

# CWJ-075型燃气轮机专用高温温度传感器

# CWJ - 075 Special High Temperature Sensor for Gas Turbine

## 1.工作原理

CW-RD-5003型燃气轮机专用高温温度传感器的工作原理是利用两种不同的导体(热电极)组成的热电偶所产生的热电势来测量温度的。测量端裸露于大气中,其热电势值随着温度变化而变化,通过仪表显示进行温度的直接测量。

### 2.特点

具有响应时间快、性能好、抗振动和冲击及工作寿命长等特点。

### 3.应用范围

它适用于燃气轮机专用高温温度测量。其特殊的结构设计适合于燃气轮机、发

动机等高温、恶劣环境下对温度的测量。

## 4.外形结构尺寸

### 1. Working Principle

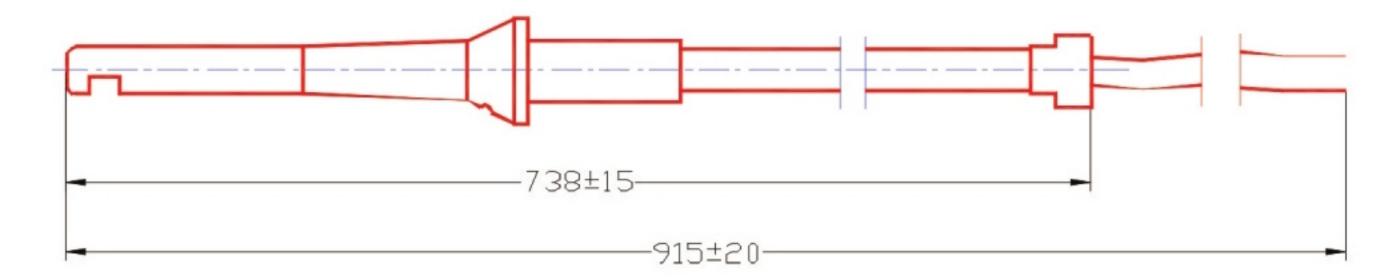
The working principle of CW – 075 high temperature sensor for gas turbine is that temperature is measured by thermoelectric force caused by two different conductors (thermode) of thermocouple. Measure end is exposed in the atmosphere, its thermoelectric force value changes with the temperature change, direct measurement of temperature through the instrument display.

