

»» INSIDE THIS ISSUE

- Pg 1 > Foreword from GM
 - > 2 New Realcold Branches
 - > www.coolparts.co.nz
- Pg 2 > Local Scene
 - > No-Loss Campaign REVAMP
- Pg 3 > Product Range available at Realcold
 - > MEPS 2 Requirement
- Pg 4 > Case Study : DuPont™ ISCEON® MO59 - Part 2
 - > Realcold Specials

Foreword from GM

That fun time of the year is approaching again with 'improved' weather and longer hours of daylight and we look forward to a long, warm summer filled with BBQs and water sports from a leisure perspective, and increased activity levels from a business perspective.

We have several new product developments, particularly with our evaporator coil range and an additional compressor brand. These new products and innovations will be announced in our next newsletter, so, as the saying goes, 'watch this space'.

We have made good progress with opening two new Realcold branches. The fit out of the premises is well underway with opening scheduled for November in Dunedin and December in Tauranga.

We welcome Dave Hickling as Technical Department Supervisor to assist Craig Bell (Technical Manager), Mick McCann and Vicky Tuteja (Applications Engineers) in providing you with world-class technical service and sound engineering solutions.

Have a good summer.

Robbie Hunt,
GM - Realcold Components

2 New Realcold Branches Opening Soon!

We are expanding! Look out for the two new Realcold branches soon to be opened in Tauranga & Dunedin.

Dunedin (Opening in November 2006)

18 Roberts Street, Dunedin

Toll Free : 0800 732 363

Telephone: 03 - 467 7106

Facsimile: 03 - 467 7107

Email: dn@realcold.co.nz

Tauranga (Opening in December 2006)

120D Birch Avenue, Judea, Tauranga

Toll Free : 0800 73 28 28

Telephone: 07 - 571 0096

Facsimile: 07 - 571 0097

Email: tga@realcold.co.nz



Realcold Components is looking forward to bringing customers at Tauranga & Dunedin a wide range of quality refrigeration components, excellent technical expertise and customized solutions.

WWW.COOLPARTS.CO.NZ

The Realcold Components website has just been upgraded with new sections such as:

- > Technical Notes : Handy technical information & articles
- > Feature Products : Selected specials from the Realcold Components product range
- > Brands : Various brands stocked by Realcold Components
- > Photo Gallery : Samples of custom built commercial refrigeration unit

Visit our website www.coolparts.co.nz and enter our competition to be in a **draw to win a 3/8" drive socket set valued at \$239.**



To enter this competition*, simply email the full correct answer to this question: "According to Robbie Hunt, General Manager of Refrigeration Engineering, what is the attraction of installing ice machines on board ships?" (Hint: refer to the Technical Notes section on the Coolparts website, under Articles - Sept 05 Flaked Ice is Ultra Cool. Full answer is required).

Email your answer along with your contact details to: gkhong@realcold.co.nz by close of business on 15 November 2006. The draw will take place on & the winner will be notified by 16 November 2006. Happy surfing!

*This competition is only open to readers of Cool Parts News. Employees or Suppliers of Refrigeration Engineering are not eligible for entry. Only one entry per reader.

Local Scene

New Staff Member - Presenting Realcold Components' newest staff member providing professional support to customers.

Dave Hickling - Technical Department Supervisor, Auckland

Dave has been in the refrigeration industry for over 38 years. For the majority of that time, he has been in the field covering all aspects of service installation and commissioning of major capital plant including industrial, supermarket and cold storage facilities to name a few.

Immediately before emigrating to NZ from the UK in 2000, Dave was responsible for the area operation of a multi national refrigeration manufacturer who supplied and serviced the major supermarket chains.

Since arriving in NZ, Dave has worked with two major HVAC companies, the latest as the supervisor for the Auckland Area.

Dave is now the new Technical Department Supervisor for Refrigeration Engineering Co Limited (Realcold) who will be responsible for capital plant manufacturing & supply. Dave hopes that his extensive experience gained during his time in the industry will benefit both Realcold and its customers.



WELCOME ABOARD, Dave!

Loud Shirt Day @ Realcold

On Friday 22 September, Realcold Auckland and Wellington staff wore their loudest, brightest shirts to work. It was Loud Shirt Day 2006, a nationwide annual appeal organized by the Hearing House as a fund raiser to give deaf children a voice.

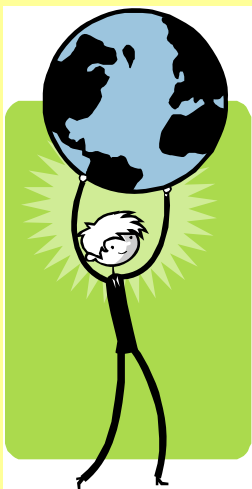
On this day, staff members had some fun in their loud shirts and managed to collect approximately \$200; donations from Realcold staff members and customers. The Hearing House would like to thank everyone for their generosity.

