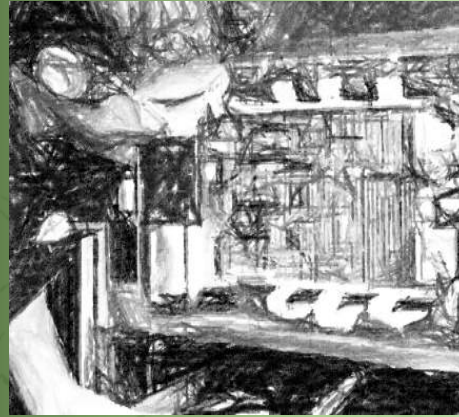
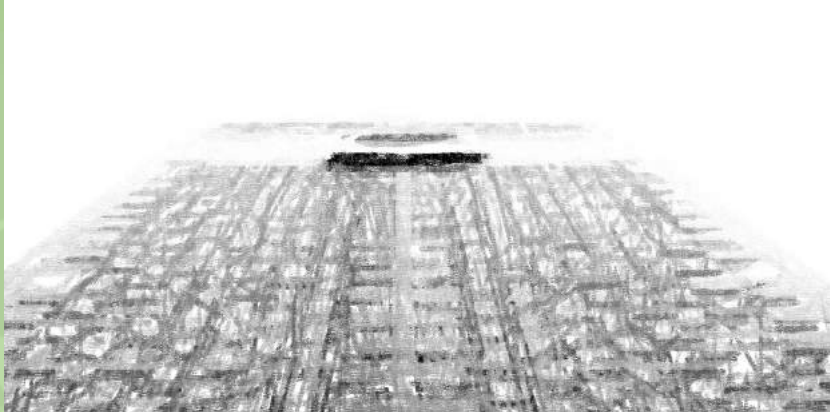
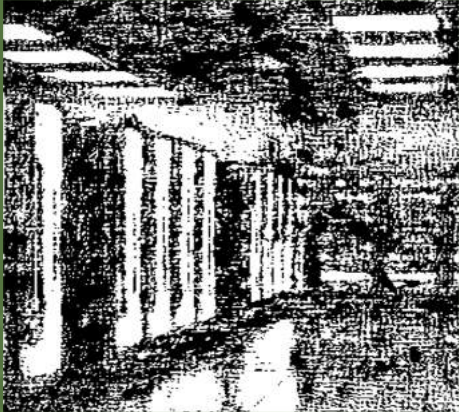
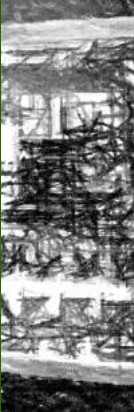
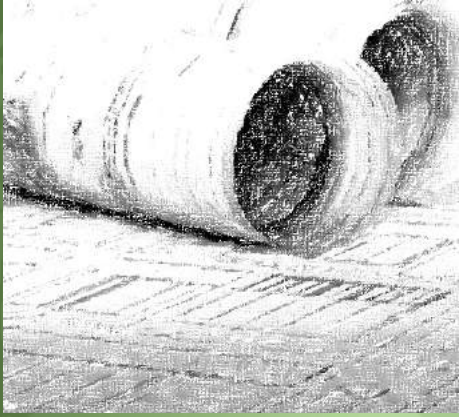


CLEANROOM

PROCESS UTILITIES



 **CRITICAL**<sup>™</sup>  
GROUP OF  
COMPANIES

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## THE CLEANROOM

A cleanroom is a facility ordinarily utilized as a part of specialized industrial production or scientific research, including the manufacture of pharmaceutical items and microprocessors.

Cleanrooms are designed to maintain extremely low levels of particulates, such as dust, airborne organisms, or vaporized particles.

Cleanrooms typically have an cleanliness level quantified by the number of particles per cubic meter at a predetermined molecule measure.



## CLEANROOM CLASSIFICATION

US FED-STD-209E was a United States federal standard. It was officially cancelled by the General Services Administration on November 29, 2001, but is still widely used.

Class	Maximum Particles/ft <sup>3</sup>					ISO Equivalent
	=> 0.1um	=> 0.2um	=> 0.3um	=> 0.5um	=> 5um	
1	35	7.5	3	1	0.007	ISO3
10	350	75	30	10	0.07	ISO4
100	3,500	750	300	100	0.7	ISO5
1,000	35,000	7,500	3,000	1,000	7	ISO6
10,000	350,000	75,000	30,000	10,000	70	ISO7
100,000	3,500,000	750,000	300,000	100,000	830	ISO8

## THE PROFESSIONAL

Each and every one which involve in the design build construction projects are internationally certified and qualified to carry out their task, to fulfil to the customer expectation, namely;





# PROCESS UTILITY SYSTEMS

Efficient and reliable utility systems are a critical requirement for the successful operation of your process facility. Utilizing the appropriate technology to meet the necessary regulatory requirements, CMEE develops solutions that are "right sized" to your application.

CMEE are experts in the design, testing and troubleshooting of utility systems for manufacturing facilities especially in the semiconductor industries, pharmaceutical industries, food & beverage industries, medical industries.



## Our Presence



### Sales & Services Offices

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11920 Bayan Lepas  
Penang, Malaysia  
T / +604 649 6033

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Anggerik Villa, Off Jalan  
Semenyih  
43500 Kajang  
Selangor DE, Malaysia  
T / +603 8723 2033

Ho Chi Minh  
Vincom Center Tower  
72 Le Thanh Ton,  
17th Floor, Unit 11,  
Ben Nghe Ward, District 1,  
Ho Chi Minh City, Vietnam

### Tests & Logistics

Penang  
17, Lorong Valdor Jaya 3  
Golden Gateway Perindustrian  
Valdor  
14200 Sungai Jawi  
Penang, Malaysia

Ho Chi Minh – Sales & Services

The map shows the geographical outlines of Southeast Asia in white against a green background. Three orange location markers are placed on the map: one in Vietnam (Ho Chi Minh), and two in Penang, Malaysia. Lines connect these markers to their respective labels.

Penang – Sales & Services

Penang – Tests & Logistics

Kuala Lumpur – Sales & Services