

CUSTOM VACUUM CHAMBERS

RIAL Vacuum supports its customers in the development of installations, systems and vacuum chambers for several industrial and research applications, according to the specifications of the main european research centres.

High qualified experts apply techniques in the vanguard of welding and mechanical manufacturing fields over various materials such as aluminium, copper and stainless steel.

Our products' quality is guaranteed by strict checks on dimensions and welding quality. We also offer the possibility to make x-rays, ultrasound and residual gas analysis controls.



Do not hesitate to contact our specialized staff for technical or economical personalized requests.

“IN-VACUUM” PROCESS EQUIPMENT

“In-Vacuum” Process Equipment are supplied both to Industry (industrial equipment) and Research Institutes (R&D prototype equipment) mostly for thin-film deposition and coating (functional, decorative, hard and soft). The main applications are ophthalmic, semiconductor, solar-photovoltaic, automotive and material science.

RIAL Vacuum can study and optimize individual vacuum chamber designs in order to decrease manufacturing costs by maintaining equipment performance.

On demand, a vast array of equipment can be kept in stock in order to be ready to deliver “Just in Time” in case of unscheduled or urgent requests.

RIAL is also able to provide the internal assembly of the equipment. Some of the components too can be designed, optimized and manufactured internally. An internal team of skilled personnel is fully dedicated to equipment assembly.



Coating chamber (thermal evaporation) for ophthalmic (ID: 1320; L=1300mm)



Double wall cooled coating vacuum chambers



Completely assembled coating equipment



The Photovoltaic (PV) sector is evolving at an extraordinary rate, and is destined to grow even more in the years to come.

RIAL Vacuum will not pass up this great opportunity; thanks to its experience in several deposition techniques, RIAL Vacuum is also involved in this new business sector through the development of special equipment for photovoltaic cell manufacturing. Currently at a prototype stage (as per the picture), the ground plan includes the realisation of a “scaled-up” release for large area deposition, plus eventual industrial versions for mass production too.

The goal is to produce process equipment which allows the manufacturing of PV cells with a cost decreased by up to 1\$ Wp, which is the target value currently taken into account for the production and commercialisation of PV systems.