RE Auckland Staff

RE Wellington Staff



NO-LOSS Campaign—REVAMP



RACCA has advised that the NO-LOSS programme is currently being reviewed by the Ministry of the Environment. This programme has taken on a greater significance and the Ministry would like to broaden its base of operations. The Motor Traders Association (MTA) has also expressed an interest to commit to the programme where RACCA would administer their applications.

This could indicate that the NO-LOSS programme may become a requirement of membership for RACCA. Employees of a RACCA member company who handle refrigerants may also be required to hold a No Loss certification.

Realcold branches have been very pro-active in driving the NO-LOSS campaign over the last twelve months. Realcold branches would be pleased to continue running NO-LOSS evenings where contractors can sit for their NO-LOSS certification, either at their company's premises or at an outside venue.

Please contact your local Realcold branch or the IRHACE office (09 262 1405) for details.

MEPS REQUIREMENTS—Air Conditioners / Heat Pumps

As energy efficiency become increasingly important around the world, New Zealand has implemented regulations and standards with the aim of turning New Zealand into a more energy efficient nation with a sustainable future.

The Energy Efficiency (Energy Using Products) Regulations 2002 places obligations on importers, manufacturers, suppliers and retailers who sell air conditioners and heat pumps.

Importers & Manufacturers

All importers and manufacturers must ensure that air conditioners and heat pumps comply with the Minimum Energy Performance Standards (MEPS) when tested under standard conditions. Importers and manufacturers must also register their products with the Energy Efficiency and Conservation Authority (EECA).

In New Zealand, the EECA is responsible for administering Energy Rating Labels and MEPS. EECA is involved in a joint energy efficiency programme with the Australian Greenhouse Office where information on standards is shared along with a joint check testing regime to verify product claims. Models registered in Australia will not require extra registration to be sold in New Zealand. For more information on products that have been registered under the Australian energy rating website, visit www.energyrating.gov.au.

Importers and manufacturers are also required to supply EECA with annual sales data including efficiency information in order to help track the effectiveness of Energy Rating Labels.

Suppliers & Retailers

Suppliers and retailers are required to sell air conditioners and heat pumps that only comply with the appropriate MEPS.

All Realcold air conditioning products meet MEPS requirements.

Retailers are required to display energy labels on their products. Non-ducted air conditioners must display energy rating labels when displayed for sale whereas three phase air conditioners and ducted single phase units do not require labels.

Energy Rating Labels

The Energy Rating labels is a guide to show how energy efficient a product is. It enables consumers to compare relative efficiency ratings when deciding how best to keep heating and cooling costs to a minimum. The new Energy Rating labels look like the previous version except it also includes a reading to indicate the heating capacity of the heat pump when operating at 2°C (refer to diagram).

New MEPS Level

To keep efficiency high, effective from 16 June 2006, MEPS levels for air conditioners and heat pumps for single phase units up to 7.5kW rated cooling capacity were increased. Air conditioners and heat pumps imported on or after this date that do not meet the new standard are prohibited from being sold in New Zealand. Existing stocks that were in New Zealand before 16 June 2006 can still be sold, provided it complies with previous regulations or MEPS levels. There will be another increase in MEPS levels in October 2007.

Window / Wall up to 7kW	2.75	EER Minimum
Non Ducted Splitup to 4kW	3.05	EER Minimum
4kW to 7.5 kW	2.75	EER Minimum
7.5 kW to 10 kW	2.30	EER Minimum
10 kW to 18.9 kW	2.30	EER Minimum

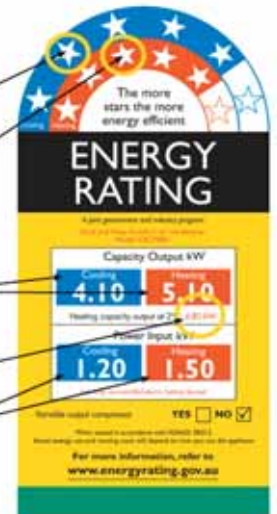
Cooling Star Rating—How well the product performs in cooling. 6 stars mean a top performing product.

Heating Star Rating—How well the product performs for heating. Again, 6 stars mean a top performing product.

Cooling/ Heating Capacities at 7°C—The output capacities of the product. The most energy efficient products will have a higher output capacity.

Heating Capacities at 2°C— Heating performance and output will be lower when the temperature outside is lower (2°C compared to 7°C).

Electricity Input — The relative electrical input for cooling / heating capacities.



* Adapted from Energy efficiency regulations: Choosing a smart heat pump or air conditioner, Energy Efficiency and Conservation Authority (EECA), June 2006.

For the latest update summary of MEPS levels, visit www.standards.co.nz. For information on EECA, visit www.eeca.govt.nz

Realcold Product Range



In 1976, King Tony Tool Corporation started out as a hot forge factory specializing in the forging business in Taiwan. Having identified the gap in the market place for professional tools in 1984, King Tony changed its focus and started supplying the tool industry with exceptional quality tools at an exceptional price.

All King Tony Tools meet the DIN (Germany) and ANSI (USA) standards. King Tony received its ISO 9001:2000 & ISO 9002 certification; proving that its design and manufacture processes are to the highest standard. King Tony also received the TUV Rheinland certification for successfully demonstrating internal quality control and test procedures.

