



Modular Cleanrooms

Partition wall and ceiling system



- www.gmechgroup.com -



Introduction

GMECH Group is one of the fast-developing private business groups in Egypt. It has 4 companies in diverse business sectors such as Consultancy, Contracting and Manufacturing.

Gmech Group modular clean room are manufactured in a fully integrated facility in Abou Rawash industrial Zone, equipped with the most modern machinery. Our core production team has 25 years of technical experience.

Gmech Group quality assurance policy assures that the quality of all manufactured modular clean room meets the highest international standards. We are committed to continuous quality improvement and maintain focus on enhanced customer satisfaction levels.

Our modular clean room are ideal for installation in pharmaceutical production areas and Labs.

We offer our clients the best technical support and quick responding after-sales services.

GMECH Group of Companies has a strong foothold in the Egyptian HVAC sector. It expands its manufacturing base and precise procedures to

increase production volumes, accelerate production times and improve project delivery times.

Gmech Group commitment to research The product range features premium components according to last international update. and development has led the company to constantly improve its products and thus guarantee system reliability and performance.

Our vision is to support all pharmaceutical industries projects with our products and improve the Group's position as a leading of clean room manufacturer and supplier in Egypt Africa, and the Middle East with a global vision.

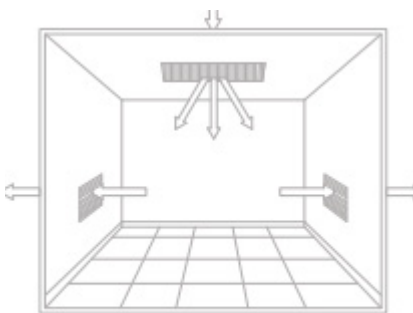
What is Clean room?

A clean room is an environment, typically used in manufacturing, including of pharmaceutical products and scientific research as well as aerospace, semiconductor, engineering applications with a low level of environmental pollutants such as dust, airborne (microbes, aerosol) particles and chemical vapours. More accurately, a clean room has a controlled level of contamination that is specified by the number of particles per cubic meter at a specified particle size. In addition, the temperature and humidity is also controlled.

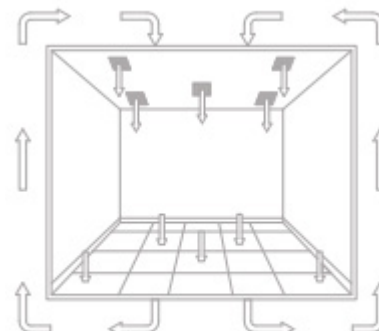


Purity classes for sterile zones

Classification Numbers(N)	Maximum concentration limits(particles/m ³ of air) for particles equal to and larger than the considered size shown below					
	0.1 μm	0.2 μm	0.3 μm	0.5 μm	1 μm	5.0 μm
ISO Class 1	10	2				
ISO Class 2	100	24	10	4		
ISO Class 3	1000	237	102	35	8	
ISO Class 4	10000	2370	1020	352	83	
ISO Class 5	100000	23700	10200	3520	832	29
ISO Class 6	1000000	237000	102000	35200	8320	293
ISO Class 7				352000	83200	2930
ISO Class 8				3520000	832000	29300
ISO Class 9				35200000	8320000	293000



Conventional Airflow



Laminar Airflow



Panel Technical Data

Product Name:

Modular Clean Room Panel.

Application:

Wall & Ceiling Panel

Available Thickness:

50mm.

Face Material

- Interior:

PPGI (0.5 mm.) With 70 micron PE
Protective film

- Exterior:

PPGI (0.5 mm.) With 70 micron PE
Protective film

Paint Coating

- Colour:

Standard off white (RAL 9002)

- Paint type:

Regular Modified Polyester/ Epoxy Primer

- Pain

- Profiled slip joint

Available std. Size

- Width: 1000,1180 mm.

Internal Architecture

Wall system

- Fast & easy installation.
- Prefabricated panel with concealed electrical wiring.
- Self-supporting, dismantlable system.
- Flush surface and corner coving finishing.
- Accommodate changes in clean room layout and future expansion.
- Built-in panel return air riser. Return air duct concealed in panel in order to minimize dust deposit and increase utilizing room area for production activity.
- Single piece wall corner.

Ceiling system

- Walkable, serviceable ceiling
- Concealed suspension
- Interior flush surface.
- Flexible to make cut out at site for lighting, HEPA filter etc.



