

Innovative GLOVEBOX and ISOLATOR Systems

Prepared for the future with GS high-tech solutions



- Eco mode < 100 W
- LED light
- Vacuum pump only for antechamber
- No water-cooling necessary

- Experience in glovebox technology
- Worldwide operation
- Individual solutions

- High quality
- Long-living systems
- Certified (ISO 9001 acc. to TÜV)

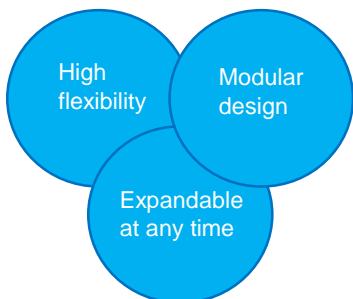
GS Production Facility



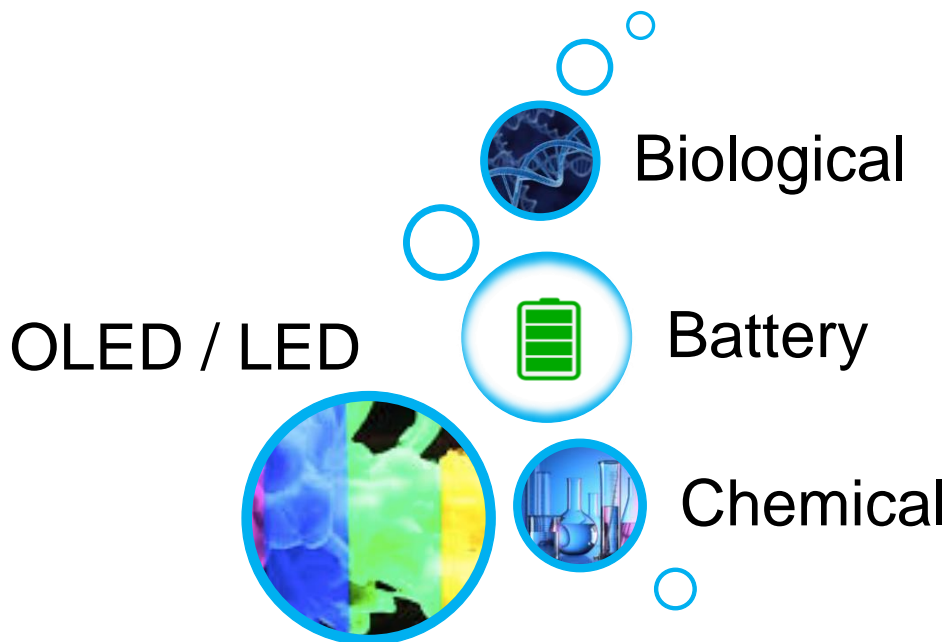
- Product and operator protection
- Leak rate < 5×10^{-2} vol%/h (ISO 10648-2, Class)



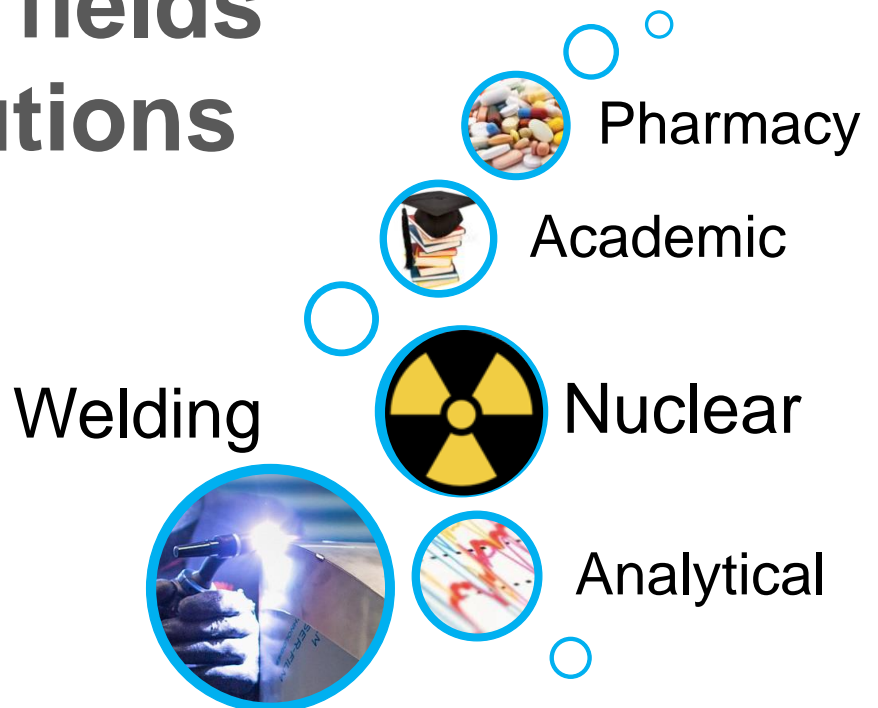
- Pressure regulation without vacuum pump
- Vibration-cushioned blower (almost noiseless)



