

# ISO-PRO-NANO

SAFETY HANDLING OF NANOPARTICLES UNDER AIR OR INERT GAS



- Operator protection while working with nanoparticles
- Glovebox operating in underpressure mode (-200 Pa)
- A blower generates automatically an airflow (>0.5 m/s) in case of leak
- Gas inlet and outlet with Hepa-Filter
- Analogue pressure indication (Magnehelic)
- Stand with leveling feet and castors for easy mobility

# ISO-PRO-NANO

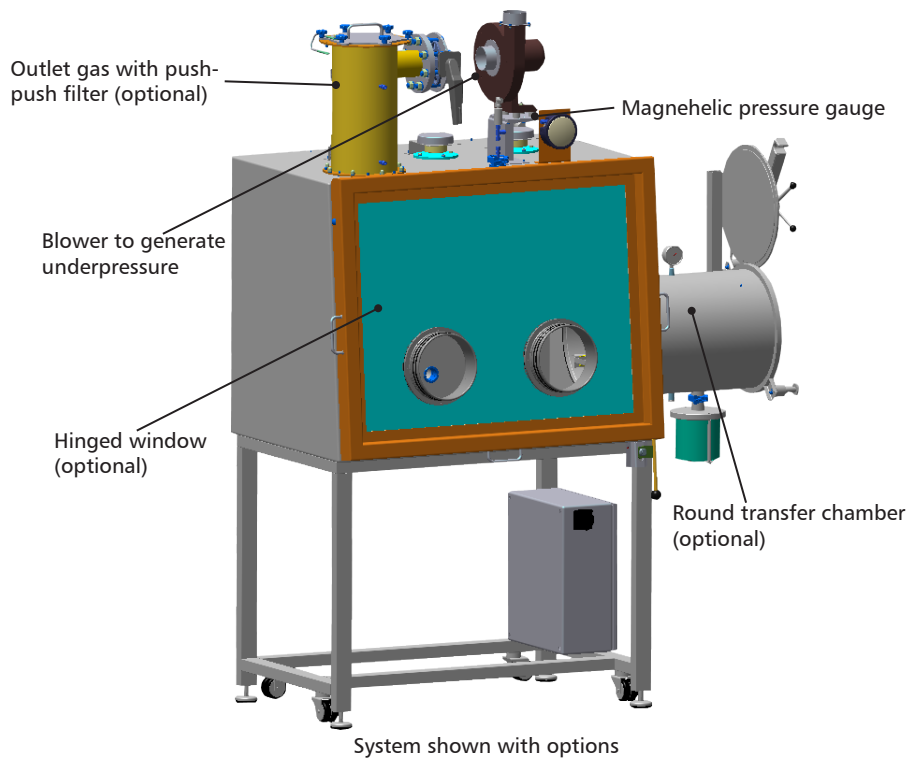
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## DESCRIPTION

The ISO-Pro-Nano glovebox with integrated blower is designed for operator protection while working with nanoparticles. It is operated in relative negative pressure to the environment (-200 Pa). The operator safety is guaranteed by the high leak tightness of < 1 vol%/h and the automatic (under)pressure control. In case of a leak (e.g. the breakdown of a glove) the blower generates a permanent inward gas flow with a velocity > 0.5 m/s to prevent the diffusion of box atmosphere into the surroundings.



## TECHNICAL DATA

Type of construction	Welded enclosure of stainless steel (US 304, 1.4301) with round corners
Inside length	1194 mm
Inside depth	594 mm
Inside height	925 mm
Leak rate	< 1 Vol%/h
Surface inside (working area)	Brushed, roughness Ra < 1,2 µm
Outside surface	Brushed, roughness Ra < 1,2 µm
Window	Laminated safety glass window mounted in a screwed on window frame
Window gasket	Special window gasket made of EPDM for an optimal connection
Glove ports	POM, 220 mm diameter, O-ring sealed
Gloves	Butyl, thickness 0.4 mm
Illumination	> 500 Lux
Feedthroughs	3
Electrical feedthrough	1
Inlet/Outlet gas	Inlet/Outlet with HEPA H 13 filter and manual isolating valves
Operation principle	Turbulent air flow with ambient air, pressure controlled to -200 Pa
Pressure gauge	Analog (Magnehelic gauge)

## OPTIONAL:

Upgrade with HEPA H 14 filters
Front hinged window
Inert gas purge operation
Round/rectangular transfer chamber
Push-push filter
Round antechamber and its filtration
Overpressure valve
WIP and drain valve

Technical note: Filters type needs to be discussed in any case, several solutions are available according to the customer's application.

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