

**SHORT COURSE  
HYGIENIC DESIGN OF FOOD PROCESSING PLANTS**

**TWO DAYS**

The course aims to make established and potential food processors aware of the standards that are required for modern, safe food processing installations, how to implement such standards and what documentation with regard to such standards is available locally. Aspects of building and facility design as well as process and service equipment are addressed. In so far as HACCP requirements are concerned the course highlights some of the prerequisite programs that need to be put in place to allow HACCP to be implemented. The course pays attention to the processing of low acid food and the use of hygienic design as one of the important tools to combat *Listeria monocytogenes*.

The course will elucidate and expand on the information included in SANS/ISO 14159: *Safety of machinery - Hygiene requirements for the design of machinery* as well as sections of SANS 10049 - *Food safety management - Requirements for a prerequisite programme (PRP)* and ISO TS 22002 *Prerequisite programmes on food safety -- Part 1: Food manufacturing* and information from the European Hygienic Equipment Design Group (EHEDG). GMA Facility design checklists will also be considered.

SANS 14159 provides, for the first time in South African standards literature, a general guideline to the risk analysis that should accompany equipment design and the hygienic issues involved in machinery design and installation. This will be reviewed in the light of more detailed documentation. SANS10049 although under review still provides valuable guidelines to the hygienic design and use of food processing facilities.

The course will include

- Introduction: Facilities, PRPs and HACCP
- Overview Regulation R962
- Overview SANS 10049 (and PAS 220)
- Overview SANS 14159
- Layout, flows and zoning
- Building structures and surface finishes
- Hazards, risks and barriers
- Materials of construction
- Design of open systems
- Design of closed systems
- Pasteurisation and sterilisation systems
- Air handling systems
- Services
- Cleaning and CIP
- Verification and test methods
- Checklists

Pre-course reading will be supplied. There will be an assessment assignment at the end of the course.

**Presenter**

Andrew Murray is a consultant food process engineer with more than 20 years experience in the design of hygienic plant for the food and beverage industries. He has presented a number of courses on the subject of food machinery design and food engineering. He is a member of StanSA TC 5140.25 – Hygiene practices in the food industry (responsible for SANS10330 and 10049).

**Who should attend?**

The course will be of use to food industry management, food scientists, food safety professionals and auditors as well as for installation or process engineers in the food industry.

**Requirements**

A basic knowledge of HACCP or attendance of a basic HACCP course would be an advantage but is not essential. Pre course reading will also include information regarding HACCP.

**Course Fee**

R4400.00 plus R616.00 Vat = R 5016.00. This fee includes notes, teas and lunches as well as copies of SANS 14159 and SANS 10049. Payment is required to secure confirmation of booking. Bookings close two weeks before the start of the course. Space is limited. There will be a cancellation fee of 20% of the fee for cancellations later than two weeks prior to the course.