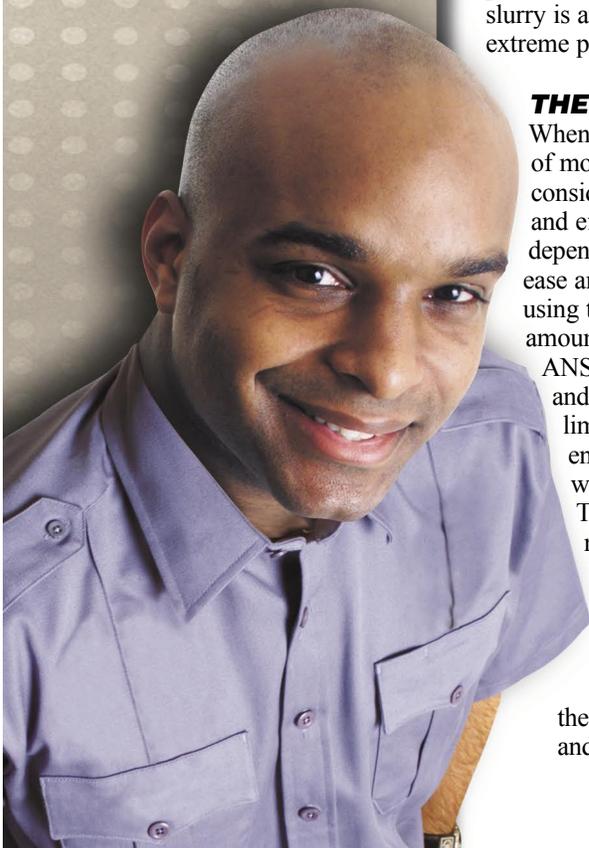




**“The lower cost of ownership was the driving force in selecting LaBour.”**

**Company Reliability Site Manager**

**Pump Expert**



## Entrained Air

### THE COMPANY

As a world leader in the advanced specialty chemical industry, an Ohio-based company has been producing chemicals and chemical additives for over 100 years. Their formulations are used in a wide range of consumer and industrial product manufacturing. The company’s chemical products touch our lives in many ways through just about everything we use. From the personal care, pharmaceutical and home cleaning products we use to paints, textiles, preservatives, food processing and many more, name the product and one or more of the company’s chemicals are probably involved in its manufacture!

### THE PROBLEM

One of the company’s 27 facilities worldwide is a plant that manufactures branded CPVC piping products, thermoplastic polyurethane for film and sheet-coating processes and static control polymers for use in the packaging of static-sensitive electronics. Part of the process in the manufacture of these materials is the need to pump an entrained-air acid slurry. The slurry is highly corrosive to begin with and contains... or is entrained with... more than 20% air! The entrained air alone causes reduced pumping efficiency, capacity and head, vibration, noise, and loss of prime, as well as possible pump damage and accelerated corrosion. To make matters worse, the slurry includes a powdered, sand-like material from the manufacture of CPVC pipe, which reduces pump performance even more. Obviously, pumping this acid slurry is an extreme industrial application calling for extreme pump performance.

### THE SOLUTION

When evaluating pumps to tackle the tough task of moving the acid slurry, the company not only considered the obvious parameters of capacity and efficiency, but they also put a high priority on dependability, hydraulic and mechanical stability, and ease and cost of maintenance. They ran process tests using traditional ANSI-style pumps, but with the large amount of entrained air in the slurry, the traditional

ANSI pumps could not produce the required flow and head. ANSI pumps with open impellers are limited to less than 8% entrained air in a fluid while LaBour’s TFA Triple Volute Pump has no problem with up to 20% entrained air.

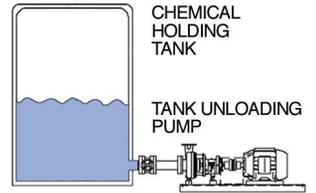
The tests proved that the LaBour TFA was up to the task and then some, so the pumps were installed and put to work.



## Application Guide

### Typical Application

#### Entrained Air



### The LaBour TFA Triple Volute ASME/ANSI B73.1 Pump Benefits

- The industry’s lowest cost of ownership over the life cycle of the pump
- Engineered to last longer and require less maintenance
- Physically superior to competing product offerings - you can see the difference
- Designed to run cooler allowing seals and bearings to last longer
- Worldwide technical support and quick-response service
- Minimal shaft deflection
- Over 80 years experience in the chemical processing industry
- The pump industry’s most impressive array of warranty options

