Supermarkets with Natural Refrigerants in South Africa

by Bernd Kaltenbrunner, eurammon

eurammon – Together for natural refrigeration

- **Natural refrigerants do no harm on environment, they have no or just marginal GWP / ODP.**
- **Natural refrigerants are energy efficient, especially when considering the whole lifecycle of applications.**
- **There are many successful examples for applications with natural refrigerants.**

eurammon – Together for natural refrigeration

Global expert network

- 80 eurammon members (companies, institutions and individuals) from 23 countries worldwide are committed to increase the use of natural refrigerants.
- International networking with other initiatives worldwide.

Centre of competence for natural refrigerants

- eurammon regularly informs on new solutions with natural refrigerants.
- eurammon creates platforms for pooling and exchange of knowledge and brings together experts in applications with natural refrigerants.
- eurammon supports young academics who research in the field of natural refrigeration.

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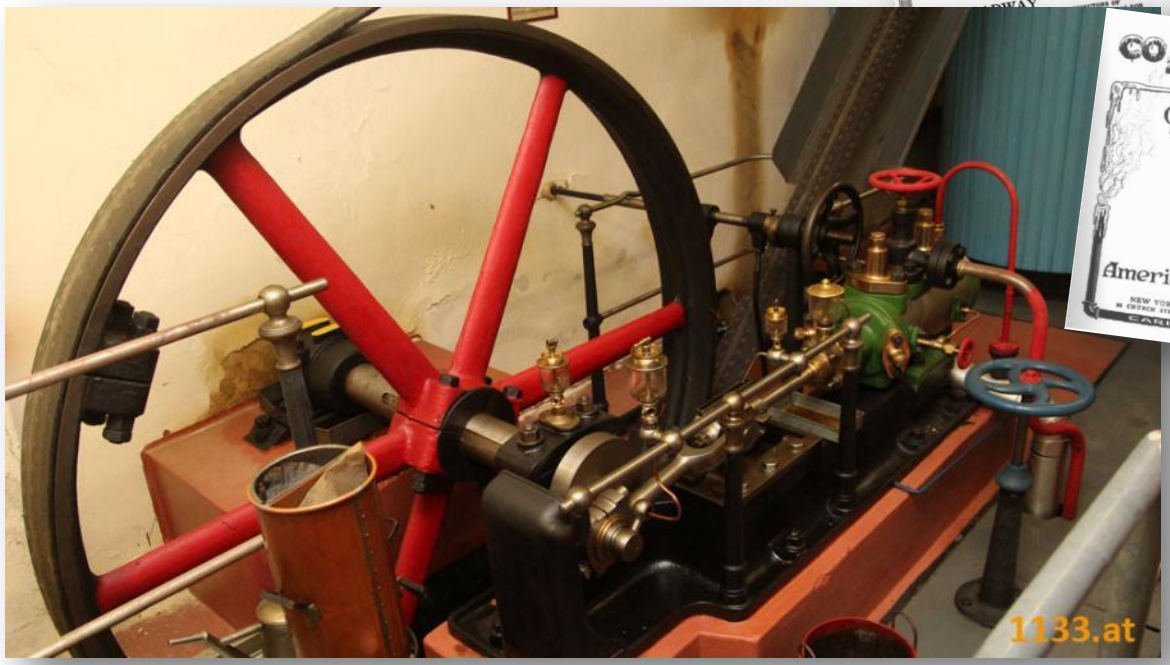
Operating from 1904 to 1997
Refrigerant: Carbon Dioxide
Testing Pressure 200bar
Operating Pressure 60bar
COP 3,36



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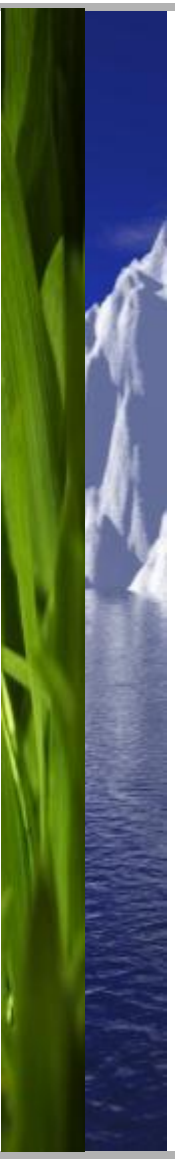

