Refrigeration insights

A vast range of choices

Store refrigeration is an ongoing topic, with critical issues like equipment choices, energy saving, maximising cabinet and plant efficiency, and alternative energy supply relevant all year round. Key considerations for increasing energy efficiency and decreasing energy costs include cabinet styles, preventative maintenance, refrigeration audits, and door and closure types.

Let's take a look at some of the refrigeration

Let's take a look at some of the refrigeration solutions and services available to South Africa retailers and wholesalers.

Emerson commercial and residential solutions

Emerson is a global industry leader offering a complete range of automation and commercial solutions. They pride themselves on offering a total farm to fork retail and food refrigeration solution. Their strength lies in their experience and a wealth of technical skills and know-how — even the sales team have technical backgrounds and often make on-site repairs when calling on customers.

Automation solutions

Automating your system can reduce down time, particularly for events such as load shedding that take place after hours, and also reduces the



potential for human error. Automated systems are an exceptionally useful way of monitoring your energy consumption and quickly identifying any problem areas. Emerson offers a complete and varied range of automation solutions, from temperature and electricity usage monitoring to control management and lighting.

Refrigeration audits

A refrigeration audit will analyse total energy consumption over a certain period, how a system is installed, how efficiently it runs, and what sort of maintenance has been undertaken. It also evaluates how a refrigeration system has been performing, assuming that it is being monitored and recorded.







access to fresh food being the global norm rather than the exception.

Emerson revolutionizes how food is kept cold and safe as it is transported from farm to fork.

Emerson.com/WeSeeColdChain

Learn more, contact us:

Email: comresmea.marketing@emerson.com

Tel: +27 11 451 3700



CONSIDER IT SOLVED

This will show if efficiency is decreasing and energy consumption is increasing, identify areas of concern, and indicate where improvements could be made.

Retrofit

Improper installation and a lack of preventative maintenance are two of the biggest culprits when it comes to decreased efficiency.

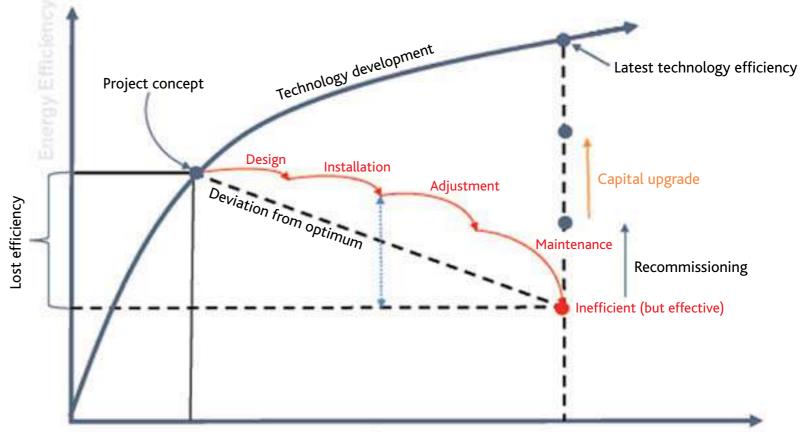
A system that is effective but not efficient does the job it was designed to do, but it takes a lot more energy to achieve those results than it should. This type of decline can happen quickly, and the effect can be seen on energy consumption within twelve months. Overall refrigeration energy efficiency can plummet by up to 30% in two years.

Causes for this decline can include poor or inexpert installation, adjustments needed to systems that haven't been specifically designed for your space and business, and infrequent or improper maintenance. Recommissioning or retrofitting an existing system is a solution that can often reap significant savings.

New tech

Intelligent cold chain management, that follows produce from the moment it leaves the farm, ensures that fresh produce remains at a stable temperature throughout its journey to the customer's plate. Consistent temperatures mean a safer food product, as well as longer shelf life.

The relationship between system efficiency and effectiveness



Source: Emerson Commercial and Residential Solutions

Refrigeration systems can loose as much as 30% efficiency within the first two years of operation – monitoring is critical

AHT Multilayer Trading

Multilayer Trading has a full range of supermarket refrigeration solutions, with a focus on energy-efficient, eco-friendly, and self-contained units. These units have been extensively tested, both at the design stage and through years of on-site learnings and experience.