- Fully automated
- Intuitive software
- Alarm and recording for O₂ and H₂O

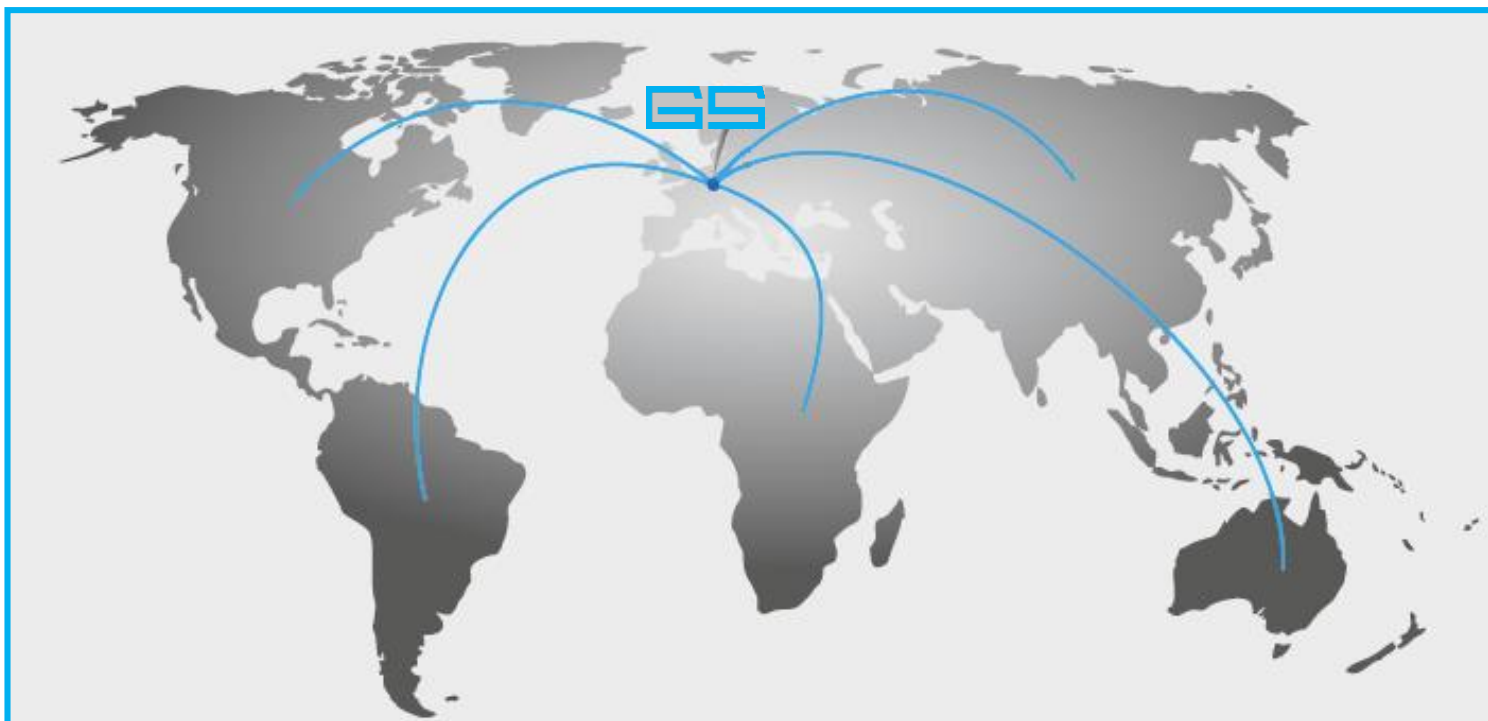


Application fields for GS solutions



... and more

Cooperative partnership lead to durable success



In 2000, a solid growth enable us to move in our new headquarter in Malsch near Karlsruhe.
About 80 skilled employees accomplished all type of glovebox systems, which are delivered worldwide.



