



The most reliable industrial timers on the market.

Eagle Signal has been the leading supplier of timer solutions for a range of industrial applications all over the world. We pride ourselves on the flexibility and maneuverability with which we constantly innovate and adapt our products to meet the needs of an ever evolving market.

Modern industrial applications involve complex machines, filled with innumerable highly synchronized moving parts. A slight error in the coordination of these processes could result in a serious loss for the manufacturer, either through damage to materials, machinery, or loss of time. Eagle Signal timers enable industrial applications to run smoothly by delivering accurate, reliable results every time, ensuring that there's never a breakdown in machine operations.

[Electronic Timer vs. Electromechanical Timer](#)

A timer may have many functions and applications within manufacturing processes. Eagle Signal's electronic timer and electromechanical timer products are designed primarily to track or control time-based applications such as run-time and event processes. However, choosing the right kind of timer (electromechanical timer or electronic timer) depends on application specifics: Does the application only require monitoring, or does it require an output/control action as well?

Eagle-Signal timers come in two main varieties: electromechanical timer or electronic timer designs:

Electromechanical Timer

Electromechanical timer models are characterized by their ruggedness and simple efficiency. An electromechanical timer may take the form of an On Delay, off delay, interval timer or Repeat Cycle device. In addition, an electromechanical timer is characteristically long-lived. An electromechanical timer would not be ideal if space was a concern (due to their larger physical size) or where a non-fixed time range is required.

Electronic Timer

An electronic timer would be the timer of choice when fast, high precision accuracy and event feedback are required. In contrast to electromechanical timer models, an electronic timer is more compact and also more complex. If feedback/output control functions are required (in terms of an alarm or another pre-programmed event), an electronic timer is a better fit than an electromechanical timer. Each electronic timer offers digital programmability and a choice of LED or LCD display as well as multifunction and long time ranges. These programmable timer solutions are available in many forms to meet many different needs:

- time indicators
- reset timers
- repeat cycle timers
- Multi-function timers

Electronic timer models are more complex yet relatively easy to maintain. Each programmable timer is rugged and requires minimal maintenance. Some units are sensitive to environmental forces such as physical shock.

INDUSTRY SOLUTIONS

Commercial Printing

We may be living in a digital age, but printed materials aren't going anywhere any time soon. The print advertising industry is still a multi-billion dollar a year entity, and with advanced data collection and consumer profiling technologies growing more sophisticated every year, there's every reason to believe it will only continue to grow.

To meet these needs speedily and efficiently, it's vital for printing press operators to perform regular maintenance on their equipment to prevent costly breakdowns and other malfunctions. Time spent in repairs is time not spent fulfilling orders and meeting customer demands.

And behind many successful print shop operations are Eagle Signal electronic timers. By giving technicians an accurate account of a machine's total runtime and other vital statistics about their mechanical operation, Eagle Signal timers are the backbone of a well regimented and regularly maintained print shop.

Food Processing

As anyone who has ever baked a cake knows, even a small variation in time or temperature can have drastic results for the finished product. The food processing and industrial baking industries operate on the same principle, but on a much larger scale. And because the quantity of ingredients involved could potentially result in a huge loss of resources in the event of a mechanical error in timing, the equipment the industrial bakers rely on must be absolutely accurate beyond all doubt.

That's why industrial bakers and food manufacturers turn to Eagle Signal for their large oven applications, such as the production of bread, pastries, and

other products. Our counters enable machine operators to reliably measure ingredients and accurately monitor oven processes and baking times to prevent material waste, scrap and the time and labour involved in reproduction. Eagle Signal offers a range of reset and repeat cycle timers designed to provide user-friendly and accurate time and process control of oven baking time coupled

Material Handling / Production

Production lines thrive on precision. Robotic fluid filling and dispensing systems automatically fill large vessels quickly and accurately with the help of electronic timers. Because a timer malfunction or mechanical error represents a huge potential loss of resources and technician time, plant managers take great care to ensure their production lines are regulated by the most reliable and accurate electronic and electromechanical timers.

Eagle Signal on-delay and repeat cycle timers are user programmable to control start and stop times in material handling and filling applications over a discrete time interval. Most Eagle Signal timer models have two outputs that can be programmed regulate a specific machine function such as a stop fill, or to actuate a conveyor to move the product along after completion of the previous filling process, enabling the next empty tray of product to be filled.

Eagle Signal offers a range of timers including electronic timers that are durable, compact, cost-effective, reliable and remotely re-settable. That makes them perfectly suited to deliver accurate, repeatable and timed control of fluid release on an OEM inline filling machine.

