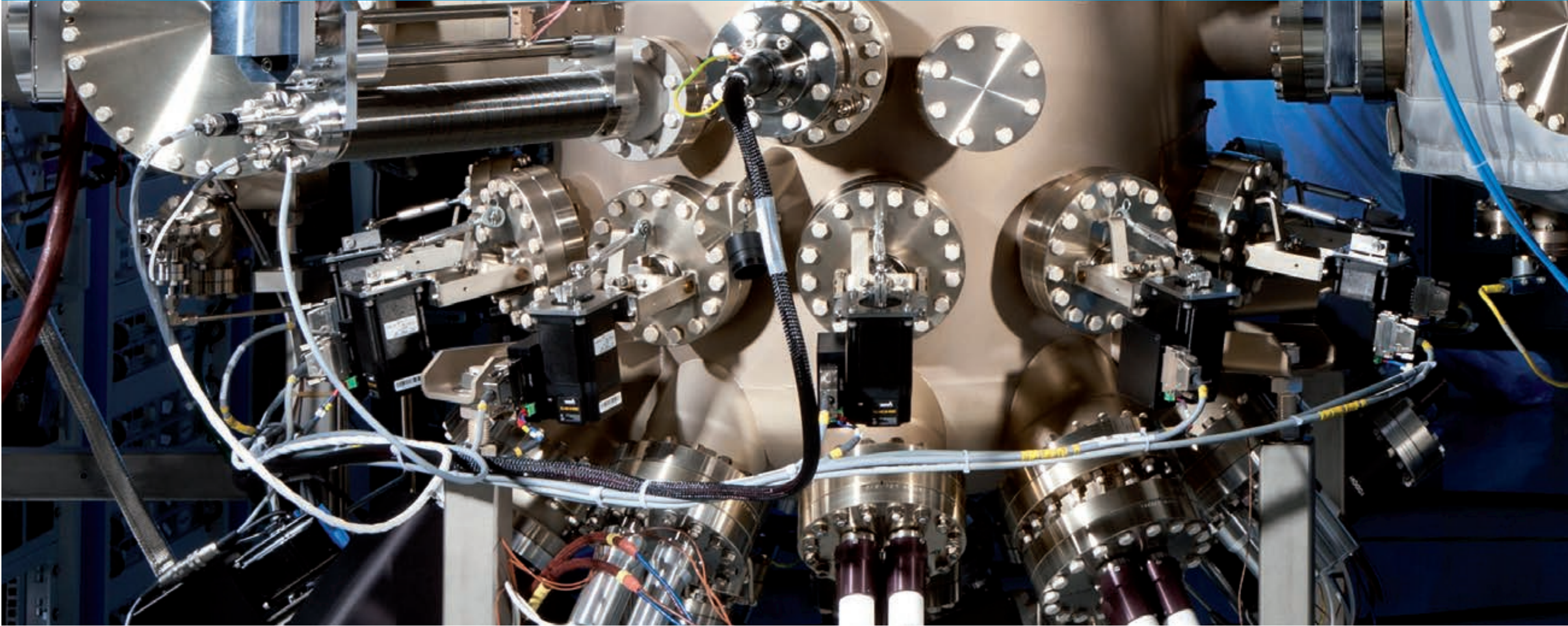
EXTEND YOUR RESEARCH PERSPECTIVES WITH **RIBER'S NEW COMPACT 21 DZ**



INCREASE YOUR RESEARCH AMBITIONS

Exclusive: 12 geometrically equivalent cell ports compatible with all Riber cells and sources product range As-P-Sb valved cracker cells, high deposition rate N-RF plasma, NH3,CBr4 injector, large capacity group III cells, standard effusion cells…

Large bottom port for Electron beam unit, cells and instrumentation.

SUPERB GROWTH CONTROL

Exclusive: 12 linear motorized independent cell shutters for rapid and controlled movements.

SMALLEST FOOTPRINT AND FLEXIBLE

Organise your lab as you see fit, with Riber's modular approach.

OPTIMISE YOUR TIME

Full automation of everyday MBE routine tasks
Flux calibrations, baking control, burst elimination…

Riber's renowned and simple wafer transfer
Includes high temperature wafer degassing station, wafer cleaning / annealing capabilities.

BE CREATIVE

Easily expandable to multi chamber configuration MBE, ALD, PVD, Metallization, STM…
Manual or fully automated configuration.

