



# The South African Institution of Mechanical Engineering

## Steam Distribution; Pipeline Ancillaries; Steam Flow Metering; Desuperheating Workshop

**Duration - 2 Days : Time - 08h30 – 16h30** (Registration at 08h00)

Manual, teas and lunch provided

**CPD Validation Number : SAIMEchE-1005-12/19**

**This workshop will earn delegates 2 credits in Category 1**

This workshop is suitable for SAIMEchE Groups 0 & 1

**The workshop is facilitated by [Mr. Malcolm Black](#), B.Sc.(Mech.Eng.), G.C.C., MSAIMEchE, Th.B.**

### SAIMEchE Group Classification

0 = Non-technical,  
e.g., HR, Finance

1 = Candidate  
(including GCC) with <  
5 years experience

2 = Professional  
(including GCC) with <  
15 years experience

3a = Professional and  
**Appointment** with > 15  
years experience with  
specialist interest

3b = Senior  
**Management** with >  
15 years experience

### Contents

#### Steam Distribution:

- Introduction to steam distribution
- Pipes and pipe sizing
- Steam mains and drainage
- Pipe expansion and support
- Air venting, heat losses and a summary of various pipe related standards

#### Pipeline Ancillaries:

- Isolation valves – linear movement
- Isolation valves – rotary movement
- Check valves
- Strainers
- Separators
- Gauges, sight glasses and vacuum breakers

#### Steam Flow Metering

- Fluids and flow
- Principles of flow metering
- Types of steam flow meter
- Instrumentation
- Installation

#### Steam Desuperheating

- Basic desuperheater theory
- Basic desuperheater types
- Other types of desuperheaters
- Typical desuperheater installations



In the continued effort to bring quality training to the Engineering fraternity, SAIMEchE and Spirax Sarco have concluded an agreement in terms of which SAIMEchE has received the right to use Spirax Sarco's Steam Engineering Tutorials as the basis for workshops on steam and related topics.

In doing so, SAIMEchE recognises the valuable contribution made by Spirax Sarco in the development of high quality steam related products, as well as their commitment to the transfer of knowledge through an extensive range of technical literature and training material.

Delegates to the workshop will receive the complete set of Spirax Sarco tutorials covering the workshop topics, which include multiple choice questions at the end of each module.

Delegates must bring scientific calculators to the workshop.

### Who Should Attend

- Candidate Engineers • Candidate Engineering Professionals • Registered Engineering Professionals • Process Managers & Process Supervisors • Utility Managers

### [Delegates' Comments](#)