

International Beryllium acquires U.S. processor

by Peter Caulfield



A step in making beryllium alloy products: Pouring molten beryllium into ingots at International Beryllium's subsidiary Freedom Alloys Inc. Photo courtesy Freedom Alloys Inc.

International Beryllium Corp. [IB-TSXV] recently signed an agreement to acquire 100% of **Freedom Alloys Inc.** IBC is an up-and-coming Vancouver, BC-based beryllium producer. Freedom Alloys, located in Royersford, Pennsylvania, is a manufacturer and supplier of beryllium, beryllium copper and beryllium alloy products.

IBC president and CEO Anthony Dutton called the deal an "important and strategic combination for both IBC and Freedom." He said Freedom's technical experience and market knowledge "will be invaluable" as IBC pursues "additional downstream acquisitions" and expands its manufacturing and marketing capabilities.

IBC owns and controls 90% of seven beryllium properties in Uganda and 100% of two beryllium properties in Brazil. The properties in Brazil and Uganda are all formerly operating open pit artisanal mines. The company also recently acquired 371 beryllium claims in Utah. By the end of 2008, IBC will have other exploration properties, some with proven reserves, in North America. Its goal is to consolidate the steps in beryllium's mine-to-market value chain

and become a vertically integrated beryllium company. IBC believes this strategy will enable it to become a global beryllium giant.

BERYLLIUM – THE WONDER METAL

Beryllium is a unique metal with special characteristics. It is extremely stiff and very lightweight, has excellent thermal characteristics, is non-magnetic and non-sparking, transparent to X-rays and has a low thermal neutron absorption cross-section.

More prosaically, beryllium is, Dutton said, "twice as strong as steel and half the weight of aluminum."

Beryllium has many applications: telecommunications equipment and computing (broadband hubs and gateway equipment; mobile phones, PDAs and notebooks); automotive electronics (engine control computers; heat-sensitive switches); aerospace and defense (electronics and guidance systems; brake components; nuclear and other weaponry); industrial components (any tooling where sparks are a concern; high-impact bearings). One of the single biggest applications of beryllium is nuclear power generation (blast shields).

Deposits of beryllium are concentrated in Colorado, Utah, Brazil and Uganda. Brazil, followed by Uganda, is the world's largest producer.

BASIS OF COMPANY IS NUCLEAR RENAISSANCE

IBC was co-founded in 2006 by Dutton and James Passin, portfolio manager of New York-based Firebird Global Master Fund, Ltd. Dutton said the company was formed to capitalize on the continuing strength of the "nuclear renaissance."

"The world-wide demand for energy feeds the demand for nuclear power-generating capacity – and for beryllium," Dutton said.

At the moment, there are about 450 nuclear power reactors producing electricity around the world, with an additional 350 nuclear reactors in various stages of planning and permitting.

Beryllium demand is expected to increase sharply in the future. Between 2005 and 2010, consumption in North America is

expected to grow from 86 tonnes to 319 tonnes; in Europe, from 95 to 125; and in Asia Pacific, from 45 to 65.

At the same time that demand for beryllium is increasing, sources of supply are less certain. Passin said the world has been living off stockpiles of beryllium that were built up by the U.S. and the Soviet Union during the Cold War. Since then, no investment has gone into the exploration, mining or processing of beryllium, as the old stockpiles have gradually been used up. Production of beryllium is controlled by two companies, **Brush Engineered Materials Inc.** [BW-NYSE] and **NGK Metals Corp.** And, because beryllium is not traded on an exchange, Brush and NGK effectively control not only the production of beryllium alloys but also their price.

IBC'S GAME PLAN

IBC has three immediate goals:

- Acquire, explore and develop beryllium assets world-wide
- Procure and set up modern, efficient beryllium processing facilities located close to target markets, and
- Acquire and develop an international marketing and distribution network for beryllium and beryllium alloy products

The mine-to-market value chain for beryllium has five steps: mining; chemical concentration; processing into pure beryllium and master alloys; casting, milling/forging, manufacturing; and sales, marketing, distribution. IBC wants to consolidate these steps in one efficient company that will be able to compete against Brush and NGK.

"The purpose of consolidating the value chain is to drive the price of beryllium down, which we hope will increase the demand for the metal over the longer run," Dutton said. "There are many potential applications for beryllium – for example, in lightweight bicycle frames – if the price comes down."

IBC hopes to consolidate the chain within the next 12 to 18 months and, after that, to concentrate on strengthening the links. Dutton said IBC is part-way toward completing its goal and is ahead of schedule. ■