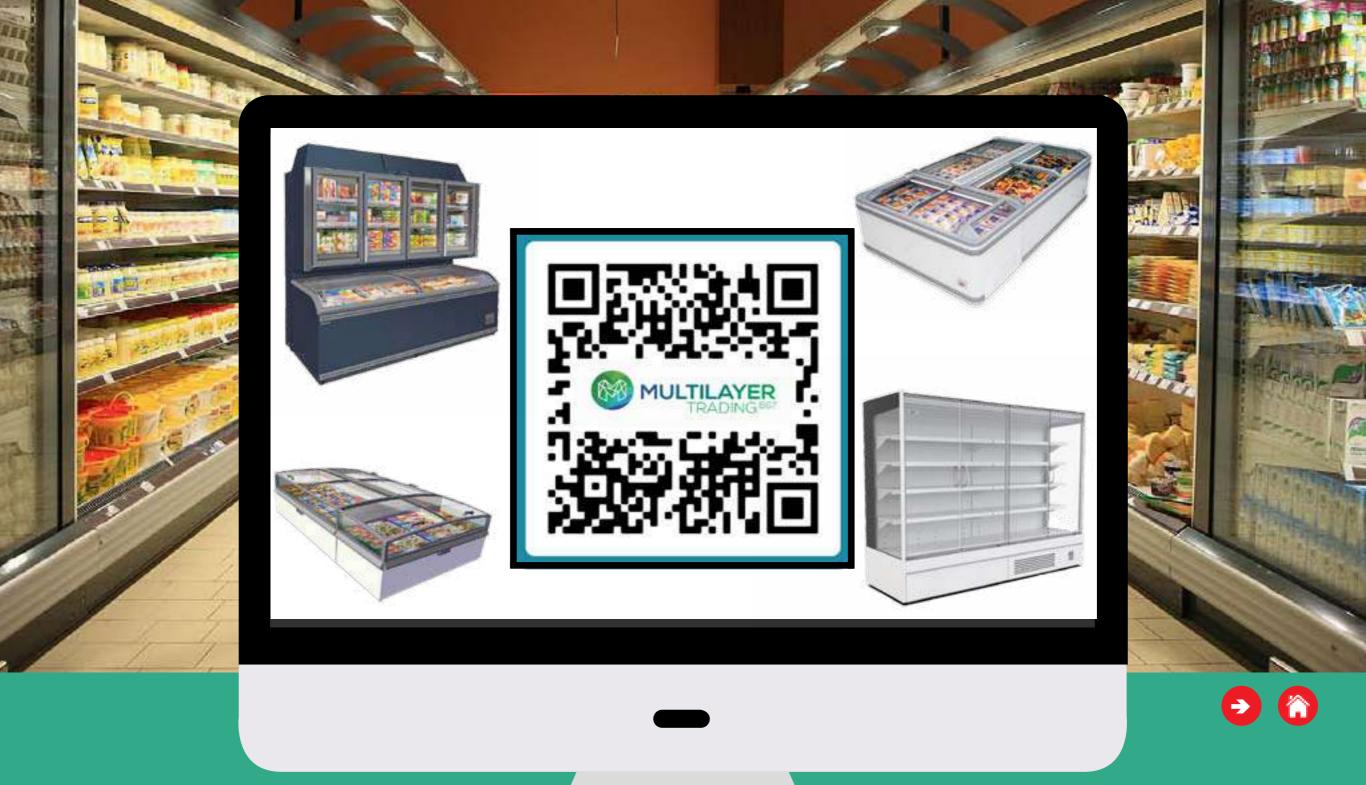
Cabinet styles

Multilayer Trading offers three different turnkey solutions for retail stores: plug in, hybrid and remote.

Plug in – This is a what is known in the industry as self-contained refrigeration. These highly energy efficient units are manufactured with compressors fitted into each unit, so there is no need for any external compressors. The unit is fully flexible and can be moved to anywhere in the store, without the need for copper pipes or trenches. The savings on installation, labour, and building materials is extensive.







We Cool

You Sell

Hybrid – This is unique to the market and only offered by Multilayer Trading. The hybrid feature is utilised by Multilayer's Multideck system. These units can be fitted to either a water-cooled system or run using condensing fans, resulting in greatly reduced refrigeration downtime.

