

## Camera for High Temperature Furnace

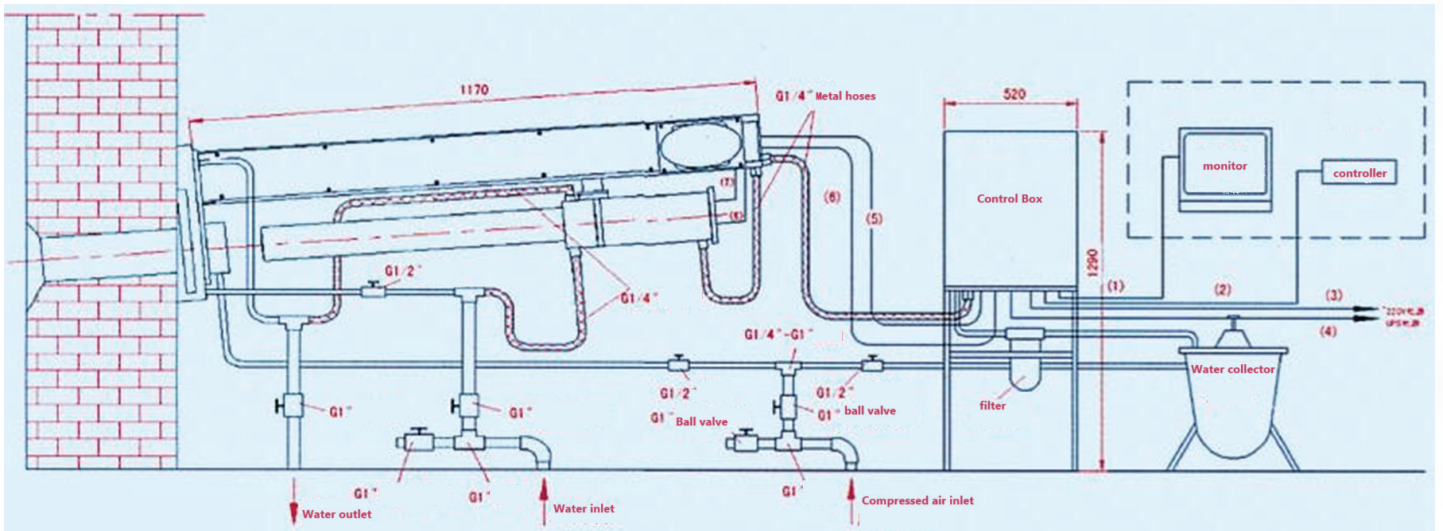


High temperature industrial cameras are an important component of industrial furnace automation. With the development of industrial technology, high efficiency, energy saving, and safe operation have become particularly important. The comprehensive improvement and progress of industrial automation control technology have led to the increasingly common use of high-temperature industrial television for monitoring industrial furnaces. Its use significantly improves the production efficiency of manufacturing and the safety and service life of equipment. Hotwork International design and manufacture a series of high-temperature industrial cameras, including endoscopic, furnace wall type, furnace wall automatic protection type, endoscopic automatic protection type, and blast furnace top sealing type, which are suitable for various high-temperature and harsh furnace environments.

The system adopts a PLC automatic control unit to automatically control the insertion and extraction of the camera and lens parts. In case of problems such as power supply and compressed air supply, as well as when the temperature inside the probe cover exceeds the range, the mechanism can be automatically removed from the furnace, providing automatic protection for the equipment.

The system adopts pinhole imaging and double spiral air curtain technology, effectively solving the impact of high-intensity thermal radiation, dust, and corrosive substances inside the kiln on the camera lens, greatly improving the reliability of the system, reducing system maintenance requirements, and basically achieving maintenance free equipment.





## Parameters

**Opening size:** Diameter 95~110mm

## Compressed air

- Inlet pressure: (0.3-0.5) Mpa
- Inlet flow rate: (0.1-0.4) M3/min
- Inlet noise:  $\leq 150$ db
- Inlet temperature:  $\leq 35$  C
- Inlet dust:  $\leq 200$ g/M3
- Clean instrument air

## Working environment temperature

- Automatic exit device:  $-10$  °C - $90$  °C (excluding probe cover)
- Control system:  $-10$  °C - $80$  °C
- Camera:  $\leq 600$  °C.
- Camera:  $-10$ °C -  $60$  °C

## Temperature

- Furnace temperature:  $\leq 2000$  °C
- Furnace wall temperature:  $\leq 300$  °C
- Vibration: Normally

## Power

- Power consumption: 100-120 W
- Power supply voltage AC 220V

## Technical Parameters

Video output: 1Vp-p synchronous positive polarity 75 ohms  
 System image quality: Level 5 (normal condition)  
 Brightness discrimination level:  $\geq 8$  levels  
 Sensitivity: 0.05Lux (F1.4)  
 Protection level: IP65  
 Power consumption: The whole machine is  $\leq 180$ W  
 Perspective (diagonal):  $80$  °

Scanning method: PAL 625 lines/50 fields  
 Signal to noise ratio:  $\geq 52$ db  
 Clarity:  $\geq 650$  lines  
 Reaction time: 1ms  
 Travel: 200-900mm (depending on the thickness of the furnace wall)  
 Mean time between failures: 25000 hours



**Head Office:**  
 Romanshornestrasse 123  
 9322 Egnach, Switzerland  
 +41 71 649 20 90  
 contact@hotwork.ag  
 www.hotwork.ag

### Worldwide Availability:

Chicago, USA  
 Orlando, USA  
 Houston, USA  
 Cuernavaca, Mexico

Bergen, Norway  
 Berlin, Germany  
 Kindberg, Austria  
 Milan, Italy  
 Istanbul, Turkey  
 Nazare, Portugal  
 Cairo, Egypt

Seoul, South Korea  
 Osaka, Japan  
 Bangkok, Thailand  
 Vadodara, India  
 Cebu, The Philippines  
 Jakarta, Indonesia  
 Sydney, Australia

Noumea, New Caledonia