







## The food industry laboratory design description

Generally area for the laboratory is relatively small, so that the demarcation of the functional areas is relatively few, mainly in the following areas:

- 1, Reagents, containers Area: Generally speaking, the function in this part is equivalent of industrial production of raw materials warehouse, the main role is to store chemical reagents, glassware, laboratory tools and other consumables. Experimental reagents are divided into strong corrosive, toxic, volatile organic reagents and common reagents, that is to say, divided into controlled medicines and general medicines. a variety of reagents required to be stored in the appropriate reagents cabinet in accordance with their own physical and chemical nature instead in a mingled store cupboard, those reagents that may be are harmful to social or physical need to be controlled. According to store size categories, glass equipments are also need to put in special storage cabinets. So when design this region, we need to consider the types and quantities of reagents, and then determine the size and material of cabinets, according to measurements do assessment for the room size.
- 2, Physics and chemistry laboratory areas: physics and chemistry experiment areas generally have three components: physics and chemistry experiments, including a general inspection experiment, precision weighing experiments, the standard experiment for measuring ingredients. Generally inspection experiment need the central table, side table and experiment tables, sink, exhaust hood, etc.. precision weighing experiments and calibration experiments request to control temperature and relative humidity in room. Therefore, it should be cared when choosing air-conditioning. Basically, the differences between sophisticated laboratories and the general physics and chemistry is the air quality Control
- 3 Microbiology Laboratory: This part is a little complex, it often need to control airflow and clean room class, but also relevant auxiliary rooms, such as dressing, hand washing, disinfection pools, etc.. In short there is some necessary equipments, such as biological safety cabinets, wind forest rooms, a buffer, the









sterilizer, air quality is better as comfort, cleanliness controlled in 1000 - 10K is fine. As long as the room is suitable for experimental equipment, it will be fine. Because more space means more consumption of electricity, so it is not unreasonable. Usually negative pressure control the environment, so it avoids the air polluted indoor going outdoor.

- 4, Offices and rest area
- 5, Power distribution room
- 6, Reference library and training rooms

Basically, the context probably like those, the food industry laboratories is very simple, hope you will not think it too complicated.