Any questions?
We would be pleased to help you.

**GS GLOVEBOX
Systemtechnik GmbH**
Daimlerstraße 29 – 31
D – 76316 Malsch

Phone: +49 7246 / 7001 – 70
Fax: +49 7246 / 7001 – 69
E-Mail: gs@gs-glovebox.com
Internet: www.gs-glovebox.com



GS MEGA Metall GmbH
Im Köbler 2
D – 75438 Freudenstein

Phone: +49 7043 / 95855 – 0
Fax: +49 7246 / 95855 – 29
E-Mail: gs@gs-mega-metall.com
Internet: www.gs-mega-metall.com



30 YEARS
EXPERIENCE



GS GLOVEBOX
SYSTEMTECHNIK



GS ALPHA Line

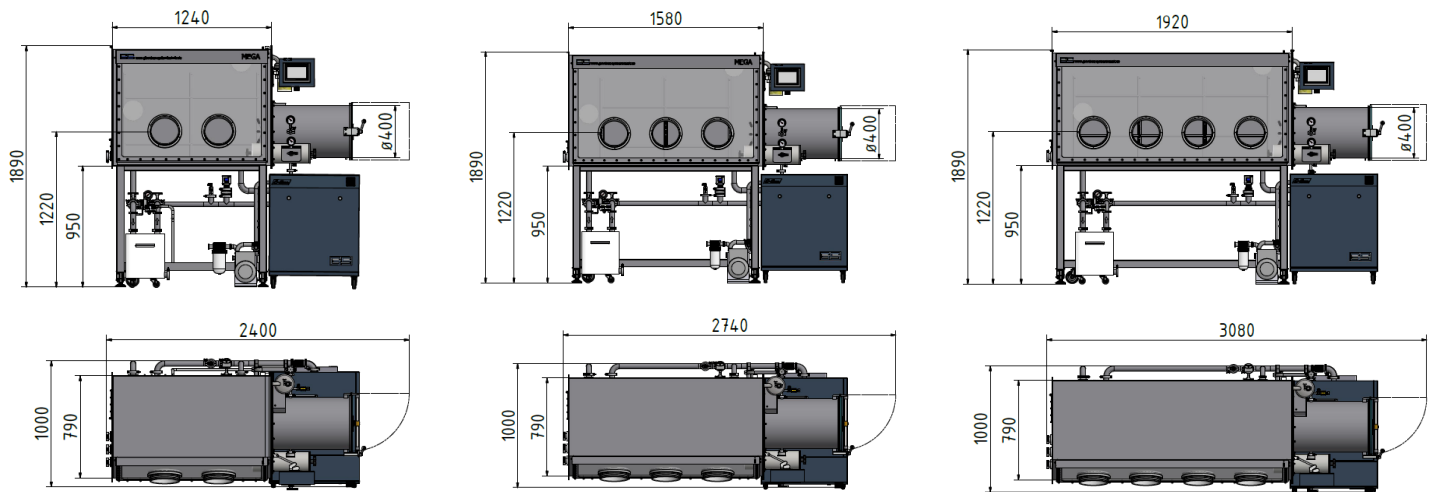


+49 7246 / 7001 – 70
www.gs-glovebox.com
gs@gs-glovebox.com

GS GLOVEBOX Systemtechnik GmbH
Daimlerstraße 29-31
76316 Malsch



One-Side GLOVEBOX



Standardized features

- Over 30 years experience
- High quality manufacturing ISO 9001
- Leak test according to ISO 10648-2, Class 1
- HEPA H14 filters
- Modular design for high flexibility
- Siemens PLC with 7" colour touch screen
- Intuitive software
- Antechambers (d=400mm, d=150mm)
- Complete inert gas system for O₂ and H₂O < 1ppm
- Stainless steel glovebox (1.4301, AISI 304)
- Automatic pressure control (positive and negative) without vacuum pump
- High-efficiency ECO-Mode < 100W



Unique features

- One-sides (2-4 gloves) variants
- Front window in polycarbonate
- Gas purifier for gloveboxes up to 2,6m³
- Manual antechamber cycles
- Standard rotary vane pump (1-stage)
- Warranty: 2 years