Remote – Much like a conventional case, these units can be fitted into an existing system. The choice of many stores, remote systems run off a central condensing unit that pipes refrigerant to individual fixed location cabinets. The pipes and wiring for these units must be channelled in, which can limit manoeuvrability once installed.

New tech

An in-house monitoring system is connected to each refrigeration unit. If a fault is noted, it can be resolved electronically or logged to the 24-hour helpdesk, which then advises a technical team on the problem, ensuring they are prepared to speedily repair the fault in-store.

Colcab

Colcab is an innovative manufacturer of refrigerated display cases and cabinets and is one of the leaders in the South Africa's refrigeration industry.

Cabinets

Over the years, cabinet design has improved dramatically, and new generation cabinets can be up to 30% more efficient than older units. Colcab



Colcab Spar Century City

offers both conceptual design and retrofit solutions, aimed at significantly decreasing energy costs and increasing energy efficiency.

Doors and closures

Close-the-case technology uses high-quality materials to close any type of case, chest, or cabinet. Closing the case can result in energy savings of 30% to 60%, depending on the age of the cabinets, the store design, and what sort of doors are used. Colcab are the masters of retrofit and can, achieve a storewide close-the-case solution in one night, resulting in zero downtime for an undisturbed shopper experience, depending on store size and accessibility.

Closing the case makes financial sense – adding

doors or sliding closures to refrigerated display cabinets and freezers results in energy cost savings, stable temperatures, better product quality, and a longer shelf life. It also reduces the spill over of chilled air into shopping aisles, which makes for a more comfortable shopper experience.

Colcab's trademarked DoubleCOOL acrylic doors are lightweight, realising the double benefit of providing a reduced barrier to product for the consumer and making the doors easy to fit and retrofit. Acrylic is a sturdy material that doesn't break into shards if it is broken, which is a safer option when it comes to food display. Acrylic doors have exceptional clarity, which provides excellent product visibility. Eco Leaf acrylic doors can be up to 64% more efficient than standard doors.







THE FUTURE IS ACRYLIC WITH A HIGH TECH, FRAMELESS, TRANSPARENT DESIGN

- Double pane acrylic doors with a frameless design
- 50% lighter than glass doors
- Improved safety almost unbreakable
- Ergonomic handling with door opening up to 175 degrees
- 11% more clarity than low-e glass

- Self-closing hinge up to 40 degrees
- 1000 000 hinge movements tested
- Up to 50% more saving
- 100% recyclable
- Enables warmer store aisles
- Improves shelf-life of products

- Compatible with OEM and retrofit cabinets
- Designed according to DIN EN ISO 23953 standards
- Preserves temperature during power failures
- Reduced refrigeration capital cost

RETROFIT

Colcab offers tailor-made retrofit solutions.

Please contact De Wet Solomon on 084 368 5048 for retrofit enquiries.

Legal disclaimer: The above information is believed to be correct but does not intend to be all-inclusive and shall be used only as a guide. Colcab (Pty) Ltd shall not be held liable for any damage resulting from handling the above product.

REFRIGERATION INSIGHTS

Retrofit

Colcab offers new and retrofit options, which can be undertaken together with a full cabinet refurbishment that includes modernised cladding and lights for a fresh, modern look and feel.

Refrigeration systems

Aqualoop, a trademarked design, is an ultraefficient waterloop refrigeration system. However much like a Miniplex system, it requires increased installation, set-up, and maintenance skills from all the technicians involved and, as such, may be better suited to more urban areas. Any system, whether it uses water, CO₂, R290 Propane, or freon gases, must be "fit for purpose" in order to work efficiently. It is also possible to improve the efficiency of any freon or natural gas system with the addition of new technology, as well as modern compressors and controls.

New tech

Colcab are currently engaged in testing an appbased system monitoring solution, so watch out for exciting new developments.

Solo Aircon & Refrigeration

Solo provides a full refrigeration service, including repair work, maintenance, and installation of refrigeration and air conditioning units, as well as cold and freezer rooms. This long-standing company is a refrigeration industry leader in the Lowveld with a strong focus on energy-efficiency, system optimisation, and customer relations.



