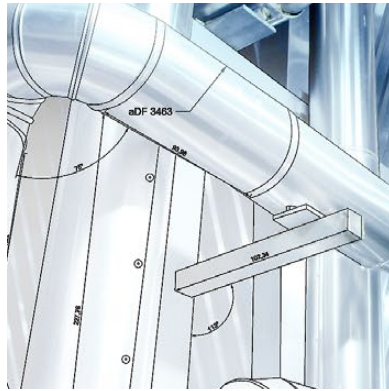
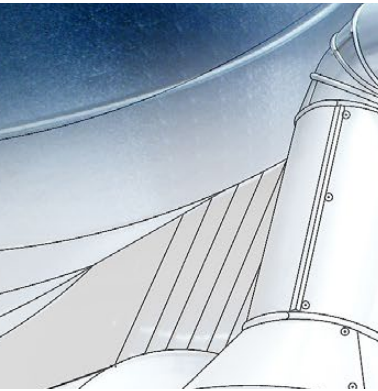
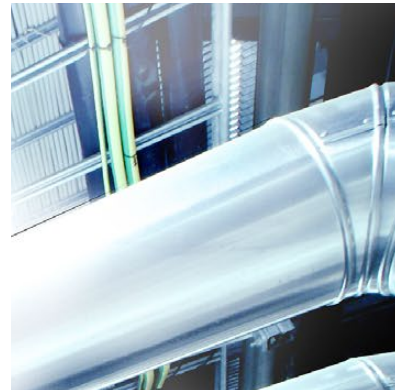
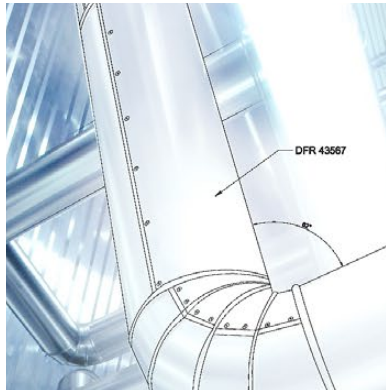
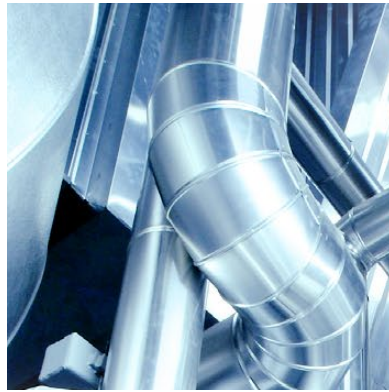
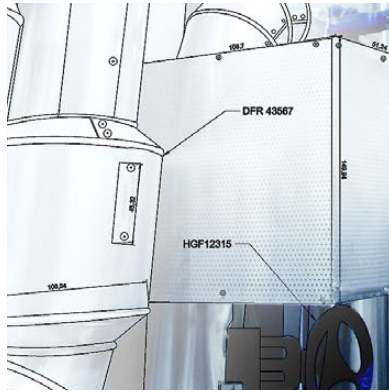
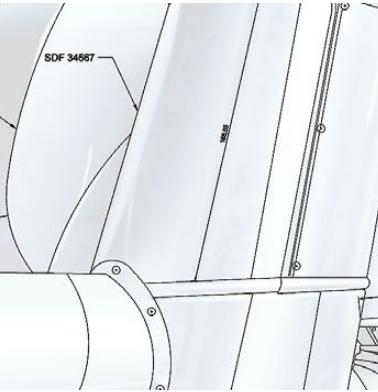




CELEBRATING  
**9 YEARS**  
2015 - 2024



**PROFILE**



## SPECIALIST INDUSTRIAL CONSULTING SERVICES

Utility Piping | Refrigeration | Steam Applications

## ABOUT

AMC Engineers is a Cape Town-based consulting engineering firm, founded in 2015. We specialise in utility and plant design aspects of mechanical engineering projects. These include the concept, schematic and detail design of refrigeration plants, both freon and natural ( $\text{NH}_3 / \text{CO}_2$ ), commercial and industrial refrigeration applications and general plant utility design. We have a broad range of experience in traditional and specialist HVAC design and applications, and have an excellent understanding of appropriate HVAC solutions.

We specialise in the design of insulated structures and buildings, compressed air plant and reticulation systems, steam and hot and cold water generation and distribution systems, fuel storage and distribution, biomass combustion as well as piped services. We also have significant experience in combustion systems, furnace, and boiler design.