As an example, studies have shown that King Tony Tools' ½" 17mm socket is measured to have the highest fatigue testing results (33,430 times) compared to other major ½" 17mm socket brands in the market place.



First sold in New Zealand in 1998, King Tony Tools are universally accepted as a quality hand tool and are excellent value for money. Visit your Realcold branch NOW!

New R410A Models from Gree

The first in a range of new R410A Gree Hi Wall units have arrived in store. Committed to introducing new technology and efficiency, the new Gree models incorporate a smooth flat front panel, improved sound levels and simple remote control. These new impressive models exceed MEPS requirements and are being well received in the market place.



Current model range: 2.1kW, 2.5kW, 3.2kW, 5.3kW & 6kW. A 7kW unit is still being developed and arrival should be late November early December 06.

Quality is very important to Gree and this is reflected with well known brands such as Panasonic, Sanyo to name a few, trusting Gree to manufacture their product. The Gree product supplied by Realcold is of equal quality at a very competitive price for the New Zealand market.



New sales leaflets and service manuals are available and your account managers will be delivering these shortly. For further information, please talk to Noel Mountjoy or Roger Lee from the air conditioning department in Auckland, or your local Realcold representative.

Case Study of the Month: DuPont™ ISCEON® MO59 (R-417A) - Part 2



A leading UK supermarket chose to replace its wide range of R-22 refrigeration and air conditioning equipment with the more energy efficient ISCEON® MO59 (R-417A). Trials were carried out on refrigeration and air conditioning applications such as low temperature freezer rooms and pack systems, high temperature cold rooms, roof top packaged reverse cycle heat pumps, split air conditioning systems as well as close control computer rooms in the supermarket's Head offices. Two of the results are as follows:

REFRIGERATION - High Temperature General Purpose Cold Room

Conversion of a Frascold Condensing Unit with Foster evaporator. The oil was changed to Shell SD and minor adjustments were made to the expansion valve after conversion to obtain optimum operating conditions.

Average data	Unit	R-22	ISCEON® MO59
Suction pressure	Psig	12.0	11.9
Discharge pressure	Psig	121.9	96.6
Liquid temp.	°C	16.08	17.81
Discharge temp.	°C	46.8	30.1
Air off temp.	°C	3.2	3.36
Air on temp.	°C	4.07	4.08
Evaporator in temp.	°C	-0.35	0.88
Evaporator out temp.	°C	2.32	1.02
Peak discharge temp.	°C	89.35	64.67
Peak liquid temp.	°C	22.1	23.43
Amps/phase	Amps	3.9	3.3
Run time in 24h	h	8.38	8.13
Ambient temp.	°C	6.3	6.94

The success of this trial has prompted other industries to also replace its wide range of R-22 refrigeration and air conditioning equipment with the more energy efficient ISCEON® MO59 (R-417A).

Back in February 2004, the Royal Gwent Hospital successfully converted over 67 systems operating on R22 throughout the hospital with more than 3,400 staff and approximately 774 beds. The potential energy saving on all the units identified estimated to be in the region of £3,000 in addition to a reduction in the Climate Change Levy.

** Adapted from DuPont™ Refrigerants, Case History - ISCEON® MO59 - Leading UK Supermarket Selects ISCEON® MO59 (R-417A) to replace R-22 in their UK Stores.

FREEZING - Frozen food cold room

Conversion of a low temperature frozen food / ice-cream cold room with a Frascold Condensing Unit and a Foster evaporator. The equipment was optimized on both refrigerants before conversion.

Average data	Unit	R-22	ISCEON® MO59
Suction pressure	Psig	9.4	5.4
Suction temp.	°C	12.53	5.35
Discharge pressure	Psig	201	153
Liquid temp.	°C	18.52	19.82
Discharge temp.	°C	116	85
Superheat	K	9	3
Subcooling	K	10	11
Air off temp.	°C	-22.1	-21.22
Air on temp.	°C	-19.4	-18.75
Plant room temp.	°C	20.52	20.18
Sump temp.	°C	55.2	42.5
Evaporator in temp.	°C	-27.42	-27.4
Evaporator out temp.	°C	-21.95	-21.14
Peak discharge temp.	°C	136.9	94.2
Peak discharge pressure	Psig	210	160
Amps/phase	Amps	5.5	5
Run time in 24h	h	21.24	21.67
Average ambient	°C	12.8	11.44



The miracles of science™

Toy Specials still ON!

Enquire at any Realcold branches for your Toyo piping & air-conditioning accessories at a discounted rate!

REALCOLD CONTACTS

Auckland 09 526 5700 parts@realcold.co.nz
 North Harbour 09 448 5245 nh@realcold.co.nz
 Hamilton 07 848 2111 hm@realcold.co.nz
 Wellington 04 569 3072 wgt@realcold.co.nz

Hawkes Bay 06 870 3714 hbn@realcold.co.nz
 Palmerston North 06 357 9101 pn@realcold.co.nz
 Christchurch 03 338 8084 chch@realcold.co.nz