CURRENT connections

Spring 2003

INTERSTATES
Providers of Premier Services

OUR VISION:

Turning Visions into Reality through:

- People
- Adding Value
- Alliances
- Performance

OUR VALUES:

Building Relationships through:

- Dependability
- Integrity
- Trust
- Quality
- Family

OUR MISSION:

Providers of Premier Services

INTERSTATES COMPANIES

Gold Standard

Interstates Celebrates 50 Years of Success Built on Commitment to Customer Service and Satisfaction

Fifty years ago, John A. Franken saw an opportunity to supplement his income as an operator at Sioux Center's power plant by cashing in on the latest craze: selling TV sets from his front porch. He soon found that the real potential was in another sideline: installing the wiring for his customers' antennas and power outlets. The evolution of Interstates Companies as the premier provider of quality services had begun.

"Many of the elements that have driven the success of the companies were in place from the very first: the willingness to embrace new technology, the ability to identify new opportunities in the marketplace, and making customers' needs a priority," said Larry Den Herder, CEO of the Interstates Companies.

As the '50s gave way to the '60s, the focus of the company moved from residential to commercial electrical installation. By the early 1960s, Johnny's Electric was involved with grain elevator and feedmill construction, establishing a connection to the agribusiness world that continues to be a part of Interstates' core business.

By the late 1960s, the company had acquired a new name, Interstates Electric and Engineering, and an individual who would play a prominent role in its future development. Darrel Ramhorst, fresh from service with the Air Force and NASA, was selected to spearhead the company's engineering efforts. Under his supervision, Interstates began offering design-build electrical packages.

HISTORY *continued on page 4*

The Numbers are In!

Study Proves Performance of Design-Build

Whether you deliver your projects within a Design-Build format or use a variety of project delivery methods, a recent study by the **Construction Industry Institute (CII)** brings some much needed empirical evidence to the "best" project delivery debate. At Interstates, we are pleased to offer fully Integrated Design-Build Project Delivery for the electrical segment of our customers' projects. By seamlessly combining our abilities in electrical engineering, construction, instrumentation and factory automation, we strongly believe that Design-Build offers our customers outstanding advantages.

Dave Crumrine

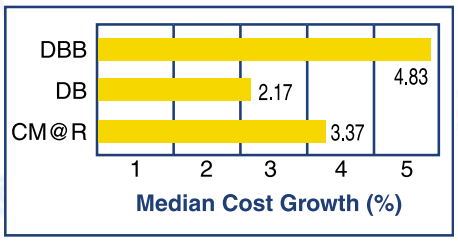
As project delivery professionals, we know that one method can't fit all needs for all projects. Design-Build and its process industry counterpart, Engineer-Procure-Construct (EPC), have grown increasingly popular. Up until this point, the reason was simply that owners got more of what they wanted and told others about it.

But now, courtesy of the Construction Industry Institute (CII) and University of Texas - Austin, the numbers are in! By studying some 350 projects of varying delivery methods and types, key performance metrics prove out what many of us have known for some time.

- Design-Build is faster
- Design-Build has better cost control
- Design-Build has better schedule control
- Design-Build delivers as good, or better, on quality than other delivery methods
- Design-Build has notable advantages in subjective areas like single source responsibility, team building, and risk management.

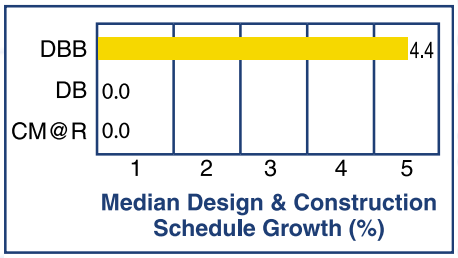
Faster – Using square foot rates and other criteria; Design Build (DB) was determined to produce projects faster than both traditional (design-bid-build) delivery and Construction Management at Risk (CM@R). When the design phase is included, DB produced projects more than twice as fast as traditional DBB.

