

Pipe freezer tackling plumbing repair business

Technology that relies on liquid nitrogen useful in older buildings that require ongoing maintenance

By Joel McKay

Most people think frozen pipes spell plumbing disasters, but **Matt Farrell** will tell you they're magic bullets.

Icing up water pipes of all shapes and sizes is his company's bread and butter, and despite the fact few plumbers on the West Coast do it for a living, the mild-mannered Englishman is convinced there's a big market for it here.

"Although being a specialized pipe-freezing company is a new thing in the sense nobody else is specializing in it, it's not new in terms of the actual concepts," explained Farrell, owner of Vancouver-based **Nitro Pipe Freeze Inc.**

His company uses liquid nitrogen to freeze a section of a pipe so that plumbers can carry out service or repair work downstream without draining the entire system.

Farrell said the technology is popular in Europe where old buildings require ongoing maintenance for their water systems, but has yet to establish a foothold in Vancouver where most buildings are new.



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Nitro Pipe Freeze Inc. owner **Matt Farrell**: approached by VANOC to see if he could improve slushy ski jumps for Olympics

At -200 C the nitrogen is so cold it turns standing water into a stress-free ice plug that expands along the pipe

without damaging it.

"It basically allows us to freeze, theoretically, any pipe size," he said.

Farrell's nitrogen system is applicable for pipes up to eight inches wide, and that means he can service everything from single homes to highrises, shopping malls and commercial properties.

But his clients aren't people in need of repairs so much as the companies that provide them. "Plumbing companies are an easy sell in the sense that they know the benefits of pipe freezing, I don't have to explain it."

For years, contractors have used refrigerant machines to freeze pipes, but Farrell said that only works on small pipes and takes a long time.

His nitrogen system can provide a complete freeze within hours, saving contractors time and money in large buildings where a traditional repair might mean draining the entire water system.

Farrell said that means huge benefits for hospitals and institutions where system-wide shutdowns are time consuming and costly.

He launched Nitro last year after more than 12 years as a plumber in the U.K.

The company is barely out of the gate, but Farrell said he's been busy with sub-contract work at **Vancouver Community College**, **UBC** and several residential buildings.

Evan Lanaras, a plumber with **Elafon Mechanical Ltd.**, found out about Nitro when the company first joined the local contractor's union.

"You're comparing a Ferrari to a Chevette when it comes to quality of freezing, I was so impressed by it"

- **Evan Lanaras**,
plumber,
Elafon Mechanical Ltd.

Lanaras said he quickly found an opportunity to try the technology at one of his sites and was impressed.

"It's crucial for us because it saves us time in the building, and it saves our customers a lot of money," Lanaras said.

Elafon does its own freez-

ing, but Lanaras said its system is limited and can only service pipes up to two inches wide.

"You're comparing a Ferrari to a Chevette when it comes to quality of freezing, I was so impressed by it," added Lanaras.

Before the 2010 Olympic Games started, Nitro caught the attention of the **Vancouver Organizing Committee (VANOC)** who wondered if the technology could be used to freeze slushy ski jumps on Cypress Mountain.

VANOC decided to go with dry ice tubes instead.

Farrell said his biggest challenge is getting the word out about his business to local contractors, and he has yet to reach profitability.

But Nitro isn't the only company in Canada that offers the technology.

N-Two Cryogenic Inc. and **IRCAN Plumbing & Mechanical Inc.**, both in Ontario, use nitrogen to freeze pipes.

N-Two claims to have been using the technology for 18 years. ■

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