Honeywell’s patented insulated wire technology enables reliable high temperature operation in electro-mechanical devices. Insulation is chemically inert and not effected by fluid contamination.

**HIGH PRESSURE & HIGH TEMPERATURE (HPHT)**

- **High Temp**
  - Capable of operation in conditions of up to ~750°F / 399°C

- **High Performance**
  - Sustaining electrical performance at high temperature

- **Improved Reliability**
  - Improved component reliability in high temperature and high pressure environments reducing operating cost

**HPHT - CAPABLE PRODUCTS**

- Direct Solenoids
- Pilot Solenoids
- Torque Motors
- Rotary Variable Differential Transformer (RVDT)
- Linear Variable Differential Transformer (LVDT)
- Electric Motor Actuators
- Solenoids to control fluid movement and directional actuation control
- Downhole pressure transducers
- Magnetometers
- Accelerometers
- Telemetry for position tracking

**HIGH PRESSURE & HIGH TEMPERATURE (HPHT)**

- Downhole electric motors
- Drill head actuation & solenoids
- Drill head power and rotation
- Downhole generators
- Resolvers for speed and direction control
- RVDT and LVDT for precision drill position sensing
- Telemetry for position tracking
FAQ’S

WHAT IS HONEYWELL HIGH-TEMPERATURE WIRE INSULATOR (HTI)?

A formulated wire insulation consisting of glass chemistries and bonding agents to coat single strand magnet wire that provides excellent dielectric properties at high temperature. Insulation can be applied using typical industrial methods.

DOES HONEYWELL HTI TECHNOLOGY REDUCE VIBRATION?

Honeywell has developed an impregnation method applied to HTI coil assemblies that immobilizes wire patterns resulting in a very robust assembly capable of high vibration resistance.

HOW IS HONEYWELL HTI TECHNOLOGY APPLIED?

The formulation can be applied in the liquid state using typical industrial wire application methods and is environmentally safe during wire application. Formulation has long storage life before and after wire application.

IS HONEYWELL HTI A POLYMIDE?

No.

WHAT IS HONEYWELL HTI TECHNOLOGY CURRENTLY APPLIED TO?

The typical applications where this technology can be applied to, but are not limited to aircraft engine components, missile actuation components, solenoids to control fluid movement and directional actuation control, downhole electric motors, drill head directional control using electromechanical actuation, drill head power and rotation, downhole generators, resolvers for speed and direction control, RVDT and LVDT for precision position sensing, downhole pressure transducers, Magnetometers, Accelerometers, Telemetry for position tracking, harsh environment robotics, and automotive components.

DOES HONEYWELL NEED TO MANUFACTURE THE SOLENOIDS TO APPLY HONEYWELL HTI?

This will be assessed on a case-by-case basis.

CAN THE CUSTOMER SUPPLY PARTS FOR HIGH-TEMPERATURE WIRE INSULATOR APPLICATION?

HTI can also be applied to surfaces for dielectric protection. Existing coil assemblies can potentially be directly replaced with this technology.