Cost Control – The study showed the DB method to be the best for controlling costs while traditional DBB fared the worst. The median cost growth for DB projects was 2.17%, less than half the cost growth of traditionally delivered projects (4.83%).



Source: Construction Industry Institute

Schedule Containment – Schedules are crucial for any project. The study found the average traditional DBB project schedule grew 4.4%. DB projects tended to not grow their schedule at all. Their median growth was 0%.



Source: Construction Industry Institute

Quality Performance – Using a variety of quantifiable factors related to quality, owners ranked each factor on how well the project delivered on their expectations. Elements like callbacks, O&M costs, meeting owner intent, equipment selection and others were examined. From this, each project received a composite quality score. Although the advantages were not as pronounced in this metric, DB had the highest quality rating of the three project delivery methods. DB's score was some 17% higher than traditional DBB. Traditional delivery posted the lowest quality score.

So why isn't everyone using DB? Because one size simply doesn't fit all. And certain projects require a different approach. DB delivery also requires some different owner skills and competencies than traditional delivery.

If you would like more information on project delivery and the issues surrounding making Project Delivery choices, call Dave Crumrine at 877-248-1358 X153.

This study and summaries of it can be obtained along with other project delivery information from CII @ http://construction-institute.org and at the Design-Build Institute (DBIA) @ http://dbia.org.

In Memory

Jeremy (Jerry) Monk

Sept. 22, 1974 - Dec. 9, 2002

We note with sorrow the passing of Jerry Monk who died December 9, 2002, as a result of injuries sustained at a Norfolk, NE, jobsite where he was serving as lead superintendent.

Jerry and his wife, Christina, had recently moved their permanent residence to Indiana, where Jerry was planning to take a position with our regional office. An avid automotive and motorcycle enthusiast, he was always actively and happily engaged in car repair projects in his spare time.

He is survived by Christina; his children, Aubrey and Keely; his parents, and a younger brother.

The thoughts, prayers and heartfelt sympathy of the entire Interstates family are with his family and many friends.

Interstates Wins Four Prestigious ABC Awards

The Associated Builders and Contractors (ABC) in Iowa and the Northern Illinois Region have honored Interstates with awards for excellence for two projects completed in 2002: an ethanol plant for Adkins Energy LLC in Lena, IL and the Cargill Dow LLC Plant in Blair, NE.

L to R: Jason Robertson, Dave Crumrine, Tom Shaw, Cargill, and Doug Swets

The prestigious recognition is earned for work that meets a range of stringent criteria, including complexity of the project, attractiveness, unusual challenges, innovation, safety, budget compliance and customer satisfaction.

The Cargill Dow project was not only award winning, but historic. It is the first of its kind in the world to produce in quantity a revolutionary new product, Polymerized Lactic Acid (PLA), which will be marketed under the brand name NatureWorks™.

NatureWorks™ PLA is a breakthrough in renewable resources utilization. These polymers are made from renewable resources such as corn and are used to produce such everyday items as clothing, cups, food containers, candy wrappers, as well as home and office furnishings.

"We anticipate a huge market in Asia, where biodegradability and recycling standards are very stringent. This is the first plant capable of producing NatureWorks™ PLA in marketable quantities," said Doug Swets, site manager for the project.

The plant can produce 140,000 metric tons of PLA per year, using 40,000 bushels of corn per day. It was completed in November 2002, after about 1 and a half years of construction. Interstates had responsibility for installation on the project, which was engineered by Dow Engineering.

Interstates received the ABC of Iowa "Award of Excellence" for the Cargill Dow plant in the Electrical – Industrial $2 million - $10 million category, as well as the "Project of the Year" award.

The company was also honored with the "Award of Merit" from ABC of Iowa and the "Award of Excellence" from ABC of Northern Illinois for work on an ethanol plant for Adkins Energy LLC. The plant, located in Lena, IL, converts 15 million bushels of corn into 40 million gallons in fuel per year, including 120,000 tons of distillers' grain and 105,000 tons of carbon dioxide for possible resale.

