

A MagnaDrive coupling saves enough electricity at the Nippon Paper Industries USA Co. Ltd. mill in Port Angeles to power 29 homes for a year.

By Jim Casey

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PORT ANGELES — A national industrial technology company with its roots in Port Angeles has been recognized for its phenomenal growth.

MagnaDrive Corp., which is Bellevue-based but maintains its national sales office at 116 W. Eighth St. in Port Angeles, was recognized by *Inc.* magazine as one of the nation's fastest-growing companies for 2004.

Inc. ranks MagnaDrive 392nd among its annual top 500 firms and 22nd in the region that includes Washington, Oregon, Alaska and Idaho.

Deloitte & Touche USA LLP, the accounting firm which compiles a ranking of technology companies based on revenue growth, names MagnaDrive 98th in its Technology Fast 500.

How fast? An average 94 percent growth a year, and 2,485 percent since 1999.

That's right: Two thousand four hundred eighty-five percent.

And though the company's plant is based in Bellevue, the seeds of its success and roots of its growth are in Port Angeles, says Steve Manwell, national sales manager.

Inaugural systems

It was in Port Angeles that MagnaDrive installed some of the first systems to show potential customers — at wastewater Pump Station No. 4 on the city's west side and in the sewage treatment plant on the east side.



Figure 1- MagnaDrive ASD installation in Port Angeles

Other Peninsula installations include the Nippon Paper Industries USA Co. Ltd. mill in Port Angeles and Portac Inc. in Beaver.

"It all started here," says Manwell.

"Now that we're worldwide, it's very important that the City of Port Angeles is recognized for what has been done."

The company's couplings and adjustable-speed drives replace drive shafts and bearings between motors and pumps, blowers, centrifuges and fans.

Its target industries include mining, electricity generating, oil and gas production-transportation-heating/ventilation and air conditioning, irrigation, wastewater treatment, and pulp and paper manufacturing.

In a typical ordinary situation, a motor uses a drive shaft to turn a fan. The motor vibrates, and the shaft transmits the vibrations to the fan, damaging its blades and wearing out its bearings.

No bearings, no friction

In a MagnaDrive application, motor and fan remain apart. They are linked by a powerful magnetic field across an 1/8-inch gap.

There are no bearings, no friction, and the technology produces other savings in money and energy, Manwell says.

More information is available at www.magnadrive.com. For an online tutorial, go to www.magnadriveeducation.com.

The technology, says a company brochure, is "elegantly simple."

Or, as Portac plant manager Dave Claussen told *Industry Week* magazine, which named MagnaDrive one of its five Technologies of the Year for 2001: "There's not much to fail."

No matter how well it worked on paper, however, MagnaDrive could be sold only if it could be shown.

That's where the city's economic development agency stepped in and made Port Angeles, in essence, a MagnaDrive demonstration site at its wastewater facilities.

"We wanted to be the demo center, the working success model city," says Karen Rogers, a Port Angeles City Council member.

"We really, truly utilized our city."

Overcoming a myth

Another problem was that many engineers thought technology started only on the heavily industrial East Coast and made its way west. They needed to be persuaded that a breakthrough could occur along the Strait of Juan de Fuca.

That meant bringing potential buyers to Port Angeles. And their visits did the trick.

"You *can* be in a rural community and become a top 500 company in Port Angeles, Washington," Rogers says.

Adds Manwell: "Any rural company can compete if they plan for the right infrastructure."

MagnaDrive has 66 outlets nationwide, and Manwell's travel calendar is blocked out with weeks in Chicago, Atlanta, Los Angeles, Korea, and Japan.

Port Angeles, however, is home and always will be.

Manwell took the job on condition he could stay here, where he'd been a logger and worked for ITT Rayonier.

Little vs. big

MagnaDrive has been approached with buyout offers from major manufacturers and corporations but has resisted selling.

If a big company bought the science, Manwell says, "they just might bury it" to end competition with older systems

Instead, "we are taking business away from competitive technologies," Manwell says, more than 90 percent annually in an industry that grows by about 3 percent a year.

Manwell can cite dramatic maintenance and energy savings, and point to installations that range from rollercoasters to huge FedEx conveyor belts and pumps aboard aircraft carriers.

But he and MagnaDrive CEO Jim Cich both credit the company's success to "the talent level and the hard-work ethic" of Clallam County.

Some of MagnaDrive's shareholders live here, as do many former employees.

Manwell called the *Inc.* and Deloitte awards "a pat on the back, really, for all the people who have been involved in Port Angeles."

"This company has solid roots," Rogers added.