

# **FUTUREDRIVE™** **NG**

ELECTRONIC TURNING TOOL



The future of borescope inspections.

**Rhinestahl** Corporation

**ENGINEERED SOLUTIONS**

ISO 9001:2000 REGISTERED · AS9000 COMPLIANT

# MAKES INSPECTIONS EASIER, FASTER, & MORE ACCURATE



*The Power Unit is the hub of the system. It provides power to the components, generates the text video overlay, and has a USB port for software upgrades. The unit plugs into a 110V to 240V AC outlet, and autoselects the correct voltage.*

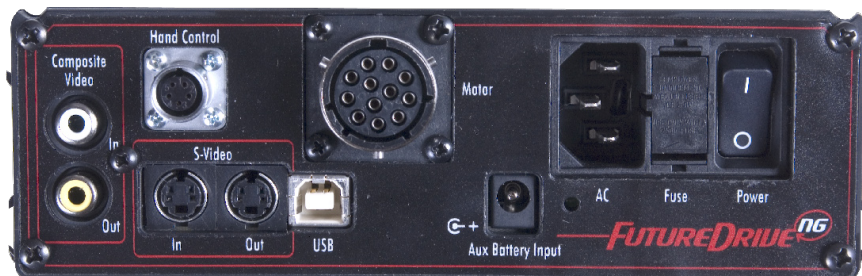
**T**HE FUTUREDRIVE® NG automates borescope inspections of gas turbine engines. It reduces the need for two technicians to perform the inspection, freeing one technician to be dispatched for out-station borescope inspections.

With FutureDrive NG you can inspect manually, advancing from blade to blade with the push of a button or foot switch, or completely automatically, with a time pause as each blade comes in front of the borescope. Blade movements are quick, smooth and precise.

The FutureDrive NG always knows which blade is visible, and will automatically stop after all blades in a section have been inspected. The operator has complete control of movement speed, pause length, and sets the exact place where each blade stops.

Questionable blades can be flagged. The unit will remember every flagged blade in every engine stage. These flagged blades can be returned to for later review.

The optional wireless hand control makes it easy to move from stage to stage without trailing a cable. The convenient hand switch and foot switch allow one-handed or hands-free operation.





Easily add engine model applications with optional adapters. Software upgrades and data for new engine models are added via USB port. The unit can store the necessary settings for every engine in your fleet.



Light, portable and waterproof, the entire package (including case and cables) weighs only 21 pounds. The case is suitable for airline travel and fits in an overhead compartment. Without the case, the components can be packed easily into a briefcase. Also available with a larger case for storage of adapters.

- Automates the inspection process; variable speed, variable timed pause at each blade
- Eliminates the need to find an assistant to turn the engine during the inspection
- Provides video overlay of engine/stage/blade information
- Flag questionable blades for later examination; easily returns to any flagged blade in any stage at any time
- Performs on most engines with the addition of optional adapters and easy USB software update
- Improves speed, accuracy and ease of performing borescope inspections
- Wireless models can be used with or without the cable, and will not interfere with airport or aviation frequencies



With the video option, FutureDrive NG can optionally overlay engine stage and blade information onto the signal from a video borescope. This is especially useful when making a video recording of the inspection. It can also display the videoscope and turning tool data on a larger external display.

## STANDARD KIT:



Hand Control (wired model), Cable



Power Unit (model without video overlay), Power Cable



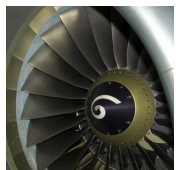
Drive Motor, Cable



Remote Foot Switch, Cable



Standard Carrying Case



One (1) Engine Program of customer's choice

## WEIGHT

Entire package 21 pounds, including case, cables and all accessories (standard kit)

## ELECTRICAL REQUIREMENTS

Voltage 100V / 240V 2A AC (Autoselecting), 24V DC

Hertz ~47 to 63

## OPERATION

Speed Variable from .01 to 1 RPM of the engine core

Direction Bi-directional

Torque Motor Drive rated at 110 ft./lb. shear pin

Interval Timer 0 to 20 seconds between blade moves in 1/4 second increments.

Blade counter Up to 999

Blade Flagging Damaged blade locations can be flagged and automatically repositioned.

Control Type Simple multiplexing one hand control design with emphasis on simple operation without sacrificing full functional versatility. Backlit LCD display provides for maximum visibility in widest variety of operating conditions.

Power Electronics Microprocessor based system design insures reliable operation.

Drive Motor Brushless DC motor design with encoder feedback for full motion control range with digital accuracy. High torque gearbox insures reliable operation. Variable acceleration design provides for minimal backlash problems during operation.

## OPTIONS:



Wireless Hand Control

### PEGASUS

HPC1 47 blades

Blade: 7

Power Unit with Video Overlay of Blade Data



Remote Hand Switch



Medium Carrying Case (holds engine adapters)



Additional Engine Programs

**FUTUREDRIVE™ NG**  
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PRECISION  
MANUFACTURING  
& ENGINEERED  
SOLUTIONS  
SINCE 1967

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