This new Hybrid Box is saving Solo Aircon's clients thousands of Rand each month on their electricity consumption.

on their electricity consumption.

Cabinets

Solo are suppliers of Colcab cabinets and cases, which are designed with energy efficiency in mind and make full use of the latest design elements. These units can be installed with acrylic doors or sliders for additional energy savings.

Refrigeration audits

Solo undertakes full audits for their customers and will continue to monitor energy usage after installation in order to determine a store's needs, as well as pinpoint problem areas. Not only does this enable them to provide an accounting of total energy and cost savings, it also allows them to pinpoint and resolve any problems quickly and efficiently.

New tech

Solo produces a Hybrid Box system that can result in energy savings of up to 20%-25% per store. By incorporating a store's air conditioning into the system and rerouting the existing pipes, an even greater energy saving can be realised.

As air conditioning units can use between 250 and 300 amps, this is a significant reduction in energy use and can boost overall savings up to 32%. The system has been designed with loadshedding in mind and can handle an uncertain power supply, automatically powering down and idling during power cuts. It is monitored remotely, with all events automatically logged with Solo's call centre to ensure prompt action is taken if necessary.



The system has

been designed with

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cuts.

supply, automatically

loadshedding in



Save Energy Save Money

Our Hybrid Sub-cooling System is the most cost effective and efficient energy system for supermarkets in South Africa



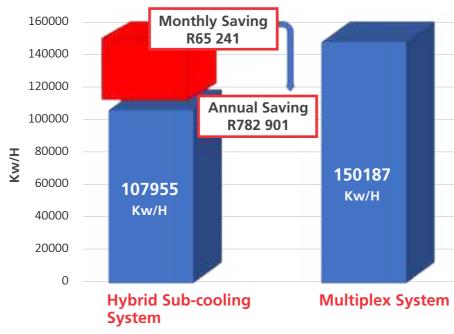
Our new Hybrid Sub-cooling nextgeneration technology will give you a minimum of 30% reduction on your total electricity bill – guaranteed!

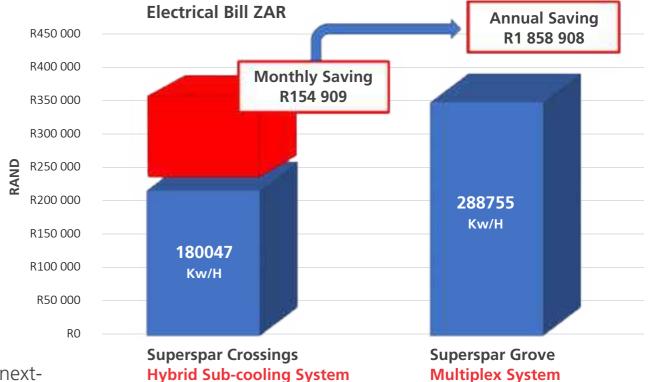
And the **extra saving can be as high as 41%** when the refrigeration and air con systems are integrated under our new Hybrid Plus Sub-cooling technology.

Superspar Westend Annual Saving (555589 Kw/h)

High-tech refrigeration systems, with features like multiplex compressor racks and electronic expansion valves, save many South African retailers millions of Rands annually.

Now, with breakthrough technology, we have dramatically increased that cooling efficiency even further.





Save 30%-41% on electricity consumption with our next generation Hybrid refrigeration system

We specialise in:

- **■** REFRIGERATION VENTILATION
- **SOLAR PANELS COLD & FREEZER ROOMS**
- 24/7 SERVICE & MAINTENANCE





Tel: 013 752 3400 | Piet Cell: 083 325 0599 E-mail: piet@soloair.za.net

www.soloair.co.za





Blizzard Systems

Founded in 2018, Blizzard Systems was formed by a team of four. With a collective 120 years of experience in the manufacturing industry, Blizzard provides a fully modernised, energy reducing, turnkey refrigerated display solution.

Blizzard designs, manufactures, and installs a turnkey glass door display system, including lighting, shelving solutions, and automated systems for walk through entrances.

Their focus is on achieving maximum energy efficiency, and they are constantly innovating to realise that goal.