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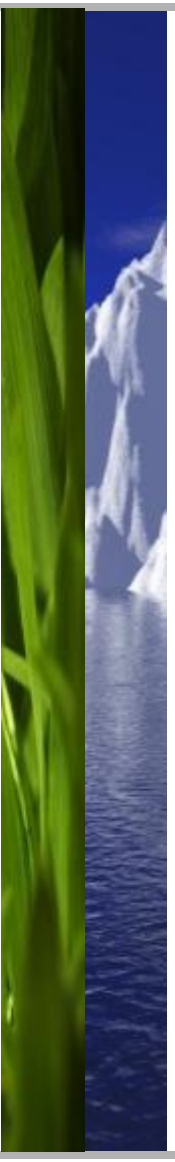
MAIN DATAS
Johannesburg

MT	140kW	to =-12° C @ tc= +40° C
LT	60kW	to =-12° C @ tc= +40° C
Refrigerant R22		1200kg
average loss		up to 80-240%

MAIN Datas of the new system

MT	140kW	to =-8° C @ tc= +38° C
LT	60kW	to =-30° C @ tc= -3° C



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MAIN DATAS
Cape Town

MT	250kW	to =-15° C @ tc= +43° C
LT	35kW	to =-32° C @ tc= +43° C
Refrigerant R22		1000kg
average loss		up to 80-240%

MAIN Datas of the new system

MT	280kW	to =-8° C @ tc= +35° C
LT	37kW	to =-32° C @ tc= -3° C

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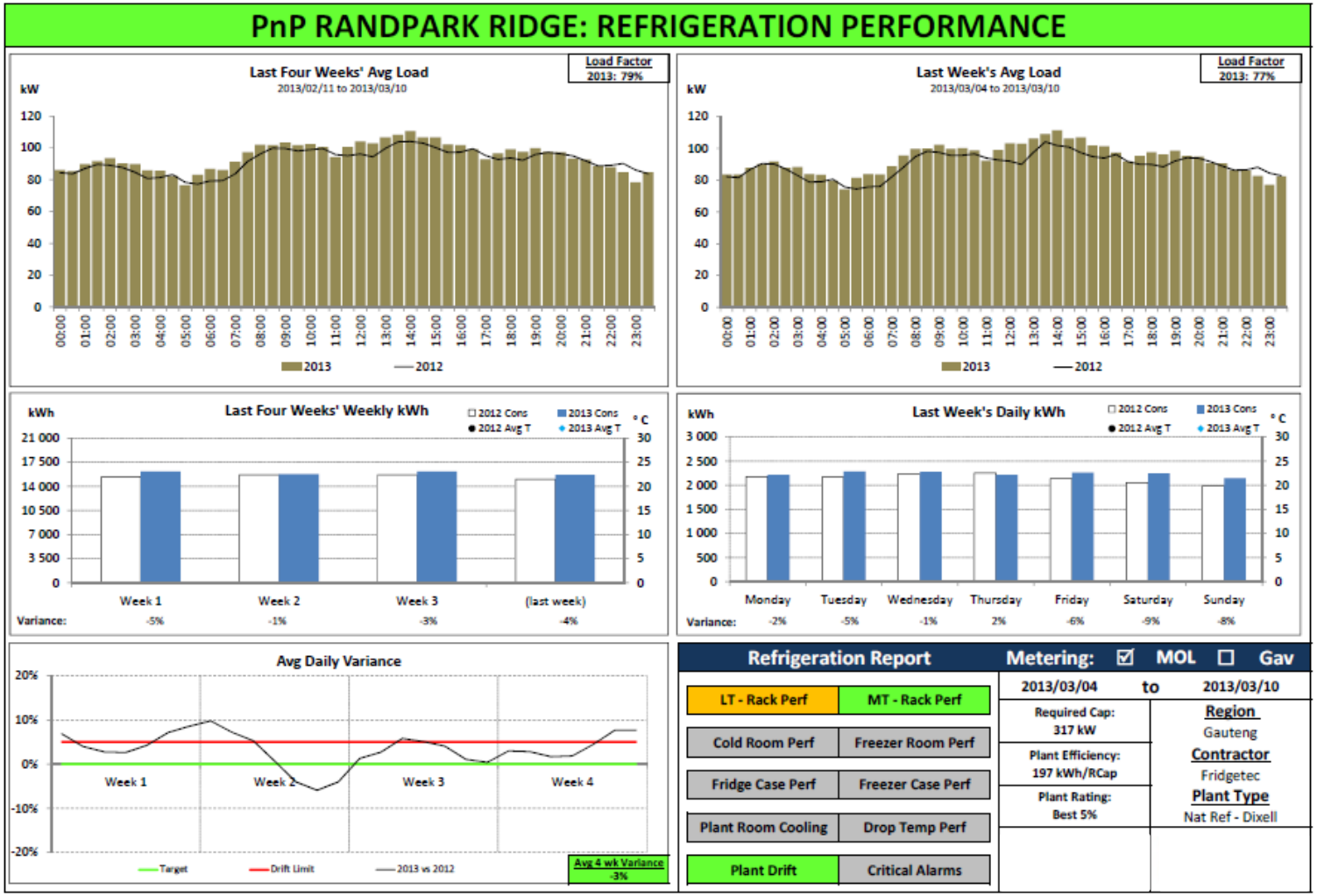