GREAT PERFORMANCE WITH LOW OPERATING COSTS

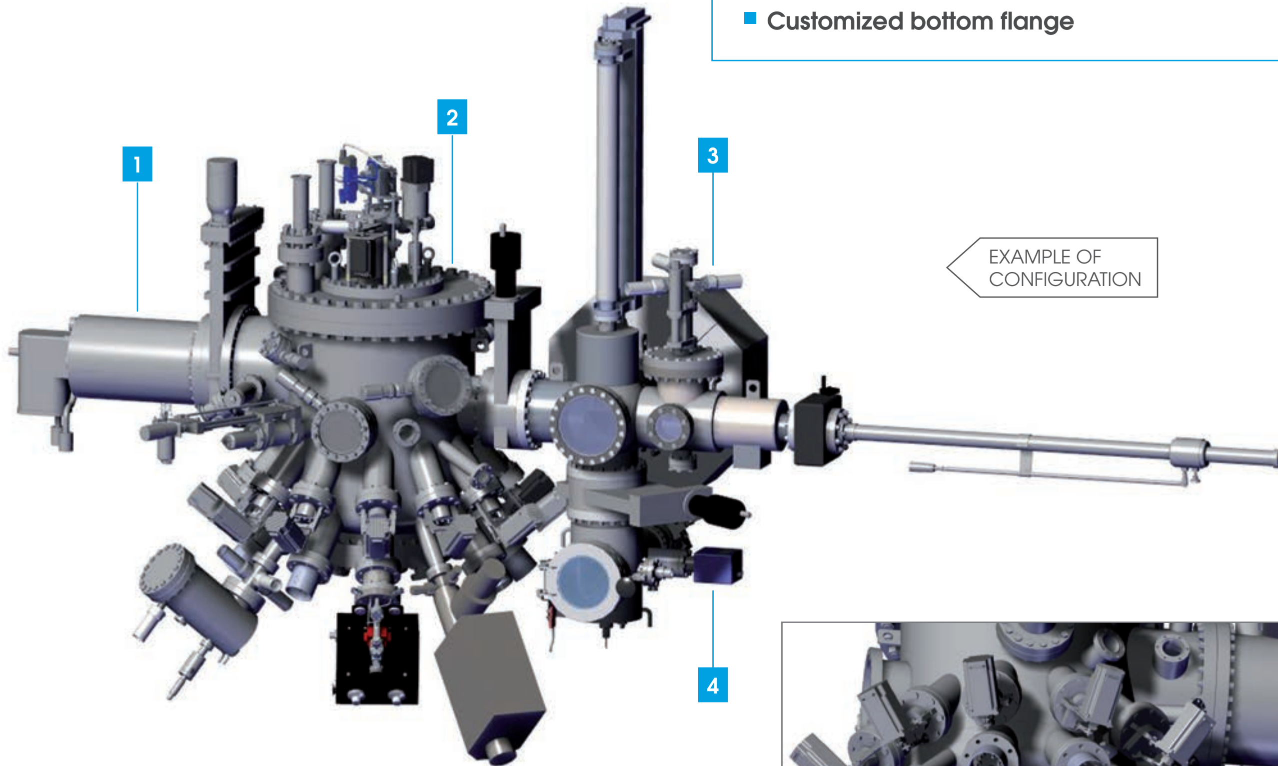
Optimized design of system cooling, combination of liquid nitrogen and water panel.
Guarantee of ultra high vacuum working conditions everyday.

VACUUM SYSTEM (1)

- **Flexible pumping configuration**
  3 large ports available for all type of pumps
  Independent titanium sublimation pump
- **Ultimate pressure <5 10^{-11} Torr**
- **LN2 cooled cryopanel surrounding the growth region combined with a water cooled panel**

GROWTH CHAMBER (2)

- **3'' wafer growth chamber**
- **12 sources ports**
- **High speed electrically driven cell shutters**
- **High temperature, high uniformity substrate heater – up to 1800°C**
- **Remote control of equipment**
- **All modern in-situ monitoring capabilities**
- **Customized bottom flange**



BUFFER CHAMBER (3)

- **Independent module**
- **Wafer storage capability**
- **High temperature outgassing station**
- **Surface treatment / deoxidation capability**
- **Remote control wafer transfer functions**
- **Expandable solution**

LOADING / UNLOADING CHAMBER (4)

- **Independent module**
- **Easy access – front door with inspection viewport**
- **6 platens loaded simultaneously**
- **5.10^{-7} Torr in less than 30 min**
- **IR lamps for wafer degassing**

IDEAL FOR III-V / II-VI / GAN / GRAPHENE / OXIDES... APPLICATIONS

REFERENCES: More than 100 Compact 21 references worldwide.

Growth chamber bottom flange with instrumentation ports

Growth chamber bottom flange with electron beam capability