

OSBORNE MATERIALS COMPANY'S DRUMMOND DOLOMITE

Successful limestone quarry continues to increase productivity with solid management, equipment



Gib Aikey, Plant Manager

When Osborne Materials Company took over operations at Drummond Island on Michigan's Upper Peninsula 18 years ago, it hoped to bring a new level of speed and efficiency to a limestone quarry that had already been in existence for decades.

Today, Drummond Dolomite Incorporated has achieved that goal. With vessel cargoes totaling 1.7 million tons of product in 2004, Osborne has achieved the highest level of production ever from the island quarry. It's expected to match that production again this year.

That level of success pleases Plant Manager Gilbert "Gib" Aikey, who has been with Drummond Dolomite since Osborne took over in 1988. Aikey had already been with the company for more than 30 years in the Cleveland, Ohio, area, doing highway

and concrete work. But the purchase of the Drummond Dolomite operation offered a new challenge; it would be the construction company's first venture into the quarry business.

"When we bought it, we weren't really sure of anything," Aikey recalled. "We went slowly at it, and each year we gradually built it up. The first year we did something like 600,000 or 700,000 tons, and we just kept upping production to where it is now."

In 1999, the company claimed more than 1.7 million tons of limestone — an impressive figure for a plant with a total of 38 personnel, including six supervisors and 32 hourly employees. Compare that to 1987, when Drummond Dolomite produced 1.2 million tons, with more than twice as many employees as it has today.

When Osborne acquired Drummond Dolomite, one of the first changes Osborne made was to upgrade the equipment. The previous operation used shovels for loading; Osborne Materials went with rubber-tired loaders. "They offer more versatility, and they're much faster," Aikey explained. "Drummond previously used three shovels, which took 14 or 15 minutes to load a truck. Now, we load a truck in three minutes."

Acquiring the quarry

The plant is located on Drummond Island, situated in the Saint Mary's River on the easternmost part of Michigan's Upper Peninsula. Its location allows easy access to water transportation, which the company uses exclusively. Drummond Dolomite loads 85 to 90 ships a year with material it ships to ports in

A Drummond Dolomite operator uses a Komatsu PC400LC-7 to remove overburden at the company's quarry site on Drummond Island.



the Great Lakes, where it is used for a variety of purposes in the steel industry. Drummond Dolomite usually begins production in the last week of March and ends around Thanksgiving. Because weather forces the quarry to shut down during the winter months, employees have to be extremely productive during the work season.

Key to making the operation run are many long-term employees, including Maintenance Superintendent Dave Klamerus, Mill Foreman Steve Kemppalnen and Garage Head Mechanic Greg McGuire. Office Manager Jeff Hiney and Administrative Assistant Karen Richwine head up the inside operations, while Mike Fairchild does boatloading.

"Our people make us very productive," Aikey acknowledged. "We have a solid core of people who work very hard to make sure we meet demands. We wouldn't be where we are now without them. They deserve much of the credit for our success."

Those employees keep the operation hopping. Production begins in Pit No. 2, where crews strip the raw material. Pit No. 2 is farther inland than Pit No. 1, and is now the only one out of which the company operates. After shooting and blasting the material, crews use Komatsu HD325 haul trucks specially equipped with 75-ton trailers to haul material six miles to Drummond Dolomite's crusher, which breaks it down into more useable products. The trucks make roughly 20 trips every 10 hours.

"It's actually a 1,000-ton-per-hour plant, but we've beefed it up to run roughly 1,150 to 1,200 tons per hour," Aikey said. "We accomplished that by using some space openings and eliminating bottlenecks, finding different ways to do things. We'll produce 12,000 tons in a 10-hour day."

