

# Fact Sheet

## NEW AMETEK CF6-80C/E EGT Probe

The benefits of AMETEK's latest high temperature technology for the GE90-115B are now extended to all CF6-80C/E EGT applications.

AMETEK has more experience supplying exhaust thermocouple probes on CF6-80 turbines than any other OEM.

### Benefits

- **Lowest Operating Costs**
- **Longest Life validated by OEM qualification**
- **Maximum Temperature Capability**
- **Silver free design eliminates silver migration**, "low insulation resistance" problems seen with other certified designs
- **Precision Calibration**
- **Highest resistance to probe erosion and its sheath material**
- **Highly accurate temperature measurement** provided by highly controlled design and test requirements
- **More resistance to mechanical creep than any other EGT product** provided by the single crystal super alloy (benefit brought from blade technologies)
- **Greater EGT Margin** providing additional benefits:
  - Increased time on wing
  - Lower maintenance costs
  - Greater fuel efficiency

### **As per GEAE Releases:**

#### CF6-80C2 – EGT Probe Inspection and Hardware Release 04-02-7721-01

The Vendor P/N 8TC34ABW1 (GE P/N 1962M86P01) probe utilizes material that provides added durability at high temperatures and will provide a "nominal" output that will result in a more accurate EGT indication and is currently released to CF6-80C2 production and to the field per Service Bulletin 72-1134.

Probes utilizing higher temperature capable materials are recommended for reduced maintenance costs.

#### CF6-80E1 – EGT Probe Inspection and Hardware Release 04-02-7721-02

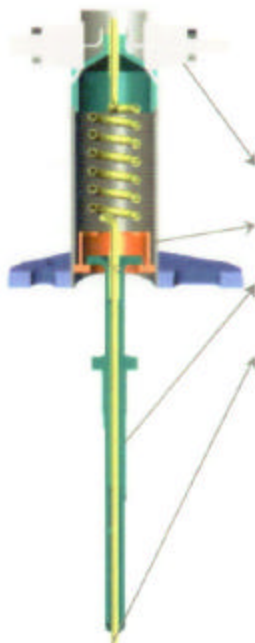
The Vendor P/N 8TC34ABY1 (GE P/N 1962M86P02) probe utilizes material that provides added durability at high temperatures and is currently released to CF6-80E1 production and to the field per Service Bulletin 72-0268.

Probes utilizing higher temperature capable materials are recommended for reduced maintenance costs.



## NEW AMETEK CF6-80C/E EGT Probe

Engine	AMETEK P/N	GEAE P/N	Replaces	S/B
CF6-80C	8TC34ABW1	1962M86P01	1696M81P09/10/12/13, 9373M91P03/05	72-1134
CF6-80E	8TC34ABY1	1962M86P02	1696M81P08/13	72-0268



### Features

- Higher Temperature Capability Terminals - Silver free design
- Spring over-compression protection - Patented vibration resistance design features
- Single Crystal Rene® N5 Probe Support: single crystal super alloy probe support coated for oxidation resistance
- HAYNES® 230® alloy\* Element Sheath (yttria stabilized nickel superalloy):
  - High temperature strength
  - Outstanding resistance to long exposures in oxidizing environments
  - Premier resistance to nitriding environments
  - Long term thermal stability
  - Lower thermal expansion
  - Resistance to grain coarsening at high temperatures
- Standard Type K output on CF6-80C provides greater EGT Margin
- Patented "Fast Time Response Aspiration Flow" Technique: Ametek invented the "Two Immersion EGT Probe with Aspiration" so that both immersions read the same. A more accurate measurement through the turbine duct and more rapid and accurate time response to transients have enabled better control.
- Accuracy is checked on each probe by installing it into a calibrated system with:
  - Automated calibration control based on stability to < 0.2 C
  - Multiple calibrated reference thermocouples used
  - Nickel alloy thermal "sink" to minimize thermal gradient
  - Calibration runs at 660 C, 870 C, 1018 C
- EGT as a system: All thermocouple materials and processes enjoy completely consistent processing. No boundaries – the entire EGT system is from the same responsible source with the same high quality product support.



Kellstrom Industries is AMETEK's Authorized Distributor for Europe, Africa, the Middle East and Latin America.

#### Kellstrom Industries

3701 Flamingo Road  
Miramar, FL 33027  
[www.kellstrom.com](http://www.kellstrom.com)  
Tel: +1-954-538-2000  
Fax: +1-954-538-2188

To learn more about AMETEK's CF6-80C/E Probe, please contact:

**Adriana Simon-Wheeler**  
Sales Director, Distribution  
[adriana.simon@kellstrom.com](mailto:adriana.simon@kellstrom.com)  
Tel: +1-954-538-2450  
Fax: +1-954-538-3206

**Dean Morgan**  
Vice President, Distribution  
[dean.morgan@kellstrom.com](mailto:dean.morgan@kellstrom.com)  
Tel: +1-954-538-2436  
Fax: +1-954-538-2158