

# BALDOR®

A MEMBER OF THE ABB GROUP

## Installed Base Evaluation

Identifying Opportunities to Improve Energy Efficiency and Reliability

An Installed Base Evaluation (IBE) is a detailed survey of motors, variable frequency drives, and mechanical products installed and inventoried at your facility. Armed with advanced collection equipment, Baldor's IBE team not only takes an accurate count of electrical and power transmission equipment, but also captures detailed nameplate information including; product manufacturer, part number or model number, horse power, speed, ratio, service factor, ratings, type of enclosure, internal protection status, plant location, and other application information.

Utilizing a unique software program, the team analyzes this data and presents a comprehensive report that outlines ways to improve energy efficiency and increase plant reliability.

### A Comprehensive Guide to Cut Energy Costs

If cutting energy costs is the goal, customers can use the IBE report to target key applications where reduced energy consumption is critical. The report contains recommendations for immediate actions, as well as long-term strategies to cut energy costs. The IBE report will:

- Clearly outline whether you should repair or replace specific motors
- Detail the energy savings that can be achieved by replacing inefficient motors with premium efficient designs, and how long it will take for the payback
- Provide information on how to use variable frequency drives to improve the energy efficiency of a system
- Offer solutions for inefficient mechanical gearing and use of synchronous belts to improve efficiency



### A Framework to Improve Reliability

The evaluation identifies more than just energy savings; it's also the framework for a motor and mechanical management system for maintenance, operations, and procurement personnel. Because the IBE provides a complete and detailed database of installed and spare components, plant officials can make informed choices that will impact reliability and the bottom line. The IBE report can be used to:

- Begin a preventive maintenance program or to enhance existing PM programs
- Drive a standardization program, consolidate vendors and simplify purchasing
- Better manage spare inventory

INSTALLED BASE EVALUATION TEAM

# IBE

**A Total Cost of Ownership Approach  
Leads to Energy Savings and Increased  
Plant Reliability**

*A mining operation in the Southeastern United States, concerned about reducing energy consumption, increasing equipment reliability and managing their spare parts inventories, asked Baldor's IBE team for help. In addition to capturing name plate information from motor and mechanical products on twenty-one conveyors, two crushers and three screening operations, the IBE team also conducted a conveyor design review.*

*Not only did the team uncover several opportunities for energy savings, they also discovered that several pulleys and gear reducers were undersized for the application, which if not corrected, could have led to significant downtime.*

*The comprehensive IBE report included detailed recommendations on which motors should be upgraded to premium efficient designs, and which applications should be switched to more efficient HTRC synchronous belts.*

*After the IBE, mine officials not only had a plan to achieve energy savings, they also were able to install correctly sized components, and had a detailed strategy for maintenance and inventory control. With their investment in an Installed Base Evaluation, they discovered a total cost of ownership approach (TCO) for energy savings and increased plant reliability.*



**Discover System Efficiency with an IBE**

By identifying inefficient motors, and replacing them with Baldor-Reliance Premium Efficient designs, substantial energy savings are the result. Variable frequency drives can save as much as 50% energy in specific applications. Mechanically, gear reducers can save as much as 20% or more, and synchronous belts improve efficiency and reduce operating costs. Baldor examines the entire system, because the combined efficiency may not be evident.

When you're ready to do something about your growing energy electrical consumption, or need help with a comprehensive motor and mechanical management program, e-mail the IBE team specialists at [IBETeam@Baldor.ABB.com](mailto:IBETeam@Baldor.ABB.com) or call 864-238-5532. It's an easy call with a big payoff.

**For additional information, rates, and availability:  
Email: [IBETeam@Baldor.ABB.com](mailto:IBETeam@Baldor.ABB.com)  
Phone: 864.238.5532**

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