Drummond Dolomite subcontracts work that it would prefer not to handle in-house. For example, the company subcontracts its blasting work. "Subbing out the blasting eliminates people, insurance and liability — plus we get a better job," Aikey explained. "Those guys are specialists. They're up on all the hot techniques and new explosives. And we get a set cost, so we've eliminated layers of management. That



Drummond Dolomite uses six Komatsu HD325-6 haul trucks to carry materials from its pit to the crusher. The trucks were modified to carry as much as 75 tons over the six-mile haul. "We're able to haul more material at one time so our production cost isn't as high," said Plant Manager Gib Aikey.

helps keep our costs down, which in turn helps with our pricing and bottom line."

Shipping product

Aikey said that more than 800,000 tons of Drummond Dolomite's two-inch kiln stone product goes to Carmuse Lime Company. In addition, Drummond Dolomite produces a variety of other products, ranging from two-inch rock all the way down to road base and ag lime, which is almost a powder.

Aikey explained that everything goes out by bulk, thanks to water transportation. A typical vessel will carry 20,000 tons; 99 ships made trips from the island last year, and this year the number is expected to be about the same.

"It's the cheapest form of transportation in the world," he said. "That's what makes this quarry so valuable. There's a lot of dolomite stone around, but not right on the water like this. They're all inland, so they have to send materials out by train, truck or some other means. It's more expensive to do it that way."

Using the right equipment

To help with production at Drummond, Osborne Materials Company turns to Road Machinery and Supplies for much of its equipment needs. The company recently purchased a Komatsu PC400LC-7 excavator and two new Komatsu HD325-6 haul trucks to add to its fleet. Drummond Dolomite already had four HD325 trucks, purchased within the last three years.



Good people and right equipment do the job

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"The owner likes Komatsu equipment," Aikey commented. "He likes the pricing and he likes their endurance. They've done very well; they're easy to service, operator-friendly and comfortable. And the cabs on the Komatsus are bigger and provide more visibility. So, consequently, the drivers like them better."

The trucks make their six-mile haul at about 30 mph, carrying their 75-ton loads to the facility's crushing spread, where material is dumped. The company made a few modifications to the HD325s, such as adding a trailer hitch for pulling the heavy loads the truck and trailer combination carry. "It was never done on a Komatsu before," Aikey said. "But it's worked out very well for us. We're able to haul more material at one time so our production cost isn't as high. It's a good deal."

RMS Sales Representative Steve Altobelli works with Aikey and the staff at Drummond Dolomite to meet the company's equipment needs.

Drummond Dolomite recently purchased the PC400LC-7 to strip overburden at the company's massive site. The 96,712-pound machine is equipped with a 4.5-yard bucket to handle large amounts of material in quick fashion. Aikey said the company decided to buy the machine after bids to sub out the overburden removal turned out to be more than Drummond Dolomite wanted to spend.

"In the long run we'll be better off with this machine," Aikey said. "It's been a good investment. The really nice thing is the power it has because that's what we really needed. The material we're stripping is hardpan, so it's very tough to dig. We've tried ripping it and even blasting it in the past, but that tends to be inefficient. With the PC400, we're able to simply dig, so it's a valuable asset to us."

Aikey said that Drummond Dolomite's mechanics take care of basic maintenance service at the site, including oil analysis. "Nowadays, oil analysis is the only way to keep up with what's happening on these engines," he said, noting that several potential problems had been caught that way in the past.

For more complex service needs, the company relies on RMS. "Steve and the people at RMS have been very good to work with," Aikey said. "They've been terrific about making sure our needs are met. We're somewhat of a unique situation because of where we're located, but they respond to our needs very quickly. In this business we can't afford to be down and they understand that."

What's ahead?

Looking toward the future, Aikey doesn't expect production at Drummond Dolomite to increase much further than where it is now. He points out that in order to do more, a second shift would have to be added, and the owner of the company would prefer not to do that. "I think we're maxed out at 1.7 million tons of production," he said.

However, the progress the company's made to this point gives Aikey plenty to take pride in. "The activity, the business and the people — that's what I like about this job," he concluded. "I can count on the really good people we have here."





Plant Manager Gib Aikey (left) works closely with RMS Sales Representative Steve Altobelli.

Drummond Dolomite's location allows its materials to be loaded on ships and transported via the Great Lakes.

