

Golden Opportunities



John GORDON/Langley Times

It's not roulette. Doug Corsan, head of sales and marketing, concentrates on business, and Knelson Gravity Solution machines like this one are working world wide, spinning out pots of gold from Russia to Africa, the Americas to Asia.

By Al Irwin
Times Reporter

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A Langley manufacturer of mineral processing machines started as a "cottage" industry on a north Langley acreage almost 30 years ago. Today Knelson Gravity Solutions - KGS has gold concentrators in Africa, Australia, China, India, Russia, South America, Spain and Portugal, the U.S. and of course, in Canada.

On Wednesday, Knelson, with about 110 employees at corporate headquarters here, celebrated the grand opening of a new assembly and shipping plant, dubbed K2, at 9744 197 B Street.

K1, the corporate headquarters and manufacturing plant is just around the corner, at 19855 98 Ave.

The company, also known as Knelson Concentrators, and its affiliated enterprise Knelson Engineering and Manufacturing, started small, and had a few setbacks along the way, but these were overcome by diversification, says Doug Corsan, vice-president of sales and marketing.

Byron Knelson was the driving force behind the firm for years, and the inventor of the core product, the semi-continuous Knelson Concentrator. His son Brett is vice-president of business development and projects. Brett referred questions to Doug Corsan, vice-president of sales.

"Byron started out on acreage on 88 Avenue. He had a small sales office in the back yard, it was a kind of modified cottage," said Corsan.

"He is a real mechanically-minded guy. It is one of those fairy tail stories," says Corsan, adding that Knelson is now the technology leader in gravity separation of minerals.

Byron Knelson's start was in 1978 when his gold concentrator was manufactured under licence by a firm in Abbotsford.

"We acted as a sort of sales and logistics office," said Corsan,

The first additions to the cottage were two Atco trailers.

The original product was the semi-continuous Knelson Concentrator, designed to recover free gold or platinum from ore, through centrifugal force and a unique and patented fluidization process.

The company's first big growth spurt began in the early 1990s when Myra Falls, a copper and zinc mine owned then by Noranda, asked if the Knelson product could be automated and utilized to recover the silver and gold the Noranda production line could not. "They gave us the first order in 1991 and we shipped in 1992." Those original concentrators are still working, but Knelson is in the process of filling an order to replace them with modern models for the new owner of the Vancouver Island mineral operation. At about the same time as the Noranda order, Knelson began the fabrication of its own machines, with about eight employees in the shop, 10 or so in the office.

Knelson began to gain momentum.

"We developed this automated machine, just coincidentally, (at the time) there was a boom in gold mining in Australia."

It was a golden opportunity, because the Kalgoorie ore was free milling, that is, when ore is crushed and ground, the gold is liberated.

"There were a lot of new mines popping up. We had the right machine at the right time, and our sales quadrupled."

In 1995, the company bought the initial 1.2-acre K1 site, and built a new facility that was beginning to feel cramped in about three years, when another adjacent lot was purchased, and a 25,000-square-foot expansion was begun.

Another coincidence, or several, occurred, these not as fortunate as the Kalgoorie strikes had been, but with silver linings, after a fashion.

Bre-X, one of the mining-exploration industry's biggest scandals ever, was unfolding.

At first, the Bre-X phenomenon caused a sensation, and the test work on the supposedly huge Indonesian gold deposit was "all done on a small, lab-type Knelson concentrator," says Corsan.

But when the enormity of the fraud was uncovered -- an independent mining consultant discovered that Bre-X had "salted" its drill core samples, and investors lost about \$6 billion -- "it killed the junior mining exploration, everything dried up," said Corsan.

"And high tech (investment) was just ramping up, and a lot of the money (mining venture capital) just moved over (to high tech stocks)."

There were tough times ahead.

"We diversified," said Corsan.

Knelson Concentrators re-invented itself, adding Knelson Engineering and Manufacturing, "as a vehicle to bring in more non-core work."

Today, Knelson equipment is at work worldwide in the recovery of precious metals, base metals, industrial minerals, metal recycling and environmental remediation. The company provides ancillary equipment, spare parts, rebuild and exchange programs, and contracts maintenance and training services.

Among the new products of Knelson Engineering is the Continuous Variable Discharge Knelson Concentrator, or CVD, a new concentrator that helped Knelson get into base metal refining.

"Now it is accounting for half our revenue," said Corsan.

While the Bre-X scandal hurt mining for some time, diversification pulled Knelson through a rough five years. And a comeback in exploration was in the works, with Russia and China opening up, and renewed interest in mineral development, even in B.C.

"The last three years have been very good. Last year was exceptional."

A small machine or lab concentrator costs in the range of \$10,000, the larger concentrators cost in the neighbourhood of \$500,000. Knelson produces between 200 to 250 machines in a range of sizes, each year.

K2, the new assembly and shipping facility, about 18,000 square feet, gives Knelson the expansion room it needs, for what Corsan foresees will be an active market for at least the next five years.

Russia appears a particularly bright light in the Knelson future.

Thirty to 40 per cent of sales are to Russia, and Knelson has opened a two-person sales office in Siberia, a third employee has just been hired, and Corsan expects the staff to grow to 10 over time.

In Russia, opportunity awaits not only in future mineral explorations, but also in past mining practices.

"There was a lot of inefficient mining in Russia (under the Soviet system)," said Corsan.

When the focus was on cobalt or copper, "no one gave a damn" about incidental minerals.

"There are a lot of good opportunities in tailings," says Corsan.

Knelson is 100 per cent Canadian owned and operated.