

THE ECONOMICS OF REBUILDING VERSUS BUYING NEW EQUIPMENT IN AGGREGATE PRODUCTION

Gary Ross

Aftermarket Business Development Manager

INTRODUCTION

Aggregate production relies on numerous pieces of equipment working together in a coordinated, continuous process to move material efficiently from extraction to finished product. Magnetic separators, metal detectors, vibratory feeders, screeners, and conveyors all play integral roles across multiple stages of processing. Each component contributes to product purity, protects downstream equipment, and supports overall plant productivity.

With ongoing economic pressures and the rising cost of new equipment, some aggregates producers are increasingly evaluating rebuild options rather than outright replacement. The following considerations are intended to guide that decision, particularly as they relate to equipment such as suspended electromagnets, metal detectors, and vibratory feeders. These principles can also be applied more broadly across aggregate processing operations.

TRACK EQUIPMENT PERFORMANCE AND SERVICE LIFE

Understanding the expected service life of individual pieces of equipment is a critical starting point when evaluating rebuild versus replacement. Performance, wear patterns, and longevity are heavily influenced by operating conditions, material characteristics, and application demands.

Peak operating efficiency and long-term reliability depend on both equipment design and the environment in which it operates. Because process equipment represents a significant capital investment, producers should perform routine inspections to identify malfunctioning or underperforming assets.

Eriez has experienced technicians available to visit customer sites to inspect equipment and perform appropriate testing. This proactive approach helps detect potential issues early, reduces unplanned downtime, and lowers safety risks to personnel and equipment.

Once inspections are complete, the technician can determine the most appropriate path forward. Options may include replacing individual components, remanufacturing the equipment to original specifications, or, in some cases, recommending total replacement. That determination is made only after evaluating all alternatives to restore performance and reliability.

CONSIDER THE COST TO REBUILD

Cost is often a primary factor in deciding whether to rebuild or purchase new equipment. When the core structure of an asset remains sound, rebuilding can offer substantial savings compared to buying new.

Eriez evaluates each piece of equipment individually to recommend whether rebuilding is the best solution. Typical rebuilds may involve replacing wear components, bearings, seals, electrical elements, or magnetic assemblies. Often, rebuilt equipment can deliver performance comparable to new equipment while requiring significantly less capital investment.

ANALYZE THE POTENTIAL BENEFITS OF NEW OR UPGRADED TECHNOLOGY

Equipment designs continue to evolve, and manufacturers routinely introduce innovations that improve efficiency, reliability, and safety. Some of these advancements are available only on new equipment, while others may be incorporated during the rebuild process.

For example, Eriez incorporates external oil expansion tanks into its oil-cooled suspended electromagnets. This design helps prevent coil burnout, a common failure point in competitive offerings, and can significantly extend equipment life. In many cases, oil expansion tanks can be added to existing units during a rebuild.

Similarly, stronger magnetic circuits used in newer drum separator designs may be incorporated into older models. Modern vibratory feeders often include energy-saving components that should be evaluated before deciding whether to rebuild or replace. Metal detectors have also seen advances in software and detection technology that may be worth considering.

Before committing to a purchase or rebuild, producers should consult with their equipment manufacturer's sales or repair team to understand which upgrades are available and appropriate for their application.

CONSIDER YOUR TIMING NEEDS

Delivery timelines frequently play a decisive role in rebuild-versus-new decisions. Producers must balance operational demands against lead times for both options.

In general, rebuilds can be completed faster than manufacturing new equipment, though timelines vary based on equipment type and scope of work. Some rebuilds may take as little as 3 to 4 weeks, while more extensive projects can require 8 to 10 weeks.

Many manufacturers, including Eriez, also maintain an inventory of finished equipment that can be shipped quickly when timelines are critical. When production is halted or safety issues arise, securing a firm delivery date becomes essential.

EVALUATE THE REPUTATION OF THE COMPANY

Selecting the right partner is just as important as selecting the right equipment. Several factors can help producers assess the credibility and capabilities of a repair facility.

Longevity in business often reflects consistent performance and reliability. Producers should ask for references from current and past customers and, when possible, visit the repair facility to see firsthand how equipment is inspected, rebuilt, and tested.

A qualified rebuild partner will provide transparent recommendations, clearly define scope and timelines, and stand behind its work with appropriate warranty coverage.

Warranty coverage should be part of this evaluation and be carefully reviewed before committing to a rebuild or purchase. Most manufacturers provide warranties on new equipment, and Eriez offers as-new warranties on rebuilt equipment returned to original specifications.

MAKING THE RIGHT DECISION FOR LONG-TERM PERFORMANCE

Choosing whether to rebuild existing equipment or invest in new assets requires careful consideration of performance history, service costs, available technology, delivery timelines, and long-term operational goals.

By thoroughly evaluating equipment condition and working with an experienced repair partner, aggregates producers can make informed decisions that balance capital investment with reliability, productivity, and operational continuity.



Headquarters

2200 Asbury Road
Erie, Pennsylvania 16506, USA

+1-814-835-6000
eriez@eriez.com
www.eriez.com