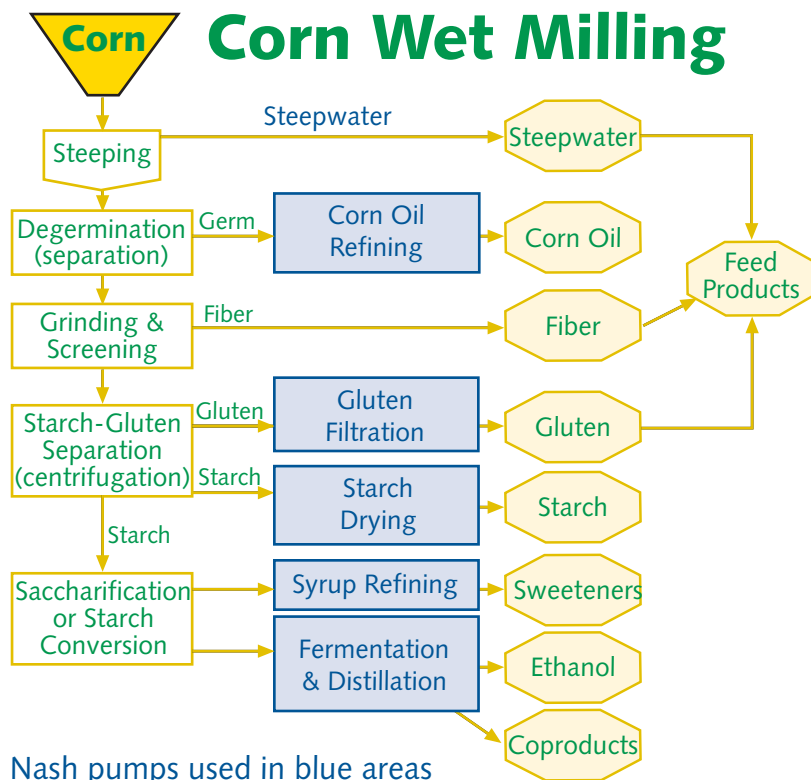


# Nash Pumps for Grain Milling

**Milling is the most energy intensive process in the food industry. Nash pumps can help you save energy, save water and save money.**



Nash pumps used in blue areas

Any grain can be milled, but the most common crops used are wheat, corn and rice.

The two major outputs from wet corn milling are corn sweeteners and ethanol. Both of these products are made from the starch in the corn. Most of the ethanol in the USA comes from corn, generally produced in the refining factories along with starches and syrups. Wheat and other grains can also be used to produce ethanol, with rapeseed and sugar cane being the most popular in other countries.

## Saving Energy

One of the easiest ways to save money and energy in grain milling is to make sure your pumps receive regular maintenance and are upgraded or replaced when necessary. You also want to be sure that you are using the most efficient products in your processes.

**Energy monitoring systems** play an important role in reducing energy use. Systems like the WebSentry can provide continuous monitoring of temperatures, pressures, vacuum levels, vibration, flow and many other critical measurements. With constant monitoring of your system, any situation that causes inefficient use of energy or water can be seen to immediately.

**Anaerobic digestion** - this wastewater treatment method can save on electric costs and at the same time produce biogas (methane) that can be used on site.

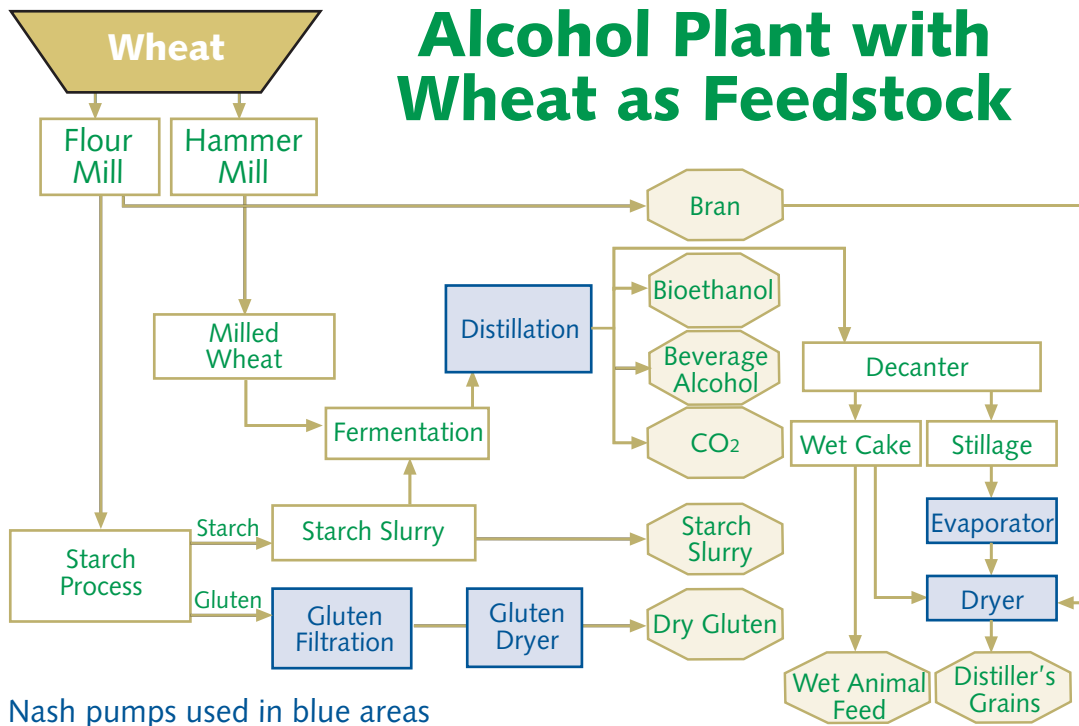
**Pump Systems** - In general, in a pump system with a lifetime of 20 years, the initial capital costs will only be 2.5% of the lifetime costs. Maintenance costs are another 2.5%.

Existing Model	New Model	Seal Water Rate (GPM)		Estimated Annual Water Cost Savings
		Existing	New	
CL 402	Vectra XL 80	12	5	\$10,000
CL 702	Vectra XL 130	20	6	\$20,000
CL 1002	Vectra XL 250	20	10	\$14,000
<b>Vectra XL130 Investment</b>		<b>8 Month Payback</b>		

Nash Vectra XL pumps have been efficient and reliable work horses since their introduction nine years ago. Now, with the adapter kits, it is easy to replace your aging CL series pumps and reduce your operating costs. The upgrades also make plants more environmentally friendly.

Assumed:

\$3/1,000 gal H<sub>2</sub>O • 8,000 operating hours/year • Once thru operation



The remaining 95% is energy costs. Built better than industry standards, Nash pumps are known for their reliability. With less downtime and fewer maintenance costs, you can rest assured that Nash quality will help your systems and your bottom line. In addition, Nash invests a considerable amount of time and money in new product development, so there may be a product upgrade for you that will pay for itself in less than a year!

**Other areas to consider** include plant lighting, the efficiency of your HVAC system and heat and steam distribution (with a focus on boilers and steam traps).

Nash liquid ring vacuum pumps and compressors have been used in many industrial applications for more than 100 years. They are known as tireless workhorses, designed to stand up to the rigorous, nonstop demands of the harshest industrial environments. We can work with you to provide an engineered-to-order system that will incorporate many of the principles examined here. We have sales and service centers worldwide, and all of our facilities are ISO 9001:2008 certified.

## NASH

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