Our engineering approach and broad, yet critical understanding of large industrial plants and utility solutions allow us to design an optimal system for each application. This includes detailed analysis of energy streams and the most appropriate utilisation of waste energy in the form absorbed or dissipated energy.

### AT AMC ENGINEERS WE PRIDE OURSELVES IN:

- Looking holistically at designs to allow for the most economical and efficient design and energy optimisation
- Managing the entire design process
- Our project management techniques allow us to oversee multi-disciplinary design projects and co-ordination between multi-disciplinary teams
- Providing excellent designs that take current economic drivers and environmental considerations into account
- Keeping the best interests of the client and environment at heart
- Structuring our service as a partnership by discussing engineering design decisions on a step-by-step basis with the client, and conducting economic evaluations, or by providing a complete engineering solution with minimal input from the client if required

## SERVICES

AMC Engineers provides specialist industrial consulting services and has a focus on the utility piping, refrigeration, steam and HVAC applications.

We are able to conduct facility surveys in terms of legal compliance with SANS10147 and SANS347 to ensure that equipment and installations comply with the latest Occupational Health and Safety regulations and have four SAQCC qualified engineers.

### CONSULTING ENGINEERING SERVICES

- Multi-disciplinary, commercial and industrial projects, co-ordination, management of refrigeration and utility (compressed air, steam and other fluids) projects
- Commercial and industrial refrigeration design, installation-, construction-, and site-monitoring and commissioning supervision in the warehousing, cold storage, production, industrial fresh foods handling and storage facilities and food processing environments
- Large utility services (refrigeration, steam, compressed air and other piped service) design and project co-ordination of complete installations

### REFRIGERATION

- Commercial synthetic, large and small scale plant design
- Large and small scale as well as critically charged industrial natural refrigerant plant design
- Cascade and multi-stage refrigerant system design
- Specialist and bespoke small scale luxury refrigeration cold rooms and wine storage facilities for luxury houses and hotels

### SPECIALIST ROOM DESIGN

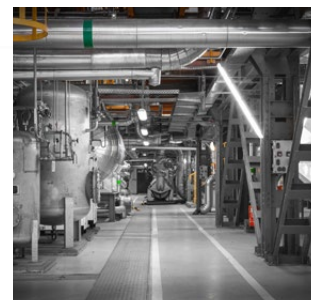
- Banana ripening rooms
- Blast freezers
- Biltong rooms
- Bulk defrosting rooms
- Specialist RH and temperature controlled rooms
- Food processing and value add facility services design

### FOOD PROCESS, BREWERY AND UTILITY DESIGN

- $\text{NH}_3$  refrigeration system design and installation
- Site wide diesel, or other fuel offloading, filtration, storage and reticulation
- Refrigeration plant process descriptions for translation into control programmes
- On site commissioning of ammonia refrigeration and steam plants, as well as plant optimisation exercises

### OTHER

- HVAC design and commissioning for both small bespoke homes as well as large commercial or industrial applications, where applicable
- Biomass combustion and system design including heat and mass flow calculations and design



## THE TEAM



### ANDREW MINNAAR

Andrew is a qualified, professionally registered mechanical engineer (reg #:20120632), and a member of ASHRAE and SARDA and a registered refrigeration gas practitioner with the SAQCC. Andrew has 22 years of experience in the industrial plant, process and utility design environment, ranging from textile, food and beverage, cold store and logistics design. This broad industry experience facilitates a deep understanding of many industrial processes. Complimented with an initial experience in the industrial maintenance sector, these skills allow a holistic understanding of client, process, utility design and maintenance needs. Studying business post gradually has nurtured his passion for business.



### ASHEEQAH SALIE

Asheeqah is a qualified mechanical technologist with nine years of experience in the consulting engineering industry. She has extensive experience in refrigeration and HVAC design and project management. Her experience includes detailed design and specifications, Revit modeling, interdisciplinary coordination, project management, and construction monitoring for the above-mentioned disciplines. Her work experience has exposed her to various design criteria and sustainability standards, such as the Green Building Council of South Africa and organizations' own developed standards (Roche K18 Directive) and has allowed her to collaborate with design teams in various countries such as USA, Nigeria, and Mozambique.



### CAMERON PILLAY

Cameron is a qualified engineer holding a B.Eng degree in Mechanical Engineering. As a candidate engineer with ECSA, he is actively pursuing his professional registration, and is also a registered gas practitioner with SAQCC. Cameron has over 5 years of experience in the industrial refrigeration sector, working primarily in contracting environments on the construction of refrigeration plants and the development of turnkey designs. His combination of design and operational experience enables him to take a comprehensive and meticulous approach to every project. With expertise spanning project management, detailed Bill of Quantities (BOQ) formulation, interdisciplinary coordination, quality control, design development, and detailed costing, Cameron is dedicated to creating innovative designs that promote sustainability and challenge conventional practices.



