



SAIRAC

The South African Institute of Refrigeration and Air Conditioning

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Dear SAIRAC members

You are invited to our Johannesburg Centre 4th Technical Talk on 20 June 2024. Presented by Ian Wilson from Direct Digital Control Services (DDCS)



With over 49 years of experience in the HVAC industry, he has developed a considerable knowledge and expertise. His journey began in 1975 as a technician at Ampros, where he honed his skills in HVAC maintenance, and repair. He joined Honeywell in 1977 as a controls technician specializing in pneumatic control systems and also commissioning large sites such as Sun City with Honeywell's micronic 100 electronic control system. He joined Staefa Controls in 1982 as a sales engineer, specialising in the Staefa Klimo range of electronic controls. He then moved on to Motor Control Construction in 1994, reuniting with my former boss George Kinnear, where he focused on the Landis & Gyr Polygyr range of electronic controls. His expertise expanded to building management systems (BMS) with Visonik 400 and later System 600 from MCC Powers, Chicago. He took the entrepreneurial leap and founded Direct Digital Control Services cc in 1994, delivering much-needed specialised service and maintenance for Visonik 400 and System 600 building management systems. Through DDCS, he has provided expert solutions, support, and maintenance to clients. Since 2002, they have proudly represented Innotech Control Systems Australia, promoting, selling, installing, and servicing their products, as well as providing training to the HVAC industry and our network of local distributors. Their dedication and commitment to excellence have enabled them to build a loyal customer base and a strong reputation in the industry. And, all going well, they look forward to celebrating our 30th anniversary in September 2024, marking three decades of service to the HVAC industry."

Synopsis:

Title: Building Management Systems - Introduction:

Building management systems (BMS) play a crucial role in ensuring the efficient operation and maintenance of modern buildings. This presentation explores the integration of pneumatic, electric, and direct digital control systems to create a comprehensive BMS.

Pneumatic Systems: - Overview of pneumatic systems and their applications in building management

Electric Systems: - Honeywell Series 90

Electronic Systems: - Introduction to electronic control systems and their advantages- Landis & Gyr Polygyr

controllers - Staefa Klima controllers - Honeywell Micronic 100

Direct Digital Control (DDC) Systems:

- Explanation of DDC systems and their benefits

- Case study: Implementing Tridium Niagara Framework for integrated building management

- Utilizing Tridium JACE controllers (java application control engine)

- Integrating various systems, such as HVAC, lighting, security, and energy management

Integration and Benefits:

- Discussion on integrating pneumatic, electric, and DDC systems for a comprehensive BMS
- Highlighting the benefits of integration, including:
 - Increased efficiency and automation
 - Reduced energy consumption and costs
 - Enhanced occupant experience and productivity
 - Improved system monitoring and maintenance

Conclusion:

A well-designed BMS incorporating pneumatic, electric, and DDC systems, such as Tridium Niagara Framework, can optimize building performance, reduce costs, and enhance sustainability. This presentation demonstrates the potential of integrated building management systems for efficient and modern building operations.

Service and maintenance of these systems is crucial for the ongoing wellbeing of the building and its occupants

Date: 20 June 2024

Time: 18h30

Venue: ACRA, 203 Element Road, Chloorkop, Kempton Park.

RSVP: Before 14 June 2024 to Mariet Pieterse, johannesburgsecretary@sairac.co.za

Kind Regards,

Mariet Pieterse

Johannesburg Secretary



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