Packaging

The single greatest obstacle to sustained freshness in packaged food is air. Vacuum seals are a critical part of ensuring frozen and pantry foods retain long-term shelf-life without degradation of flavour, colour, texture and

nutritional value. Storage of food in a vacuum can preserve product freshness for up to five times longer than conventional food storage methods.

The vacuum packaging process involves a precisely timed two-step process. First, a powerful piston pump quickly removes all air and creates a vacuum in the product packaging. Then, it's tightly sealed by a timed airtight sealing and cut-off process.

Eagle Signal brand on-delay or repeat cycle timers are used in a wide variety of sealing applications to time the vacuum pump exhaust process to a specified time interval (i.e. every 30 seconds). A feedback signal then indicates that the item is fully vacuumed which enables the counter to then send a second output signal to a temperature controller to then heat the vacuum sealer to a precise temperature parameter for a reliable and accurate vacuum seal.

Plastics

You can't go a single day without encountering literally hundreds, if not thousands, of objects made out of plastic. Since they were popularized for use in consumer packaging and durable goods in the 1950s, plastics have since exploded into a \$310 billion a year industry. And behind many those plastic packaging and manufacturing plants are Eagle Signal timers.

For plastics manufacturing techniques such as injection moulding machinery, thermoforming and extrusion equipment to blow moulding machinery, promoting reliable and safe plastics production and consistent product output is critical. This means reducing unnecessary downtime and eliminating all material waste. The key to accomplishing this is accurate and reliable timing equipment.

Eagle Signal brand electronic timers ensure timed plastic mould release and precise heat and pressure control of the plastic resin pellets within the barrel of the injection mould machine. The on-delay timer activates the heating element which signals the temperature controller to melt the plastic pellets to a given temperature parameter within the barrel for optimum plastic injection or moulding at the opposite end.

Pump Controls

Modern manufacturing plants are carefully orchestrated operations that synchronize dozens of complex machines and operations, all working in unison. And more often than not, Eagle Signal timers are behind it all, carefully keeping the pace for each and every application to follow.

Nowhere is this more apparent than on motorized pumps. Motors are associated with nearly every industrial and commercial application, including water pumps, hydraulic pumps and other utility pumps. Electronic timers initiate special starting sequences in high voltage, high horse power pump applications.

This type of gradual motor start up using electronic timers enables the motor to go through a sequential start to eventual maximum motor capacity. The gradual start up cycle time is designed to prevent thermal rise (or overheating) within the motor which, if prolonged over time, can lead to thermal breakdown and resultant motor failure, machine downtime and expense of motor replacement. By limiting thermal rise within the motor, an energy savings of up to 50% and a longer motor lifetime are made possible.

Recreational Vehicles

Eagle Signal brand elapsed timers and hour meters aren't just the lifeblood of complex machine shops and industrial applications. They're also found anywhere it's necessary to manage the long-term operation and scheduled maintenance of electrical equipment, such as for golf carts at a pro shop. It's in the interest of all concerned parties to maintain an accurate run-time records for carts in order to prevent lost revenue for the course or, worse yet, a miss-billed and unhappy customer.

Eagle Signal brand elapsed timers can be found hard at work in golf carts to monitor battery run time hours similar to a standard car's odometer. Accurate power usage readings help ensure both a vehicle's owners and users receive an accurate reckoning of its total use. That's just good business.

FEATURED PRODUCTS AND SOLUTIONS

HP5 CYCL-FLEX Reset Timers The HP5 CYCL-FLEX® series timer is a high quality, synchronous motor driven reset timer housed in the standard CYCL-FLEX® plug-in housing.



HQ9 CYCL-FLEX Percentage Timers The HQ9 offers accurate, efficient control for many industrial applications. These include motion control, electric heaters, ovens, program temperature controls, chemical feeding, and lubrication systems.



B506 Programmable Timers Designed as the "best" fit timer for most applications, the B506 family is divided into 3 separate base models. The standard unit offers a wide range of field selectable operating modes and time ranges as well as a host of other convenient features. The high performance model is a good choice when advanced functions such as dual setpoints and 1 millisecond resolution are required. The repeat cycle model provides a variety of benefits specifically tailored for cyclical operations.



B856 Multi-Function Timers The B856 features a compact 1/16 DIN package, precise digital setting, versatile functionality, and a straightforward button-per-digit interface. It can be easily programmed to perform any standard timing operation: On-Delay, Off-Delay, Interval, or Repeat Cycle. A unique On-Delay/Interval Mode can, in many cases, perform the function of two separate timers.



CX Series CYCL-FLEX Timer/Counters The CX200 is a microprocessor based timer/counter housed in a standard 15 terminal CYCL-FLEX® plug-in case. Time or count operation, time range, and standard or reverse start operation is selected by 7 miniature rocker switches located inside the unit housing.