Door Technical Data

Product Name:

cleanroom sealing hinged door..

Door profiles:

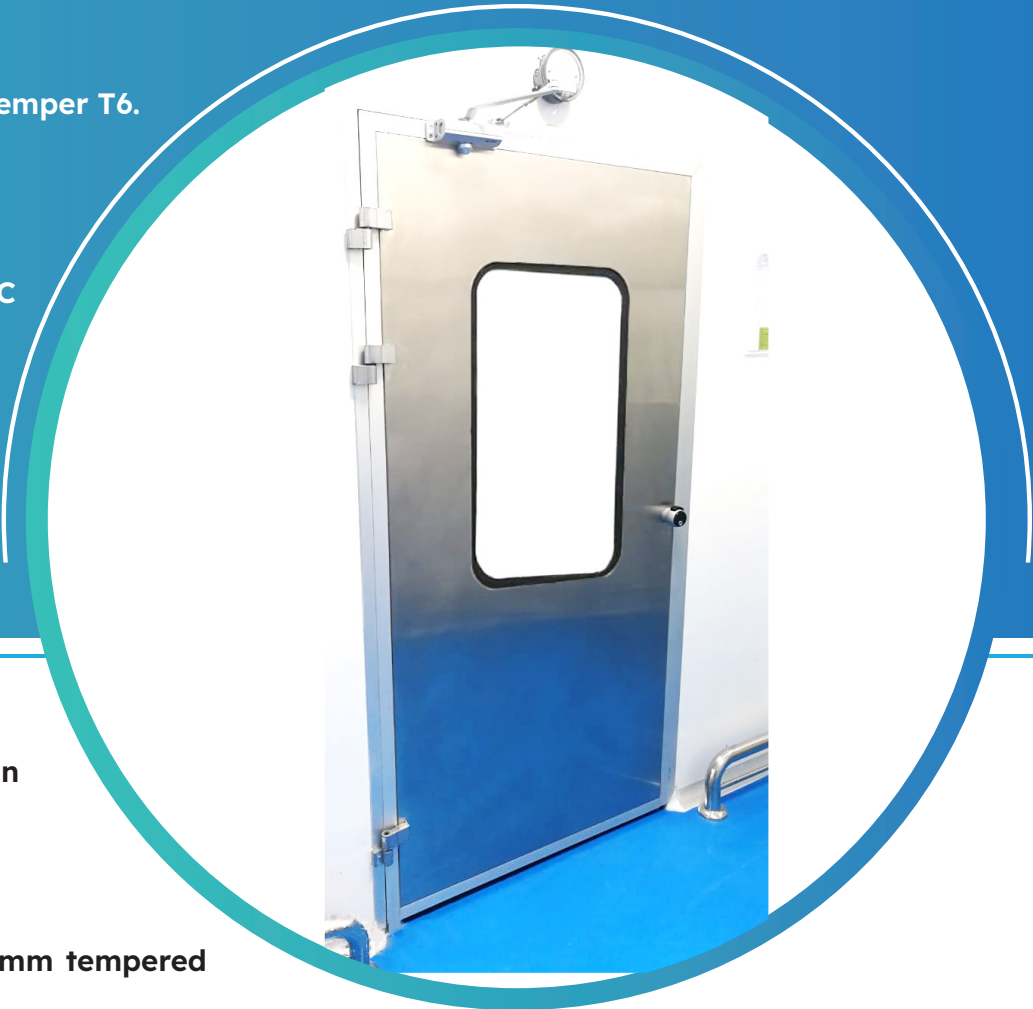
- Aluminum Alloy, Grade 6063, Temper T6.
- Natural Anodized 20 µm

Door skin:

- 2-Component Polyurethane Rigid CFC Free.
- Dimensional stability at +100°C & -25°C (2%max)
- Density 45Kg/M3 with max deviation of 2kg/m3 as per DIN53420

Core Material:

- Material: Polyurethane Foam (PUF)
- Standard: DIN4102-1 B3
- Density: 40±2 Kg/m3



Sealing Gasket

(sides on top)

- Replaceable Bulb and lip design gasket.
- Material: EPDM.
- Colour: Black.

Vision Panel

- Double Glazed IG unit with 5mm tempered glass on both sides.
- Size 900 x 700x 50 mm

Noise insulation

28 dB

Lock (optional)

Electro mechanical lock with Euro Norm cylinder and emergency release inside

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