**LaBour Taber**

**The World’s Longest Lasting Pumps... Bar None!**

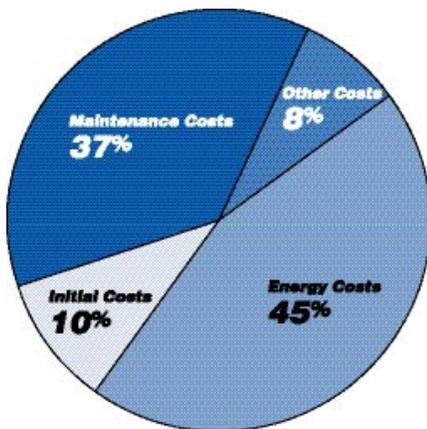
[www.labourtaber.com](http://www.labourtaber.com)  
317-924-7384

**When pump failure is not an option  
...trust the LaBour TFA Triple Volute Pump.**

## HOW IT ALL COMES TOGETHER

That was 15 years ago! The company found that the 15 LaBour TFA Triple Volute Pumps they installed have been the only pumps to be virtually trouble-free and reliable within their highly corrosive process environment. Not only do the TFA's easily pump the highly air-entrained acid slurry, but they've been doing it continuously with minimal regular maintenance. In this case, pump downtime occurrence can easily add up to the original cost of the pump, so these were serious factors when they considered a pump. LaBour built the TFA Triple Volute Pumps like they do all their pumps... with reliability in mind. From the oil lubricated bearings, extended life mechanical seals and the "best in the industry" heavy duty shaft to the Titanium Grade 7 pump casing construction materials, LaBour TFA pumps proved to be not only reliable and dependable, but easy to maintain. And of course, LaBour takes into account the unique circumstances of the pumps use. For example, LaBour engineers every detail, such as the pump installation bed-plate for the company. For the acid slurry pumps, LaBour provided a non-metallic base with titanium inserts that resist corrosion better than steel or conventional non-metallic bases. All this added up to a larger up-front investment for the company, but an investment which paid dividends in an overall lower cost of ownership and operation through the past 15 years. And the pumps are still going strong!

### EXPERTS KNOW THERE'S MORE TO BUYING A PUMP THAN THE INITIAL COST OF THE PUMP.



#### Why Should Organizations Care About Life-Cycle Cost?

*Many organizations only consider the initial purchase and installation cost of a system. It is in the fundamental interest of the plant designer or manager to evaluate the life cycle costs (LCC) of different solutions before installing major new equipment or carrying out a major overhaul. This evaluation will identify the most financially attractive alternative. As national and global markets continue to become more competitive, organizations must continually seek cost savings that will improve the profitability of their operations. Plant equipment operations are receiving particular attention as a source of cost savings, especially minimizing energy consumption and plant downtime.*

Source: "Pump Life Cycle Costs: A Guide to LCC Analysis For Pumping Systems." Hydraulic Institute, Europump and the US Department of Energy's Office of Industrial Technologies

## LABOUR: SYNONYMOUS WITH RELIABILITY AND SERVICE

LaBour Pumps has been providing all kinds of high quality, specialized pumps to the chemical processing industry for over 80 years. LaBour is known world-wide for progressive, innovative technology, a responsive representative network and for the timely delivery of pumps constructed from special materials like stainless steel, nickel alloys, titanium and zirconium. We believe that we design, engineer and build the finest, longest lasting pumps available in the market. In fact, with only routine maintenance, it's not uncommon for a LaBour pump to be working smoothly way beyond the pump life expectancy of 15 or 20 years. But it's good to know that in the unlikely event of a problem, LaBour's parts, service and representative network is there to get your pumps back online as quickly as possible. LaBour has provided thousands of customers with pumps designed and manufactured for each customers' specifications and unique requirements. No matter what the chemical processing application, a LaBour pump can be built for you.

## BECOME A PUMP EXPERT YOURSELF

If you would like more information about LaBour TFA Triple Volute Pumps—or any other quality LaBour pump—call LaBour-Taber at 317-924-7384, visit [www.labourtaber.com](http://www.labourtaber.com), or email us at [labourtabersales@peerlesspump.com](mailto:labourtabersales@peerlesspump.com). We'll analyze your unique challenges and show you how a LaBour pump can work for you!

**LaBour  
Taber**

**The World's  
Longest Lasting  
Pumps  
...Bar None!**

**The LaBour TFA  
Triple Volute  
ASME/ANSI B73.1**

#### Typical Pump Applications

- Synthetic Resins and Latex
- Viscous Fluids
- Petrochemicals
- Entrained Air or Vapor
- Solids and Slurry Handling
- Vacuum Systems
- Product Transfer
- Industrial Waste
- Heat Transfer
- Acids

#### Typical Markets

- Industrial
- Petroleum
- Power
- Utility
- Chemical Process
- Food & Beverage Process
- Pulp & Paper
- Pharmaceutical
- Steel
- OEM
- Agriculture
- Primary Metals
- Pollution Control

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