

According to recent reports from NRC (Natural Resources Canada) Energy, retrofits and practices can save an average of 20% on energy.[1] Being one of the easiest controllable costs in your operation, energy efficient equipment can correlate directly to your bottom line. Mycom Canada's Xchange program utilized at the Nicholas Sheran and Enmax Arenas in Lethbridge Alberta, is an example of energy efficiency and bottom line thinking.



## Nicholas Sheran Ice Arena, Lethbridge AB

### Mike Jensen

Mike is a Red Seal Journeyman Refrigeration Mechanic with the City of Lethbridge and is responsible for the mechanical systems of six arenas in the City of Lethbridge. He can be reached at: (403) 315-0684 or by e-mail [mike.jensen@lethbridge.ca](mailto:mike.jensen@lethbridge.ca).

In the setting of the municipal ice arena of today, operators and managers are forced to look at many options in order to run an efficient operation. There is pressure to increase energy savings, reduce maintenance costs, and perhaps most importantly, provide a top quality ice surface for the arena users.

Nicholas Sheran Ice Arena located in Lethbridge, Alberta is open year round as a multipurpose ice surface and is also home to the University of Lethbridge men's and women's hockey teams.

Nicholas Sheran Arena has always maintained an excellent ice surface with N6B Mycom compressors at the heart of the ice plant. We did find that the run times were excessive; also the ice pad temperatures would creep up during extremely warm days and during Pronghorn hockey games.



\*N6B (left) and N6M (right) at Nicholas Sheran Ice Centre



When Mycom representatives approached us last year about the new M series compressor there was a certain amount of skepticism shown. With some persuasion and education, we decided to give one a try at Nicholas Sheran Arena. In April of 2009, a N6M was installed to replace N6B machine. The M series has run through the summer and we have actually seen an increase in the quality of our ice surface with the ability to maintain the ice pad temperature consistently. The M also ran approximately 300 hours less than the 6B during an average of the same time period over the past two years. Since startup in May, the new M compressor has logged 1100 plus hours and I have to comment that it has not used a drop of oil also; the oil in the site glass shows no sign at all of discoloration. These benefits, along with the extended service intervals recommended by Mycom, have made us pleased with our investment.

With this in mind, we decided to replace a N8B Mycom compressor at the Enmax Centre in Lethbridge. The Enmax Centre is home to the Lethbridge Hurricanes of the Western Hockey League. A N6M has been installed in an ice plant with a N8B and a 8WB compressor. By the time this is published, the new M series will be on line at the Enmax Centre. Give me a call or drop me a line and I'll let you know how it compares.

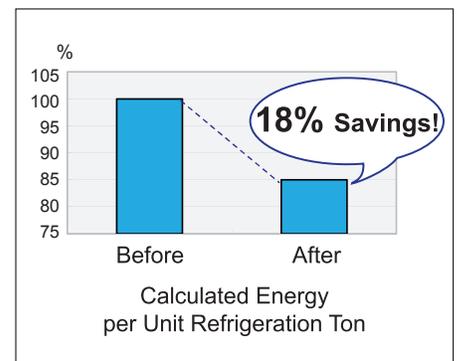
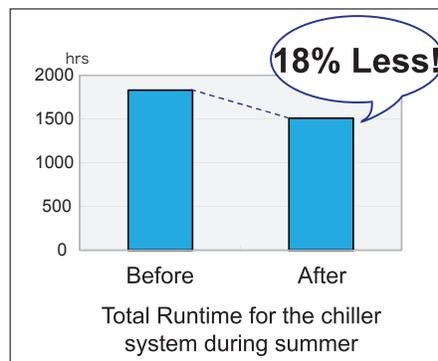
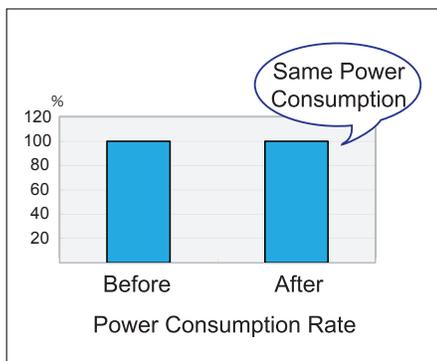
**Mike Jensen**  
City of Lethbridge

1. "Energy Efficiency in Existing Buildings." Natural Resources Canada. 25. Sept. 2009. Natural Resources Canada.  
<<http://oee.nrcan-rncan.gc.ca/commercial/existing.cfm>>

# M-series Analysis Summary

Based on operation logs provided by Mike, MYCOM has analyzed the efficiency of the M-series compressor. The summary of this analysis of this analysis is as follows:

- Nicholas Sheran Ice Centre (2) N6B compressors with an average runtime of 1833 hours during the summer over the past two years.
- One N6B compressor was Xchanged for a 6M compressor.
- After witnessing a significant improvement they decided to utilize N6M as a lead compressor.
- The new combination 1 N6B and 1 N6M logged in at 1511 hours in total. Shortening run time by 300 hours, **18% less**.
- Without a significant change to the power consumption, ice temperatures were attained quicker due to the 6M's **18% premium efficiency increase**.



In conclusion, Mike was aware that this 18% better performance could also be used to save electricity correlating to his bill, while keeping the same quality of ice. However, one of Mike's main interests was to make a better quality ice, and he has done so with the improved performance provided by the N6M compressor.

Congratulations to Mike and the City of Lethbridge for choosing the best way to improve the efficiency of their facility and for creating a better place for your community.

Improve your arena performance by Xchange existing compressors with M.  
MYCOM supports your efforts to improve financially as well.

Recips\* to M = 15% increase in efficiency  
Screws\* to M = 20% or more increase in efficiency

\*Xchange is done for all models, MYCOM or non-MYCOM.

Decrease your bottom line while increasing your performance. Contact your local MYCOM office for a free assessment and see what M-series can do for you.