Energy efficiency

Instead of several individual cold room or freezer spaces, investing in one big room with several glass-framed doors can have a big impact on reducing refrigeration energy and associated costs. The Blizzard system uses an energy efficient design complemented by thermal break technology within the door, mullion, and architrave. Double glazed Thermopane glass provides excelled insulation and increases the system's energy efficiency even further.

Automated door systems

Automated door systems for walk through entrances are included in Blizzard's production capabilities.

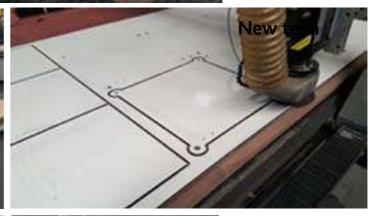
Available for bi-parting or single sliding doors, the system utilises no-touch or beam sensors and



with GEZE South Africa – a German-based company with decades of experience in building automation.

All installations use only original GEZE parts, and with Blizzard's technicians having considerable experience in the field, they do their own system commissioning.









Each of Blizzard's custom designed wiring harnesses are made to reduce electrical installation time, as well as to accommodate the layout of the store and the positioning of the doors. All frames and harnesses are fitted with male/

Images courtesy of Safety Composites

is ideal for access control. Providing additional expertise and knowledge sharing, sister company Safety Composites has been in door automation for the last eight years, providing pneumatic or electrical door system options for the railway sector. Blizzard also has a longstanding relationship

female connectors that are clearly marked, which simply clip together after positioning, creating a 'plug and play' system. Blizzard is currently the only supplier of the 'Ezi' electrical hinge with no visible wires and the 'Ezi' torque adjuster for the easy adjustment and tensioning of doors.





Energy efficient glass display systems FOR COLD ROOM OR FREEZER APPLICATION

B lizzard Systems was formed in 2018 by a team of four people with over 120 years of combined experience within the manufacturing industry. With modernised production techniques, our goal was to develop a glass door display system for the cold room industry, with our main focus being energy reduction technologies. We quickly realised the complexity of the project and that further development had to done, to offer our customers a turnkey solution for their display requirements. From there we developed our own lighting, shelving solutions and automated systems for walk through entrances.

In 2019 we did our first installation and we have grown in leaps and bounds since then. We moved our production facilities to a new 1 500m² factory and are now 16 employees. We've upgraded some of our machinery, we've erected a showroom at our facilities, installed a test cabinet where all our production items are tested, and where training on our products get offered. We've perfected our current design and can proudly say that we've now supplied over 100 stores with our current display systems. However, we are constantly looking to improve and innovate on our quality, production line, and energy efficiency.







COLOUR OPTIONS

Powder coated or anodised finishes in accordance to SABS standards





Black Silver
CUSTOM COLOURS AVAILABLE
UPON SPECIAL REQUEST



Various shelving and accessories available

Since inception, we worked closely with refrigeration contractors and panel builders. This is where we noticed how much time typically gets spent on an installation and specifically on the electrical connections, especially when working in bigger stores. That's when we introduced our wiring harness to simplify the install. Each electrical harness is custom made to accommodate the layout/positioning of the doors instore.

All frames and harness are fitted with male/ female connectors that are clearly marked, which simply clip together after positioning. Creating our 'plug and play' system.

Our automated door systems for walk through entrances seamlessly slotted into our production capabilities. Our sister company Safety Composites has been in door automation for the last eight years providing door systems for the railway sector in pneumatic or electrical options. We have a longstanding relationship with GEZE South Africa – the German-based company has decades of experience in building automation. All our installations are done using only original GEZE parts, and with our own experience in the field, we do our own commissioning of the systems.

As Blizzard Systems, our vision is to offer our customers turnkey solutions which are fully customisable, quality products that will reduce installation time and energy consumption and, most importantly, on time deliveries. We are continuously striving towards innovating and becoming the leaders in the market when it comes to energy efficiency.

Door Automation & Viewing Windows

For all walk-through entrances with a range of customisable options & accessories.

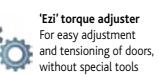
All installations are done using **GEZE** original parts.



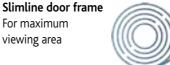












Energy efficient

(22 W) IP67 rated,

slimline LED Light

Insulated thermopane Toughened thermopane with energy saving coating. TEC 250 self regulating glass used on all feezer doors



Shelving solutions Space saving allows increased storage space



Cold Room Sliding Door Systems

(304 Stainless Steel and UHMDPE) to ensure

Compact design using 'food safe' materials

cleanliness and practicality.





