

GLOVE BOX WITH STAND-ALONE PURIFICATION UNIT $< 1 \text{ PPM H}_2\text{O} - \text{O}_2$





LIMITLESS CUSTOMIZATION

Design and operating adapted to any specific or complex processes

- ▼ Interconnectable glove boxes modules
- ▼ Customized dimensions and shapes
- ▼ 100% compatible with all options and equipment at JACOMEX
- Flexible and scalable design.
 Designed for the integration of simple and sophisticated machinery and instrumentation
- ▼ Standard configuration and options
 - Design: 100% removable rounded corners
 - Surface finish: satin electropolished
 - Stainless steel quality: AISI 304L AISI 316L (1.4306) (1.4404)

PURIFICATION UNIT

- ▼ Single line H₂O O₂ stand-alone purification unit
- ▼ Leak rate <10E-5mbar l/s
- ▼ Closed loop circulation Adjustable flow rate 0-120m³/h
- ▼ Automatic regeneration
- ▼ Regeneration N₂ or Ar + 3-10% H₂
- ▼ Purification capacity Core-12
 - 55 L O₂
 - 1500 g H₂O
- ▼ Options: double-line H,O O, stand-alone purification units













- High Purity and Special Design adapted to any specific project, scientific and industrial process in development or at pilot stage
- Recommended for mass production and characterisation under pure atmosphere, integration of equipment and machines as well as processes requiring configurable controls, automation and safety.

24/24 Energy-Saving Mode In standby and in use During handling



TECHNICAL DATA

- ▼ **Tightness Class 1** according to ISO 10648-2 (oxygen method) Leak rate < 5.10E-4/h (0.05 Vol%/h)
- EPDM gaskets with high chemical resistance
- ▼ Glovebox vacuum chamber piping: stainless steel X2CrNi18-9 (AISI304L)
- Programmable automatic vacuum chamber Ø 400 Length 600 mm Inner sliding tray - Removable rails Leak rate < 10E-5mbar I/s
- Front panel: sapphire polycarbonate laminated mineral glass
- Polymer glove rings Ø 220 mm Antistatic butyl gloves
- Lighting from the ceiling (LED spotlights)
- 6 stainless steel shelves (height-adjustable)
- ▼ 1 electrical feedthrough 230V + 6 blank feedthroughs for ISO KF40
- Automatic regulation (positive or negative pressure)
- Remote stand-alone H2O O2 purification unit
- 10" HD color touch screen: new intuitive menus, integrated assistance, user management, traceability, graphs and alarms...



New interface 10"

ADVANTAGES

- ▼ Flexibility Ability to integrate equipment and machinery
- Customized project management Information Folder technical support,
 3D drawings simulation, technical and ergonomic setup approval
- 4 large-capacity purification models available: Core-12, Core-24P, Core-24S, P(sys)-IV
 Processing of larger volumes , severe or tricky conditions, regenerations at
 widely spaced intervals
 - Purification loads among the most quantitative on the market for equivalent range.
- Pressure regulation without vacuum pump (positive pressure/negativepressure)
- ▼ Comfortable to use **Quiet**
- ▼ Easy and accessible maintenance
- Long service life Low operating costs
- ▼ Hazardous inert atmospheres: (operating in negative pressure): address us for designing a fitted security configuration (specific equipment recommended).

POSSIBLE APPLICATIONS...

