

# 51H Air Turbine Motor

**Improving Starter  
Reliability for Your  
Kawasaki or  
Kongsberg Gas  
Turbine Engine is  
Easy and Cost  
Effective**

If your Kongsberg & KHI Gas Turbine Engine is still using a vane starter, you have no doubt encountered reliability problems. Parts that stick or swell, or simply wear out due to constant friction eventually leads to starter failure. Something no one in our industry can afford.

Replacing your vane motor starter with TDI turbine technology is a significant reliability and longevity upgrade. Turbine technology is inherently more reliable, requires no maintenance, and provides significantly longer life. The model 51H Turbine Motor from Tech Development is specifically designed as a replacement upgrade for Kongsberg and Kawasaki engines.

**Installation is Fast and Easy.** The compact 6.1" diameter size, and lightweight (28 lbs. or 12.7 kg) frame, with an SAE C four bolt mounting flange make installation a one-man operation on your engine installation.

## **Contaminants are not a Problem Anymore**

Dirt, moisture, rust or other contaminants that lodge inside your vane-type starter and lead to shut down won't get caught inside the 51H. Large air channels and TDI's unique open gas path design allow these same contaminants to literally "pass through". Even sour gas has no effect on the 51H

## **Better Design. Better Parts. Better Reliability.**

The 51H features a single stage impulse turbine coupled to an integral planetary reduction set. All parts are made from rugged, high quality steels and aluminum. There are no plastic parts. No rubbing parts. And there's no need for messy lubricants in the supply line to clog the system. The clean simplicity of the 51H design minimizes potential problems and provides a longer maintenance-free product life.

## **Versatile Nozzle Plate Puts You in Control**

Gas flow control is provided using a versatile plate that houses 1 to 21 nozzles which regulate flow to the turbine wheel, allowing you to tailor the power level of the starter to the application. Fewer nozzles lower the torque proportionally. The 51H is available with an optional automatic trip valve (ATV) which shuts off air flow if motor speeds begin to exceed predetermined limits.

## **DIMENSIONAL DATA** TDI 51H *TURBOSTART*

