

BASIC FACTORS FOR FOOD PROCESSING EQUIPMENT HYGIENIC DESIGN AND ITS CLEANABILITIES WITH MINIMAL CONTAMINATION RISK

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Abstract

In this paper basic factors with respect to the manufacturing suitable for food processing equipment have been presented and considered for specific food processing lines.

All of these factors have been graphically shown and numbered in the figure one. They have to be specifically taken into consideration for so call open food production productivity area, and for open processing equipment as well. It is the most important at the area when raw food material is being prepared as food ready to eat. It can also be analysed through many other technological food production lines, but the particular importance have to be seen among food branches as following: fish fresh, frozen and meat processing, cheese, meat slices, meat raw or cooked dicer and strip cutter, meat separation from bones and trimming, dray apple slices, confectionery, potato chips and slices, tomato, cucumbers and other vegetables cut out to pieces, bakery, many dairy final products. In general for all cutting, slicing, sawing, mixing, grinding, injection, flow divider multiple processing track for fillings meat, fish, cheese or vegetables products unit operations, when that equipment should be dismantled every day for cleaning.

In conclusions it has been stated that all basic food processing equipment factors have to be verified and assessed two times. For the first time at the beginning of the design machinery concept of all equipment types, together with building and surrounding plant requirements, quality of raw materials, operations staff qualification and expected from them demand to fulfil the GHP for any kind of final food products. For the second time, at the end of that food production needs as above pointed out, regarding the EU 96/IPPC Directive, with respect to the level of waste like solids including dust, gases and liquids in keeping the ongoing way zero level waste campaign to safe environment.

Key words: *Equipment design factors, Hygiene surface clean abilities, Tools blunt and sharpness, Contamination risk area.*