

ENGINE START EQUIPMENT



**FOR
PROVEN
STARTING POWER**



About Hilliard and its Starters

At The Hilliard Corporation, we've built our reputation by solving customers' special-application needs. Hilliard is an engineered-products company. Everything Hilliard manufactures is developed and fine-tuned by a group of knowledgeable engineers.

The philosophy that has driven the development of our pneumatic starters is consistent with our desire to do what it takes to satisfy our customers' needs. Every model has been carefully designed and installed to meet a specific type of application.

If you have any questions or don't see exactly what you're looking for in this brochure, give us a call. We're confident we can provide you with the right engine starter to meet your specifications.

Hilliard Starters:

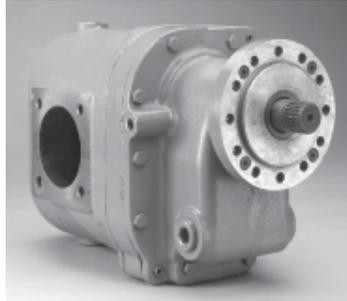
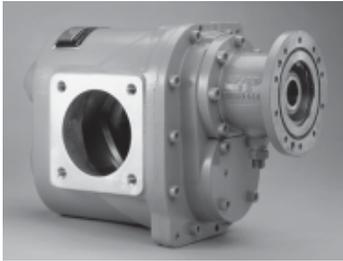
Serving these markets . . .

- Gas Transmission
- Cogeneration
- Power Generation
- Oil Exploration and Gas Lift
- Marine Propulsion
- Stand-by Generation
- Industrial Engine

. . . with these products:

- Pneumatic Starters
- Overrunning Clutches
- Gear Drives
- Hydraulic Starter Drives
- Electric Starter Drives
- DC Starters
- Continuous Duty Air Motors
- Stored Air Start Systems
- AC Start Systems

Pneumatic Starters



Pneumatic Starters are used for starting industrial gas turbines and reciprocating engines. The machine will operate and produce torque with any type of pressurized gas as long as the pressure differential across the machine is maintained.

Overrunning Clutch

Featuring a roller-ramp design, when engaged, the overrunning clutch transmits power via a cam and roller assembly connected to the input shaft. The clutch provides automatic disengagement when the input torque drops to zero, allowing the output shaft to overrun.



Gear Drive



The Hilliard Gear Drive uses step-up drives to increase the RPM output of a low-speed type motor starter. Large and small ratios are designed to meet high-speed engine-cranking requirements. Both straight drive and right angle drive designs are ready for mounting.

Hydraulic Starter Drive

In the Hydraulic Starter Drive, a high-speed overrunning clutch is featured in a finished housing. Clutch lubrication oil is sealed from hydraulic motor and engine fluids. All shafts are properly supported by bearings. Integral clutch and gear drives are available to augment the hydraulic motor.



Electric Starter Drive



The Electric Starter Drive is in a self-contained package and is used to link an electric motor to the engine. Positively engaged and pre-engaged clutches are applied. Solenoid and pneumatic-actuated designs are used.

Air Motor

This air/gas expanding motor is powered by a set of non-wearing helical lobe rotors. The rugged motor is designed for harsh use and is rated for continuous operation.



DC Starter

This 24-volt electric starter uses a Delco-Remy 50-MT Series cranking motor. Hilliard replaces the clutch with a Positork spline drive to meet the mounting required by most gas turbine engines.



Other Starter System Products

AC Start

This complete system is equipped with pre-programmed motor controller, AC motor, gear drive assembly, and an overrunning clutch for disengagement of the motor after cranking. Starter output speed of up to 15,000 RPM has been experienced with this system.

Stored Air Start System

These are packaged air systems used for black-start capability. It comes in a complete package with compressors, control valves, pneumatic starter, and piping. It is designed for two to three full starts or a single pump-up cycle.

Other Hilliard Products

Since The Hilliard Corporation was established in 1905, it has been a reliable source of quality industrial products such as:



Portable Filter Cart



Transfer Valve



Slip Clutch



Star Filter Press



Brakes



HILCO Cartridges

Your Local Representative:

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