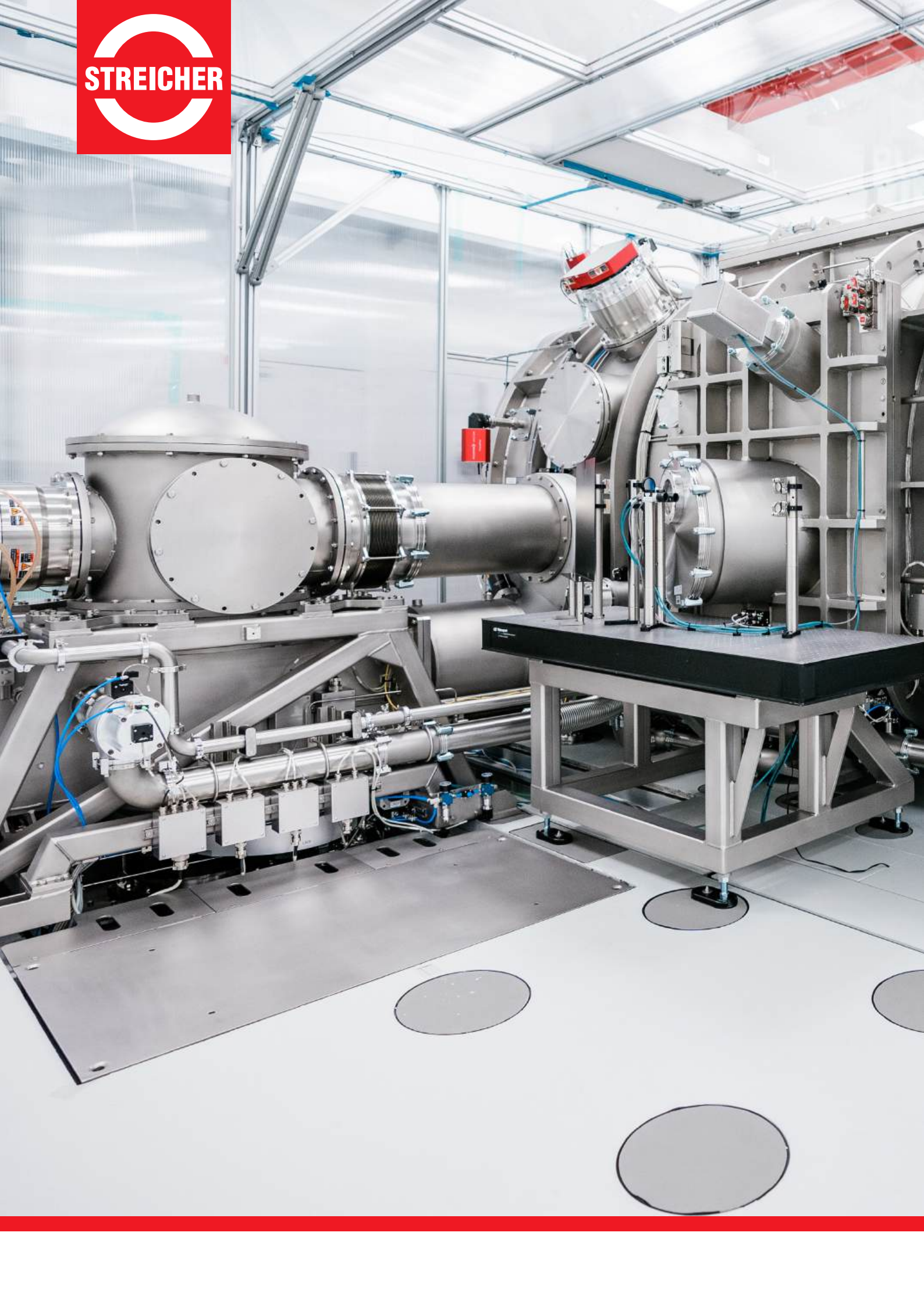
VACUUM  
TECHNOLOGY

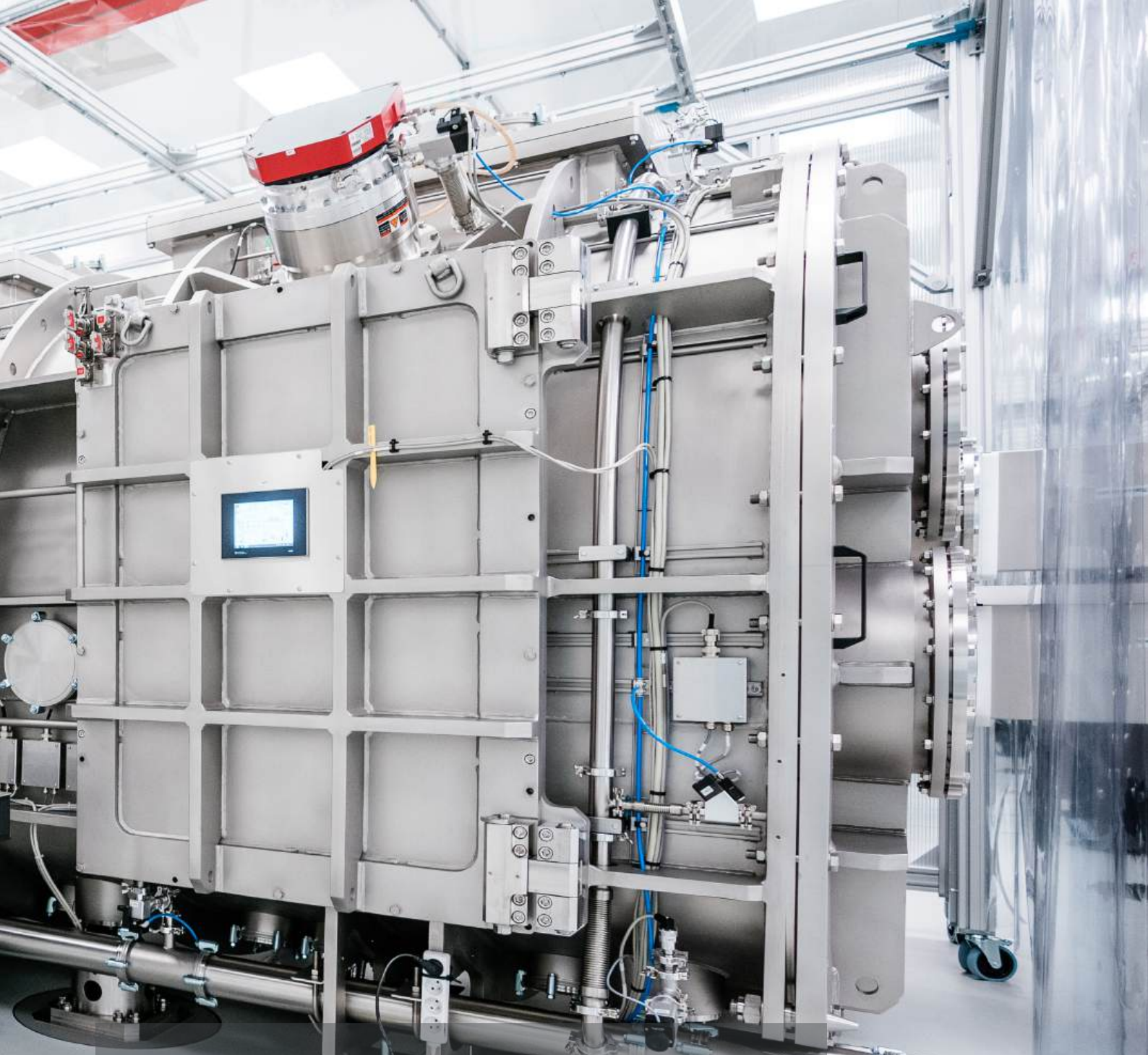


UCV

## HIGH PURITY

Across all industries, maximum cleanliness is becoming increasingly important and is a basic requirement for high-end processes which become more and more demanding. Our Ultra Clean Vacuum (UCV) chambers meet these requirements.





## WE THINK IN LARGER DIMENSIONS

From the smallest component to large chambers. With the STREICHER Cleanroom procedure, we offer customised solutions for every size. Whether you are planning individual single components or extensive projects – we offer you the flexibility and precision you need for the successful realisation of your projects.

STREICHER Cleanroom uses the synergies, infrastructure, vacuum and cleaning expertise of the STREICHER Group to create the best conditions for your vacuum processes.



PARTNERSHIP



STABILITY



INNOVATION



QUALITY

If you have any questions, please do not hesitate and contact us by e-mail:

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**WE ARE LOOKING FORWARD TO YOUR CHALLENGES!**