### LYNNE EVON

Lynne has more than 17 years of certified professional business administrative experience in the financial and auditing industry. She has dealt with Sub-Saharan countries on all business administrative levels. She has exceptional organisational and project management skills. She is responsible for ensuring procedures, policies, legislation, and regulations are correctly followed and complied with and communication protocols including streamlining administrative procedures. With her combination of skills and proficiency, she will ensure the successful initiation, planning, execution, monitoring, controlling, and closure of projects.



### STEPHEN FREWEN

Stephen is a qualified engineer with a B.Eng degree in mechanical engineering. He is currently working towards his professional registration, is a member of SAIRAC, and a registered refrigeration gas practitioner and designer with the SAQCC. Stephen has 13 years of experience in the commercial and industrial refrigeration & HVAC environments with additional experience in utility design in the retail, textile and food and beverage industries. Stephen's experience provides him with a diverse set of tools to assist in solving the most challenging of air treatment problems, and he is passionate about finding optimal solutions to his clients' needs.



### CHRISTO VAN DER MERWE

Christo started his vocational training with Grenco SA (GEA), and after qualifying he remained at Grenco for 25 years. The bulk of this work experience was based in the design and application of cooling in the food and beverage industry throughout Southern Africa. His experience included extensive work in the deciduous, fishing, beverage and warehousing industries. It included refrigeration design and project management, and mentoring new engineers and developing operational procedures in the refrigeration industry. In 2007 Christo started his own Refrigeration Design consulting business which operated successfully until 2014. Christo joined MRE Cape Town as director and partner design engineer in late 2014 before joining AMC in 2023.



### JOHN MAARSCHALK

John is a qualified mechanical BIM technician and has over 11 years experience with Revit and BIM modelling. Initially qualified as a mechanical draughtsman, John gained experience in various industries, namely rolling stock (railways), slurry pumps (mining), architecture, interior design, wastewater treatment and, over the last 10 years, refrigeration engineering.



### CLYDE ABRAHAMS

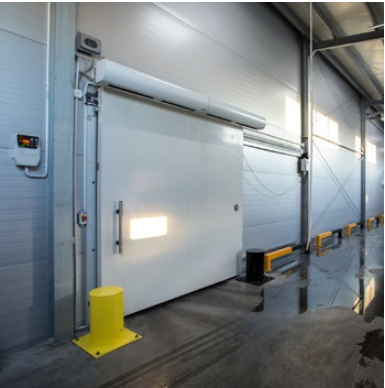
Clyde is a qualified mechanical BIM specialist at AMC with over 12 years of experience in his field. He has a comprehensive work background in building services as well as Industrial Process Services and strong ethical characteristics. His extensive knowledge covers HVAC, Insulation, Wet Services and Refrigeration in Revit modelling which is covered in all areas of services and has taken him abroad to work on detailed, specialized projects such as the Middle East ("Calatrava, Tallest building in the world"), the Australian Defense Force, Doha Oasis, and Stadium Australia.



### SARA KHAN

Sara has a bachelor's degree in Psychology. She has more than 5 years of experience in the telecommunications and administration industry whereby she liaised on a high level of customer service. Her daily liaison with clients has exposed her to professional communication in all areas of her role. Since joining AMC, she has shown great enthusiasm in her transition to the administration field. Being new to the world of engineering, she has shown growth and immense interest in learning more.

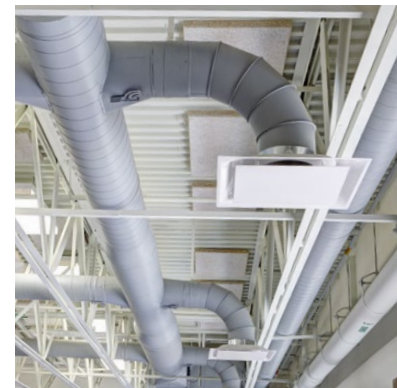
## CLIENTS



**Andrew Minnaar**  
 +27 72 148 4889  
[andrew@amcengineers.co.za](mailto:andrew@amcengineers.co.za)

**Stephen Frewen**  
 +27 84 722 7287  
[stephen@amcengineers.co.za](mailto:stephen@amcengineers.co.za)

[www.amcengineers.co.za](http://www.amcengineers.co.za)



**AMC**  
 ENGINEERS