L to R: Dave Crumrine, Jason Robertson, Roger Cannoy and Tim Foreman

The scope of the project included 36,000 feet of conduit, 250,000 feet of tray cable, five 3000-amp services, 370 control devices and hundreds of light fixtures. Lurgi PSI, of Memphis, Tennessee, served as the construction manager on this project. Interstates has a long and successful history with Lurgi PSI, working with them on numerous value added agricultural projects throughout the United States.

INTERSTATES OUT & ABOUT

May 4-7
American Oil Chemists Society Annual Meeting and Expo
at Bartle Hall Convention and Entertainment Center
Kansas City, MO
Booth # 426

May 5-7
American Feed Industry Association Feed Industry Show
Minneapolis, MN
at Minneapolis Convention Center
Booth # 323

May 17-21
Association of Operative Millers Annual Technical Conference and Trade Show
at David L. Lawrence Convention Center and The Westin Convention Center
Pittsburg Hotel
Pittsburg, PA
Booth # 629

June 16-19
18th Annual International Fuel Ethanol Workshop and Tradeshow
Sioux Falls, SD
at Sioux Falls Convention Center

July 30-August 1
16th Annual American Coalition for Ethanol Meeting and Ethanol Conference
at Sioux Falls Convention Center
Sioux Falls, SD

Maximize Your Electrical Investment — The Financial Impact of Motor Selection

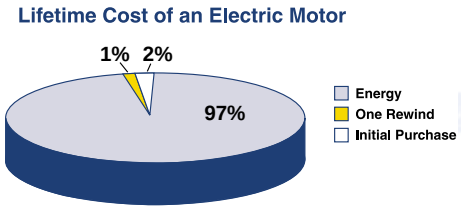
Did you know the annual energy cost of running a motor is many times greater than its initial purchase price? For example, at an energy rate of $0.06/kWh, a typical, continuous running motor uses almost $9,000 worth of electricity annually, about nine times it's purchase price! Replacing this old or standard efficiency motor can immediately reduce this cost to $8,000.

Two common motor selection mistakes keep many industrial clients from realizing great savings in motor operation costs.

One mistake is putting too much emphasis on initial cost when selecting motors. As you can tell from the figure, the purchase cost of motors is insignificant when compared to motor operating costs.

Over the past 15 years, motor efficiency has improved substantially. Today's energy efficient motors produce the same power but use less electricity due to superior construction materials and manufacturing practices. Replacing your old, pre-1993 motors with high-efficiency models results in reduced electrical operating costs of 5-15% depending on motor size (small motors have the larger improvement.) With installation costs included, payback is usually 1 - 1.5 years at continuous process facilities.

You must also choose between today's standard and high-efficiency motors. High-efficiency motors typically cost 15 - 30% more than their standard, post-1993 counterparts, but they only reduce electrical operating costs by 1 - 3%. This means replacing worn-out motors with high-efficiency motors is the prudent thing to do since the higher purchase cost will be recovered in less than six months. It may also make sense to replace functioning standard-efficiency motors. (Note: many utilities offer rebates as high as 15% on the purchase of high-efficiency motors.)



Other benefits of high-efficiency motors include reduced electrical load and the resulting system capacity, reduced demand on utility bills, reduced audible noise of operation, cooler motor operation resulting in lower HVAC costs, and longer motor life.

A second mistake is to "play it safe" and select an oversized motor. Common thought is to prolong motor life and minimize failures and downtime by operating motors at about 2/3 of their nameplate horsepower. Such motors operate very inefficiently, and at lagging power factors.

Motor energy efficiency is maximized at a 75 - 90% load factor and drops off dramatically below 50% load factor. This means oversized motors cost you in three ways: (1) increased purchase cost, (2) increased power factor penalty charges, and, most significantly, (3) decreased operating efficiency. *Load factor* is defined as the ratio of the actual amount of load a motor carries with respect to its rated full load carrying capacity. If a 10-hp motor is operating a 4-hp load, it is operating at a load factor of 0.4 or 40%.