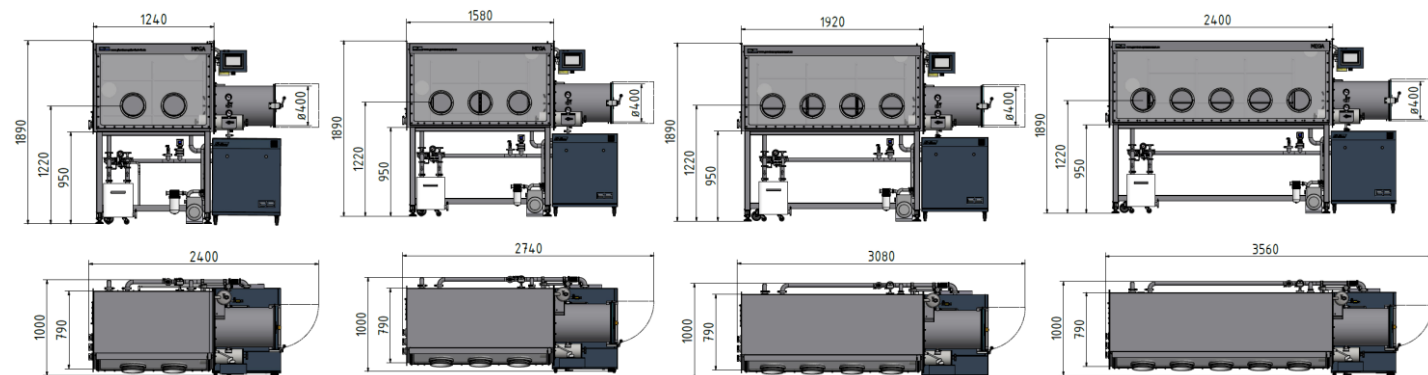


GS MEGA Line

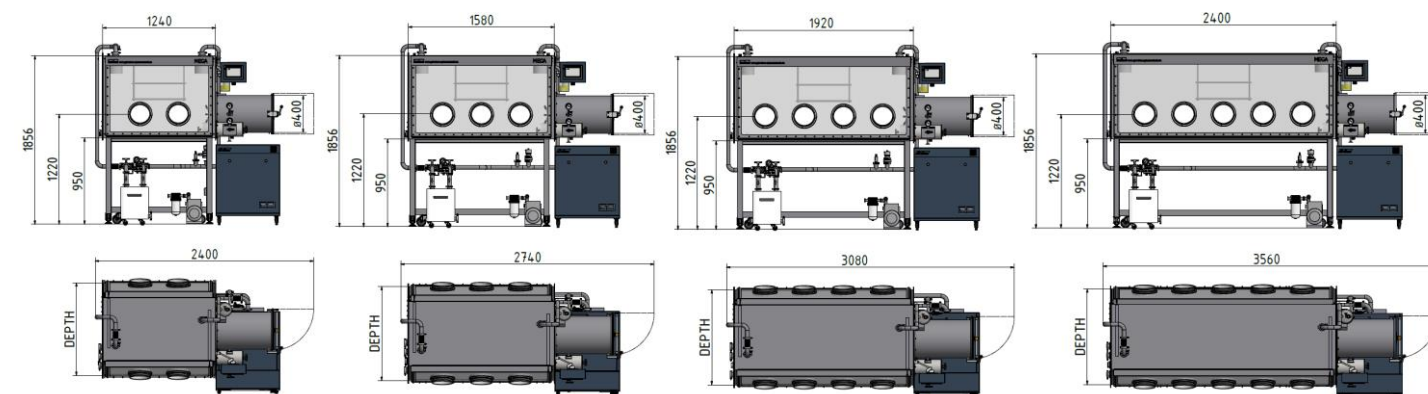




One-Side GLOVEBOX



Two-Side GLOVEBOX



Glovebox Depth	
Depth	mm
Depth 1	1000
Depth 2	1200
Depth 3	1400



Standardized features

- Over 30 years experience
- High quality manufacturing ISO 9001
- Leak test according to ISO 10648-2, Class 1
- HEPA H14 filters
- Modular design for high flexibility
- Siemens PLC with 7" colour touch screen
- Intuitive software
- Antechambers (d=400mm, d=150mm)
- Complete inter gas system for O₂ and H₂O < 1ppm
- Stainless steel glovebox (1.4301, AISI 304)
- Automatic pressure control (positive and negative) without vacuum pump
- High-efficiency ECO-Mode < 100W