Various options

to accommodate

various opening

widths

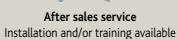
*Closing canopies and doors are made to

suit, as optional extras*











011 824-2149 www.blizzardsystems.co.za sales@blizzardsystems.co.za

Glacier Door Systems

Glacier provides specialist products primarily to the refrigeration industry. These include glass doors and complementary shelving, modular injected polyurethane panels as well as glass processing and toughening. Glacier is innovation driven and offers a range of energy efficient products and retrofit options designed to save energy in an everincreasing energy cost environment. Their products offering is supported by technical expertise and backed up by an experienced and dedicated team.



Glacier top sliders for island and chest freezers



Glacier standard Air Shield doors

Doors and closures

Close the case is vital for energy savings, reducing cold air spillage, maintaining a stable cabinet temperature, and improving product quality and shelf-life. With Glacier, any case can be closed, from doors on upright refrigerated display cabinets right though to top sliders on jumbo and island freezers and even low meat displays.

Glacier's Air Shield glass door is a high-quality energy efficient new and retrofit solution for refrigerated supermarket display cases. Air Shield doors can be fitted to any existing open refrigeration case. These doors are double glazed glass with Argon gas fill for superior insulation and come with a heating option for high-humidity environments. They are fitted with a speed-adjustable hydraulic hinge for a positive close seal saving up to 40% on energy consumption.

Eco Leaf doors guarantee energy-savings in an energy-heavy environment and can be retrofitted to existing glass door freezers.

Eco Leaf freezer doors are designed as a 'swop-out', energy-saving replacement glass door utilising 220V technology that eliminates the need for voltage-reducing capacitors.

Retrofit

Glacier offers several superior glass options for customers looking to close the case, either as part of a new design or as a retrofit. adding an optional 'facelift' to a retrofit that can modernise the look and feel of a store.

at the time of fitting or retrofitting, and this saves energy while also enhancing the look of the product within, thus improving the shopper's experience.







Glacier CASE CLOSED

Energy Saving Solutions

Glacier Door Systems has introduced the Air Shield ('Close the Case') Glass Door retrofit solution for refrigerated supermarket display cases, as well as the Eco Leaf Replacement Glass Door for existing glass door freezer rooms and glass door freezer display cabinets. Both solutions guarantee energy-savings in an ever-increasing energy cost environment. Part of the well-established Universal Industries Group, Glacier has 26 years' experience and are acknowledged industry leaders in refrigeration door technology. Innovative and forward-thinking, the company is built on cutting-edge technology, technical expertise and a customer-centric approach.

The value benefit

- High-quality locally manufactured solutions featuring the latest energysaving technology.
- Demonstrated good pay back periods can be expected.
- Customised solutions to suit your store.
- ISO 9001 accredited factory.
- Safety toughened glass in accordance with SABS/SANS certification.
- Flexible installation timing to offset any customer disruption.
- Financing options available.

Air Shield Glass Doors

Features and Benefits

- Double glazed glass doors with Argon gas fill for superior insulation.
- Glass durability and clarity with torsion bar for positive closing.
- Glass door heating option for high humidity environments.
- Glass doors available with hold open brackets and LED lighting options.
- Flex modelling means glass panels are customised to fit existing cabinets and are tailored to suit each store's specific environment.

A quick and easy energy-saving retrofit solution, Air Shield Glass Doors can be fitted to any existing open refrigeration case, saving up to 40% on energy consumption.

You can trust a Glacier door



Note: The value proposal is based on R1.31 per kWh and 40% energy saving. These are averages based on our experience and can be validated per store.