*Variance not temperature corrected

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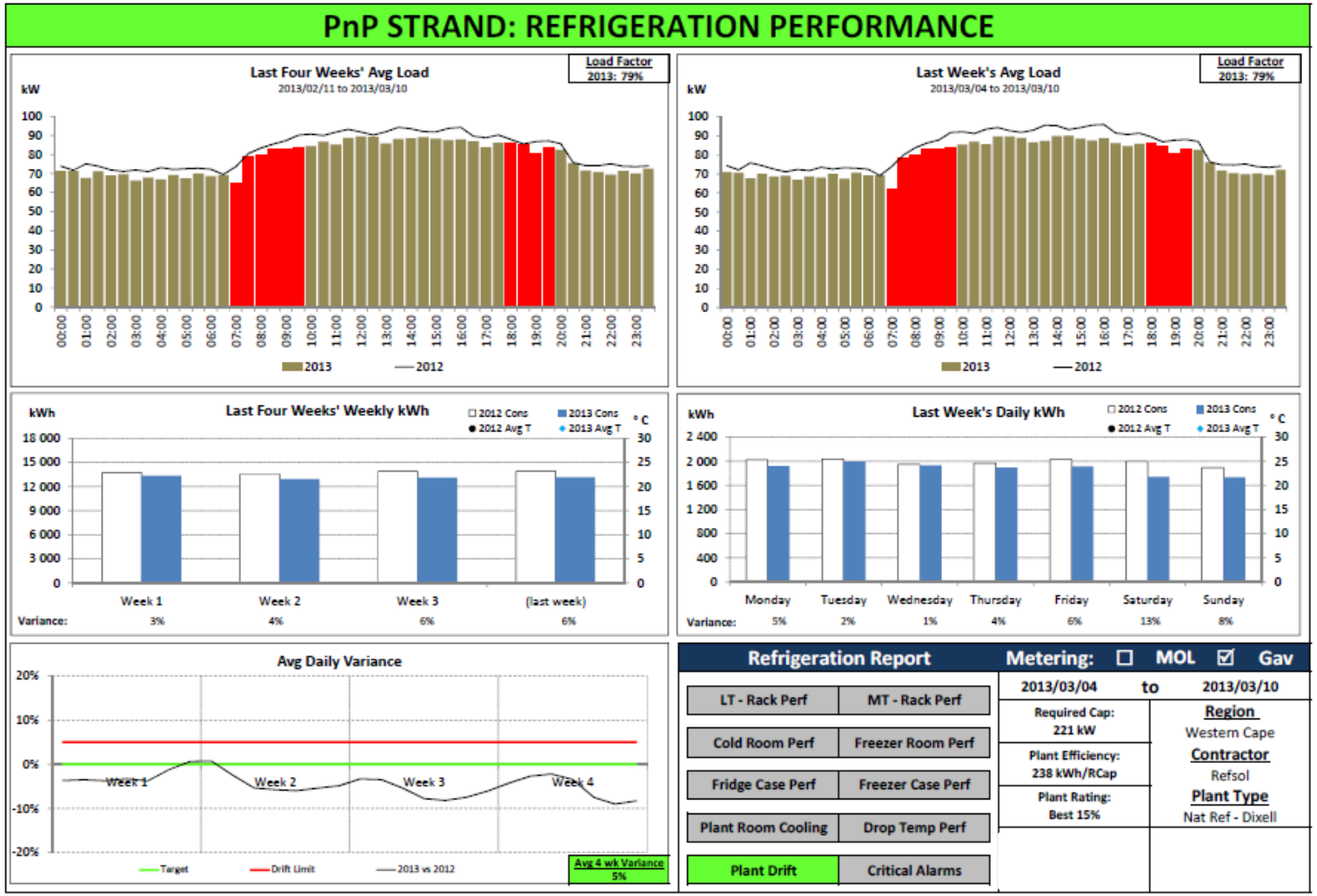

*Variance not temperature corrected

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technology summit

natural solutions

3 - 4 June 2013 in Vienna

Thank you very much for your attention