Unique features

- One-sided (2-5 gloves), two-sided variants
- Special geometries on customers request
- ESD package, LSG window (highly resistant)
- Gas purifier for gloveboxes up to 5,2m³
- Automated purging
- Alarms, recording for 60 days
- Automated antechamber cycles
- High-efficiency rotary vane pump (2-stages)
- Spare parts and cover
- Warranty up to 5 years

High-efficiency ECO-Mode (Ecologic, Economic and Silent)

- Low power consumption in standard operation (<100 W)
- Vacuum pump is only used for antechamber cycles, which provides a **silent operation**
- No additional water cooling necessary





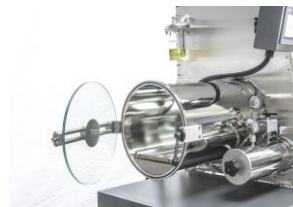
Siemens PLC 7" Color Touch Panel & Intuitive GS Software

- Reliable Siemens premium control system
- Suitable interface for many additional application
- Easy-learn, easy-to-use software with icons
- Comfortable history included O₂, H₂O and pressure



Comfort Package for Improved Ergonomics

- Extendable shelves for an easy access of items
- ESD-package (electrostatic discharge) for a simplified handling of powders
- Automated antechamber cycles via button press



Safety Set against Chemical and Physical Influence

- Improved particle filtration according to HEPA H14
- Comfort and safety valve to protect against pressure variations
- Front window and antechamber doors (d=400mm) made of laminated safety glass (highest resistance)





GS ALPHA Line

Glovebox

- One-sided (2,3,4) variants available
- Not available
- Not available
- All shelves adjustable in height
- 3-sockets, 230V
- 1 HEPA H14 particle filter
- LED inside
- Not included

Not available

- Not available
- Front window made of PC
- Gloves made of butyl (8B1532/9Q)
- Safety sealing rings for gloves made of EPDM
- Not available

Sensors

- Sensors for H₂O, O₂ and pressure
- Not included



GS MEGA Line

Glovebox

- One- (2,3,4,5 gloves) and double-sided (4,6,8,10) variants available
- Special geometries on customer requests available
- Lower side shelf(s) adjustable in height and depth
- Shelves in height and depth adjustable
- 6-sockets, 230V
- 2 HEPA H14 particle filter
- High performance LED outside with lampshade
- Cover for the glove exchange

ESD package (electrostatic discharge)

- Antistatic-equipment consist of
 - Front window made of LSG
 - Antistatic gloves made of especially high-quality butyl (BHP)
 - Safety sealing rings for gloves made of stainless steel
 - Potential equalization between gloves and housing

Sensors

- Sensors for H₂O, O₂ and pressure
- Butterfly-valve to look off the O₂ sensor



GS ALPHA Line

Gas purifier: X-Line

- Gas purifier for gloveboxes up to 2,6m³
- 1-filter (X-Line) system available
- Filter capacity: 23l O₂ and 1100g H₂O
- Circulation blower up to 52m³/h (automated)
- Recording O₂, H₂O and pressure values for 5 days
- Not included
- Not included
- Not included
- Not included

Antechambers (d = 400mm and d = 150mm)

- Both doors made of stainless steel (d = 400mm)
- Loose cover (d = 150mm)
- Manual valve for evacuation / flooding
- Not available
- Not available
- Rotary vane pump (1-stage)

General

- Warranty: 2 years after delivery (EU)
- Not included



GS MEGA Line

Gas purifier: E- | M-Line

- Gas purifier for gloveboxes up to 5,2m³
- 1-filter (E-Line) and 2-filter (M-Line) system available
- Filter capacity per filter: 44l O₂ and 1500g H₂O
- Circulation blower up to 96m³/h (automated / manual selectable)
- Recording O₂, H₂O and pressure values for 60 days
- Reading of the recorded data via USB interface
- Freely selectable alarm for O₂ and H₂O
- Automated purging unit as standard
- Regenerability for solvent vapor removal optional

Antechambers (d = 400mm and d = 150mm)

- Both doors made of safety glass (d = 400mm)
- Door with a hinge and toggle lever (d = 150mm) optional
- Automated valve for evacuation / flooding (freely programmable)
- Easy-Close-System optional
- Fully automated door (inside) moving up and down optional
- High performance rotary vane pump (2-stage)

General

- Warranty: 5 years after delivery and maintenance compliance (EU)
- Spare part package as standard included in the price