DOMINIC SCHAEFER

Sandbagged: Hun Su Kim with his company's erosion control product

Vancouver company aims to build its business on building a better sandbag

Deltalok Inc. hoping to triple current sales of $3 million marketing erosion control product

Bob Mackin

A Vancouver entrepreneur sees a bigger and better future for the sandbag, the trusted remedy for the battered banks of flooding rivers and lakeshores for centuries.

Hun Su Kim's **Deltalok Inc.** is the flagship of his **Beon Top Enterprises**, a civil engineering products company the South Korea native launched before arriving in Canada in 1996.

It's not so much the product, but the methodology that makes Deltalok unique. It's essentially a system of interlocking pyramids of geosynthetic bags filled with sand or soil. The bags are locked into place by sturdy rubber pieces with cleats.

"They're soft but strong," said Deltalok managing director Jaime Hall.

Deltalok's bag is water permeable and root friendly. During rainshowers, it soaks. On sunny days it dries. The interlocking soil bags are used for erosion control, retaining walls, environmental restoration and noise control.

The bags can vegetate and promote the growth of a natural green setting. By comparison, an alternative, like coconut fibre bags, can rot in six months. On the other end of the spectrum is rip-rap (broken rocks and concrete), which is cumbersome and not green.

"The whole science of erosion control is based on establishing vegetation, that's what holds the ground together," Hall said. "This is a unique way of establishing vegetation in a permanent and strong way."

Kim came to Canada through the immigrant investor program and has financed the company's operations on his own and with help from **BDC Business Development Bank of Canada**. Kim had experience in sales and marketing engineering products for others, but wanted to bring to market a proprietary product on his own. His goal was to develop the next generation in retaining walls, but one that had a green face. He figured a durable and versatile type of sandbag was an appropriate product to research and develop.

"The sandbag or soilbag has been used in industry for hundreds of years, and that happened to be all used in temporary purposes," Kim said.

The company has a staff of 11 with two contractors manufacturing the product in B.C. Deltalok has been patented in Canada, South Africa, New Zealand, Singapore and Taiwan. Patents are pending from dozens of other countries. Deltalok began marketing a year and a half ago.

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– Jaime Hall, Deltalok managing director

The Canadian market remains more lucrative than its American counterpart, by virtue of the number of lakes, rivers and shores across Canada.

Domestically, Deltalok is being sold in home improvement and gardening stores from **Home Depot** to **GardenWorks** – the so-called DIY market. It's primarily an alternative to concrete blocks, which are costly, cumbersome and create a grey environment. They also contribute to global warming by reflecting sunlight and absorbing heat.

Deltalok's sales last year were in the $3 million range, but Kim is expecting to triple that in the next year. More than 60 per cent of sales will be overseas where most customers are governments.

"At the beginning I was thinking of using venture capital, then I realized I didn't want to lose control," Kim said.

Beon Top, with offices in Vancouver and Singapore, has licensed its technology in Chinese-speaking countries, where up to 90 per cent of contracts are with governments. Kim is hoping Deltalok will be visible at the 2008 Beijing Summer Olympics. Organizers want to make it the greenest games yet. They'll have a big job, because Beijing is grey with concrete.

"We're bringing together two key words: ecological and engineering," said sales manager **Bruce Stickney**. "Typically you wouldn't see those words go together, because engineering for most people is hard, concrete and permanent, and ecological is soft and green." ◆

■ *news@biv.com*