- ∇ Materials physics and nanotechnologies
- ∇ Powder processes
- ∇ Development of all-solid-state batteries and lithium alternatives
- ∇ Oven processes (treatment, sintering, annealing)
- ∇ Organic electronic materials: 2nd and 3rd generation solar cells (thin films, perovskites, multijunction, DSSC...), Quantum Dots, graphene and 2D materials.
- ∇ Welding of large parts in titanium and alloys for the aeronautical, naval and automotive industries
- ∇ Research and control of experiments on nuclear materials, sensitive to atmospheric components

NEW HMI INTERFACE - HD 10" DISPLAY: even larger for greater ergonomics

- ▼ Intuitive navigation with a lot of user-friendly menus
- Adjustable parameters, continuous recording and graphs
- Integrated PLC assistance and maintenance for clear and optimal operating and ease of use
- ▼ Configurable indicator light. All features on our separate brochure

GLOVE BOX WITH STAND-ALONE PURIFICATION UNIT



SINGLE-LINE PURIFIERS

Core-12

- ▼ Variable circulation flow: max.120m³/h
- ▼ Capacities : 55L O₂ 1500g H₂O

DOUBLE-LINE PURIFIERS

Core-24P

- ▼ Variable circulation flow : max.120m³/h
- **V** Capacities: 110L O₂ 3000g H₂O

Core-245

- ▼ Variable circulation flow: max.120m³/h
- Capacities : > 280L O₂ 3000g H₂O

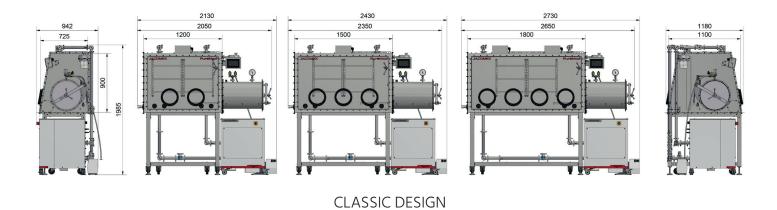


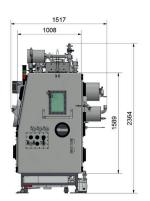
COMPARED DATA

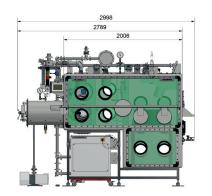
Technical Data	PureSmart Core-8	PureMod Core-10	PureEvo Core-12	PureEvo Core-24P	PureEvo Core-245
St.Steel Glovebox AISI 304L Thickness 3 mm Tightness class 1 ISO 10648-2	Y	Y	Y	V	Y
Energy-Saving Mode	V	Y	/	V	V
Operating mode : positive and negative pressure	V	Y	Y	Y	Y
Modular users management	V	Y	Y	Y	Y
Report writing	Y	Y	Y	V	Y
Help hands-in-gloves	V	Y	Y	Y	Y
Vacuum pump 2 stages 21m³/h (Limit Press. 5.10-4 mbar)	V	Y	Y	V	Y
Automatic vacuum chamber with adjustable parameters	•	Y	Y	V	Y
Glovebox tightness self-test	•	Y	Y	Y	Y
Blower with variable flow		Y	/	V	V
Customized project follow-up		Y	Y	V	Y
Custom Design / Process integration			Y	Y	Y
Alarm inert gas missing/failure	•	•	•	•	•
Double sided working area		•	•	•	•
Adjustable automatic glovebox flushing based on H ₂ O / O ₂ values		•	•	•	•
Heated mini vacuum chamber Ø150 mm		•	•	•	•
Vacuum chamber with interlocked doors Ø400 mm		•	•	•	•
Glovebox Design: high cleanability			•	•	•
Glovebox Design: electropolishing - surface coating			•	•	•
Purifier by-pass with automatic purification start (auto-start)			•	•	•
Electronic gauge with vacuum-interconnected cycling			•	•	•
Heated vacuum chamber Ø400 mm			•	•	•
HMI Touch Panel size	7"	7"	10"	10"	10"
Modularity - Integration flexibility	+	++	++++	++++	++++

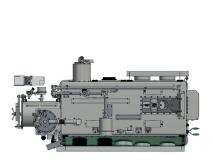
DIMENSIONS AND DESIGN: Pure RANGE

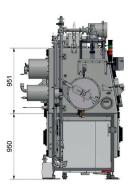












CUSTOM DESIGN (EXEMPLE)