Doug Post

Over 40% of today's industrial motors are operating under 40% load factor. If your motors are running at ampacities less than 75% of their nameplate amps, consider a study to determine the payback on replacing this motor with a properly sized, high-efficiency motor.

An exhaustive report by the Department of Energy shows that only 15 - 22% of motor users are taking advantage of these significant opportunities to increase operating profits via good motor selection and sizing criteria. Are you?

Learn more about motor efficiency at: www.oit.doe/gov/bestpractices/motors, www.nema.org, and www.motorsmatter.org.

See www.interstates.com/plant_decisions for additional ways to Maximize Your Electrical Investment. If you have any comments or questions, please call Doug at 712-722-1664, x159.

HISTORY *continued from page 1*

By the 1980s, Interstates' commitment to innovation and responsive service led it to explore the intricate, integrated technologies required to develop turnkey electrical systems.

The rapid advances in capabilities led Interstates next to expand beyond the feed and grain industries. The company began to explore opportunities in chemical plants, steel mills, food processing and other industries. In 1995, Jim Franken, the son of founder John A. Franken, became chairman and CEO. He oversaw the formation of the Harbor Group as the holding company for three independent companies: Interstates Electric and Engineering Co., Inc.; Interstates Engineering, Inc. and Interstates Control Systems, Inc. Sadly, he passed away in November 2001, leaving a legacy built on his family's commitment to excellence, innovation and dedication to customer satisfaction.

"We've come a long way from 'Johnny's TV,' " said Den Herder, "but we're not about to become complacent. We're going to continue to grow, to help our people grow and to help our customers succeed."

Proud to be members of

ABC – Associated Builders and Contractors, Inc.

ABC Q

Association of Operative Millers (AOM)

AOCS

AFIA

National Society of Professional Engineers®

CSFA Member

GEAPS

ISA Member

DBIA Design-Build Institute of America

Well Represented

Interstates, Harbor Group Team to Make Presentations at Milling Conference in May

When members of the Association of Operative Millers (AOM) gather for their five-day conference this May in Pittsburgh, PA, a generous "helping" of Interstates' insight and innovation will be on the agenda.

Interstates Control System's Jake Ten Haken and Jeff White, Interstates Engineering's Brent Kooiman and the Harbor Group's Mark Moir will make presentations at the event, scheduled for May 17-21.

Jake Ten Haken

Interstates Engineering Team Lead Brent Kooiman will explain the practice and benefits of site audits as part of a "What's New" segment of the event.

"From a production standpoint, electricity is a major cost of milling," Kooiman explained. "I know attendees will be interested in a site audit's benefits in terms of being proactive and identifying potential problems."

Jeff White

ICSI Engineering Manager Jake Ten Haken and Electrical Engineer Jeff White will give a brief overview of fieldbus networking and relate it to the milling industry.

"Millers haven't used fieldbus networking as much as the ethanol, beverage and automotive industries," Ten Haken said. "We're excited to show them what we've learned from other installations."

Mark Moir, Director of Consulting Services for the Harbor Group, will play a unique role at the conference, since he will be presenting on management strategy rather than processes or new technology. He will share Interstates' experience with developing and implementing a management approach based on the Balanced Scorecard system. The strategy, which was developed by two Harvard professors, helps organizations better define and integrate their vision, mission and strategies into daily operations.

Brent Kooiman

Mark Moir

Interstates' and the Harbor Group's participation in the conference is part of an ongoing effort to present information about the companies to new industries to develop inroads in new markets and applications.

- **Do You Know Your Power Distribution System?**
  Brent Kooiman
  Sunday, May 18, 9:10 a.m.
- **Use of Fieldbus Technologies in Flour Mills**
  Jake Ten Haken and Jeff White
  Monday, May 19,
  10 a.m. to 12 p.m.
- **Balanced Scorecard – Strategy Management Revolution**
  Mark Moir
  Monday, May 19,
  10 a.m. to 12 p.m.

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