

## **Catering for a Sustainable Future, Group**

### **Customised Cooking Suites – Energy Efficiency**

The increased interest in Chefs and the food they produce has resulted in the commercial kitchen becoming much more visible, with cooking and food preparation forming an integral part of the dining experience. When the cooking operation is being put on display, the customised cooking suite becomes an increasingly popular alternative in kitchen design.

As customised cooking suites in display kitchens are usually the visual focal point of the operation together with the pass, they must be aesthetically pleasing. However the performance is paramount in meeting the high demand that these facilities can generate while offering longevity of service, as replacement usually entails a fairly major refurbishment. Planned Preventative Maintenance and repairs must be easy to carry out as the only time the suite can be worked on is when the facility is shut, whilst a working suite forms part of the visual experience that we want to share with customer, an out of action station and the problems it generates are not to be shared.

The customised suite comprises of various components that are factory built, delivered to site and installed in one seamless piece. The components can be gas or electric and comprise of numerous items: open burners, solid tops, vortex wok burners, ceramic hobs, induction hobs, salamanders, griddles, char-grills, fryers, pasta cookers, ovens, warming cabinets etc.

The typical life expectancy of a customised suite is likely to be between fifteen and twenty years, when correctly maintained and because of its extra heavy construction it will work 24 hours a day, seven days a week.

When purchasing new equipment, it is worth considering the customised suite from both the environmental and economic view point.

- Although the initial investment is high, because of its durability and performance, life-cycle costs are likely to be less than for many modular appliances installed with a service distribution unit.
- The suite offers greater flexibility and increased efficiency because you can work on all four sides and it is easier to create multi tasking work stations with the complete brigade working together.
- A major design feature of most customised suites is the very heavy gauge stainless steel top which is formed over a thick steel plate which captures the waste heat and then radiates a gentle heat to the entire top surface, which can be used for a number of operations from holding sauces to keeping plates warm.
- It makes the most of the available space and can provide significant savings by reducing the kitchen space requirement by up to 15%.
- It allows greater functionality in the design while making each component easier to access.
- Energy and emission savings of up to 30% can be achieved over the conventional cooking line.

The design of the customised cooking suite should be a process that involves the chef, the designer and the engineer.

Firstly the suite must deliver the operational requirements to allow the chef to meet his customer's expectations while allowing him to ramp up or scale down the amount of equipment being used as the numbers increase or decrease throughout the service.

Secondly the designer must make the chef aware of the latest technology so that new or different methods of operation and cooking can be investigated, then evaluated to reduce expenditure and emissions while providing a better working environment.

Thirdly the designer must work with the engineers not only to achieve the most cost effective solution but also to make the engineers aware of the economic and environmental savings that can be achieved from heat recovery, reduced water usage etc.

By all parties working together, we can design something that is aesthetically pleasing, hard working and robust while making sure that it meets its economic, environmental and social responsibilities.

Prepared by: David C Clarke FCSI  
4<sup>th</sup> October 2006.

David Clarke is a director of design consultants CDIS-KARM (01603 721961) and a professional member of the Foodservice Consultants Society International UK (01483 761122)