CASE CLOSED

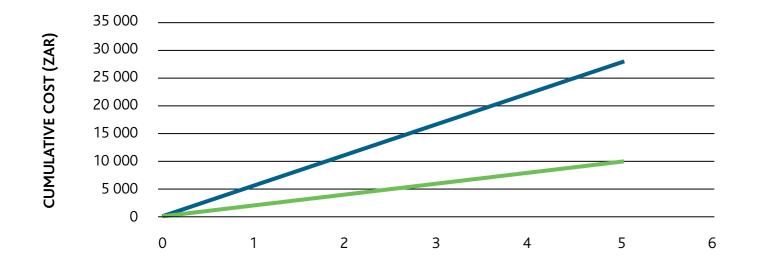
Energy Saving Solutions

Eco Leaf Freezer Doors

Designed as a 'swop-out', energy-saving replacement glass door utilising 220V technology that eliminates the need for voltage-reducing capacitors. This results in an amperage reduction from 1.29A on the standard door to 0.46A (64%) with the replacement Eco Leaf Door.

The Eco Leaf door is 64% more efficient than the standard door. The value proposal is based on R1.31 per kWh and 64% energy saving. These are averages based on our experience and can be validated per store.





	AMPS	VOLTS	WATTS
Glacier Eco Leaf Door	0,46	230	105.8
Glacier Standard Door	1,29	230	296.7



For product enquiries **011 613 8120** sales@glacierdoors.co.za | www.glacierdoors.co.za





SCM REF Africa

Refrigeration audits

The core focus at SCM REF Africa is to offer the best, most efficient system for each specific project. The first step is to determine what type of system is needed, which is generally dependent on the required refrigeration capacity and the customers preference. A fine balance between the number of compressors, cooling capacity, refrigerant type and budget is considered when a system is specified.

Refrigeration systems

With the phasing out of HFC refrigerants and the drive towards a more sustainable and environmentally friendly cold chain, the use of CO₂ as a natural refrigerant is a growing trend and is seen as a future proof refrigerant.

An important factor is to consider is the total life cycle cost of the plant versus initial capital cost. This is the reason SCM Ref Africa only uses premium branded products to ensure the maximum life cycle of the plant. To ensure the lowest operating costs, there are various energy savings options available.

The first form of energy-saving to consider is that of compressor capacity control. Capacity control allows the system to operate at the exact capacity required and prevents unnecessary starting and stopping of compressors, which is a major factor in power consumption. This is offered either by means of a variable speed drive (VSD) or by a capacity or start unloader (mechanical or digital).





The second form of energy-saving to consider is to have some form of condensing capacity control. This is either done by fitting a fan speed controller or by fitting EC (electronically commutated) fans to the condenser.

The third form of energy-saving to consider is to fit electronic expansion valves (EEV's) to the evaporators and cabinets. When EEV's are fitted, it allows for an increase in evaporating temperature and the reduction in condensing temperature. These two factors have a big effect in reducing the running power consumption of the system, as the system will modulate according to the required cooling capacities, as well as adapt to the varying condensing temperatures throughout the day.

SCM Ref Africa is committed to the goal of maximised sustainability through the offering of refrigeration systems with the lowest environmental impact. To achieve this, with the backing of their sister company SCM FRIGO, they can offer highly efficient and eco-friendly CO₂ transcritical booster systems. The range is offered with all energy saving measures in place, with heat recovery system (for water heating), parallel compressors with VSD, as well as an Ejector system to handle higher ambient conditions.

While the initial capital outlay and installation costs may be higher than that of a HFC system, the reduced power consumption of the system will narrow this gap over time, while still being a green future alternative.







Environmentally Energy Efficient Future Proof Refrigeration Systems





& cool, high efficiency CO2
transcritical condensing unit
equipped with a brushless DC
variable speed compressor with
an advanced control system.





The MWT SMKT & MWT Industrial BOOSTER product lines are high efficiency CO2 transcritical systems that can be configured as MT only or booster MT/LT.

The modular design allows for superb customization as well as system optimization for control, configuration and layout. This makes the MWT SMKT/Industrial range the best option for supermarket & industrial applications.



SCM Ref Africa, distributed through Metraclark supplied Natcool with a MWT SMKT BOOSTER CO2 transcritical system for Pick n' Pay in Randfontein.

The system supplied is a high efficiency 6 compressor MWT indoor Booster LT/MT unit. (3xMT+1xIT+ 2xLT)



For more information contact:

www.scmrefafrica.co.za 021 712 2288 info@scmrefafrica.co.za www.metraclark.co.za 011 620 0500 enquiry@metraclark.co.za





Danfoss puts inverters to the test

Recent European studies by refrigeration specialists Danfoss estimated that the use of inverter technology could potentially lead to an energy saving of approximately 30% when compared to fixed speed technology. Danfoss South Africa recently put their estimations to the test by testing energy savings for fixed scroll versus inverter scroll technology.

