



GE Oil & Gas

Tachometer Pick-up

Thermocouple Pick-up

*New Product Development*

# ET18 Turbocharger

## Improved Condition Monitoring for the Cooper-Bessemer ET18 Turbocharger

As a part of its ongoing efforts to improve existing products, GE Oil & Gas has developed a Type-J thermocouple blower end bearing package arrangement that can be installed on any 3:1 ratio Cooper-Bessemer ET18 turbocharger.

The ET18 thermocouple bearing package allows for continual temperature monitoring and trending of the compressor end bearing assembly. The end user can utilize measured bearing temperature data to anticipate the need for a turbocharger overhaul, prevent significant peripheral damage caused by a bearing failure, and assist in troubleshooting lube oil system failures. Upon installation of an ET18 thermocouple bearing package, compression systems will provide the user with bearing temperature values to set as alarm and shut-down levels for the trending instrumentation.

The traditional eutectic melt-out device used to monitor Cooper-Bessemer ET18 bearing condition is only capable of alerting the user of a failed bearing after it has already occurred. The eutectic devices can only help minimize damage to the turbocharger and is not capable of providing the user with any information until it is too late.

The ET18 thermocouple bearing package hardware can be installed in the field by an experienced turbocharger mechanic, or during a shop overhaul. Once equipped with the thermocouple bearing package, a wire is routed from the thermocouple leads to a termination point of the user's choice.

GE Oil & Gas  
16250 Port Northwest Drive  
Houston, TX 77041 USA  
[www.geoilandgas.com](http://www.geoilandgas.com)  
Email: [engagerecip@ge.com](mailto:engagerecip@ge.com)  
Call our 24-hour hotline for service support,  
parts and new unit sales at +1 844-RECIPI-GE (US & Canada) / +1 713-354-1299 (global)

Copyright © 2016 General Electric Company. All Right Reserved.