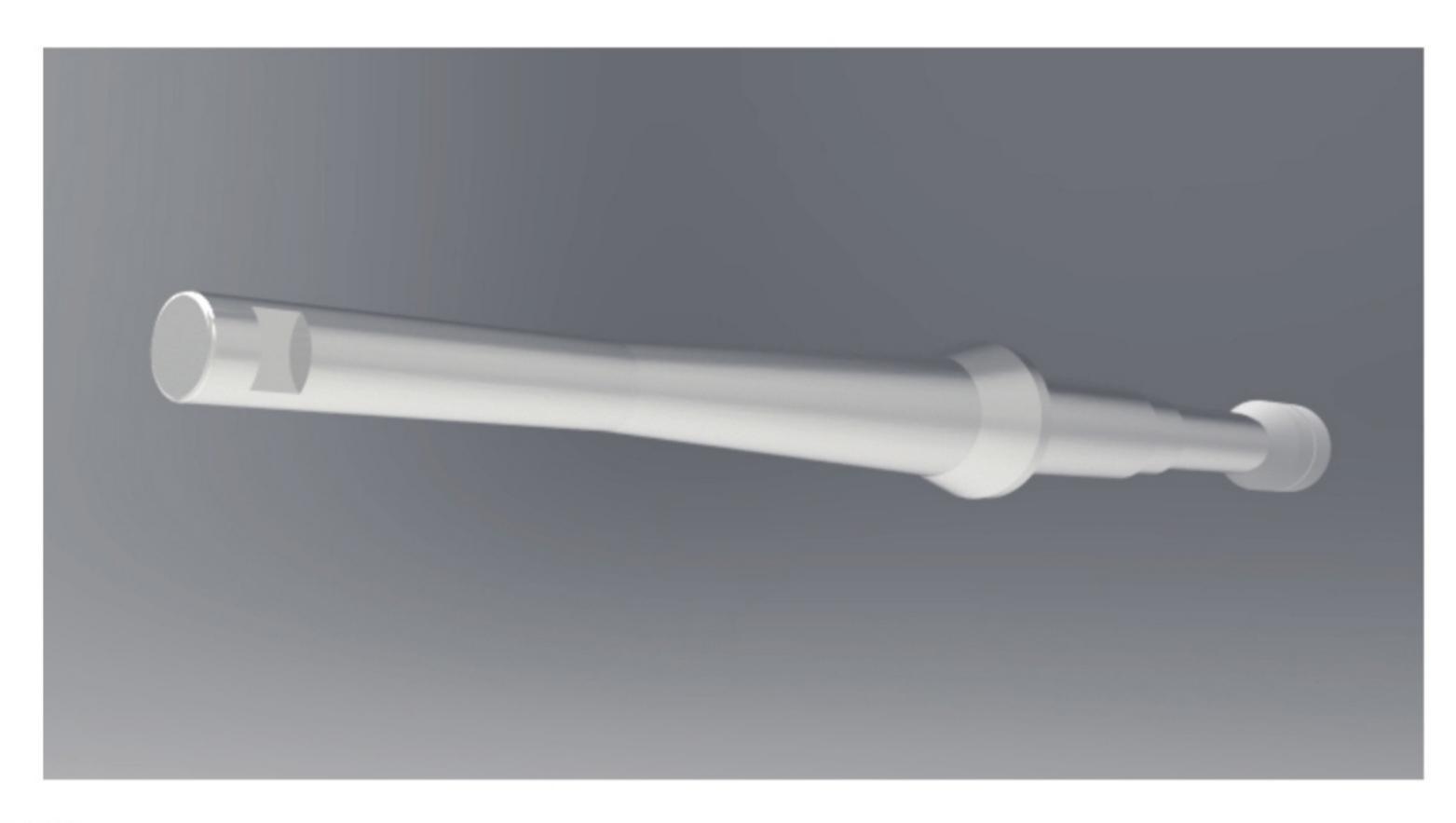
2.Fast response time, good performance, vibration and impact resistance and long service life, etc.

#### 3.Application

It is suitable for special high temperature measurement of gas turbine Its special structure design is suitable for temperature measurement in gas turbine, engine and such as high temperature, harsh environments.

#### 4. Outside Drawing





5.结构材料 传感器为金属外壳结构。

5.Material of structure
Shell of sensor is metal.



## 6.主要技术指标

main technical parameters

名称 Name		燃气轮机专用高温温度传感器 Special high temperature sensor for gas turbine
型 등 Model		CW - RD - 5003型
性能特性 Performance characteristics	测量范围 Temperature Range	0℃ ~ 1000℃
	工作温度 Working Temperature	-50°C ~ 250°C
	激励电源 Excitation power supply	-
	重量 Weight	≤1kg
	外形尺寸 Outline Dimension	-
电气特性 Electrical characteristics	绝缘电阻 Insulation resistance	≥1MΩ 100× (1±10%) VDC (250℃); ≥10MΩ 100× (1±10%) VDC (常温) ≥1MΩ 100× (1±10%) VDC (250℃); ≥10MΩ 100× (1±10%) VDC (normal temperature)
	输出阻抗 Output impedance	_
静态特性 Static characteristics	零位输出 Zero output	_
	满量程输出 Full range output	-
	非线性 Nonlinearity	_
	重复性 Repeatability	-
	迟滞 Delaying	-
	准确度 Accuracy	≤1%
	过载 Overload	-
稳定性 Stability	零点漂移 Zero drift	-
	热零点漂移 Thermal Zero drift	-