Alistair Bell, Technical Support Engineer at Danfoss South Africa says "There is no question that energy efficiency is swiftly becoming a key concern within the refrigeration and air-conditioning sector at a global level. In addition, power supply constraints in some parts of the world, such as South Africa, are putting an added emphasis on expanding HVAC-R (heating, ventilation, air-conditioning and refrigeration) infrastructure using the same power supply.

Danfoss South Africa set up a practical experimental site in South

Optyma model	OP-MPVEO68	OP-MPPM044
CODE	114X7043	114X4334
Technology	Fixed speed	Variable speed
Acc kWh (5 Feb 2021 – 4 April 2021)	1 703.3 kWh	1 193.4 kWh
Daily average kWh	19.35 kWh	13.56 kWh
Actual annual extrapolated kWh	6 813.2 kWh	4 773.6 kWh
WCSF	3.05	2.83
Full size consumption	20 780.3 kWh	13 509.3 kWh
Capital cost factor	1	2

The Danfoss South Africa experiment showed concrete results regarding electricity consumption

Africa to examine the theoretical and practical results comparing fixed scroll and inverter scroll technologies.

The results proved that inverter scroll compressor technology does indeed offer a significant saving compared to fixed















speed scroll technology or similar. The results showed that:

For every unit (electricity consumption/cost) consumed or spent on the fixed speed unit, an equivalent 0.7 units are consumed or spent on the inverter unit.

The findings go on to state: "Factors that were not incorporated, but would significantly contribute to a further saving, include peak load demand during peak electricity periods, where one would pay for the highest peak load demand. Typically, this happens when fixed speed compressors start up and the amperage spikes for split seconds. This influence is neutralised using inverter technology, further reducing consumption due to actively adapting to cooling demand by speeding the compressor up and down, thereby varying the demand load. This is but one factor that could further increase direct electricity savings."

It was also noted that "Based on the results of this study, it is clear that when using basic technology, a saving could be realised by merely changing one element of the cycle. Further savings could therefore be reached by potentially changing the following:

- Thermostatic expansion to electronically controlled expansion (Danfoss MSS technology specifically).
- Implementing smart defrost cycles, including defrost on demand.
- Pulsing of fans during the off cycle.

With the inclusion of these additional features



The Danfoss Optyma fixed speed unit

(normally already incorporated in the evaporator controller), a saving of approximately 40% can easily be realised, when comparing traditional technologies."

Sources:

www.emerson.com/en-us/commercial-residential-solutions www.multilayertrading.com | www.colcab.co.za www.soloaircon.co.za | www.glacierdoors.co.za https://scmrefafrica.co.za | https://www.danfoss.com/en-za



Ann Baker-Keulemans, a highly experienced business and consumer journalist, is published in numerous print and online platforms, writing on topics related to business, lifestyle, and health, with extensive knowledge on the SA retail and wholesale landscape. She holds a Bachelor of Arts degree in English Literature (British and Common-

wealth) and Media Studies and is a member of the Golden Key Honour Society. ann@wilkinsross.co.za

@Wilkins Ross Communications (Pty) Ltd



A beverage cold room was fitted with a fixed speed inverter as part of an experiment to compare fixed scroll and inverter scroll technologies.

Shop around for the best option for your store

From custom designs and new installations to retrofitting existing systems, preventative maintenance, and refrigeration audits, there is an industry-wide focus on energy and cost savings, efficiency, and sustainability. Being energy-smart is vital to business survival as the cost of electricity soars with irregular interruptions. New technology and innovation in everything from refrigeration systems and controllers to cabinets manufacture and closures means that savvy store owners and managers have a wide variety of options available when it comes to picking the best refrigeration solution for their needs. **SR**









+27 (56) 819 8097

info@staycold.co.za

www.staycold.co.za

Staycold International (Pty) Ltd





The STAYCOLD product that completes your self-contained refrigeration requirements

STAYCOLD are about to launch a new product development that will meet a market requirement and complement our range of energy efficient beverage coolers ideally suited to the retail environment.



