

Infrared kiln scanner

Model number: OPTKS 400

The OPT KS400 kiln carcass infrared scanning temperature measurement system is an important detection equipment to ensure the safe and reliable operation of the rotary kiln. The infrared scanning thermometer uses imported temperature measuring devices as the core, with fast detection speed, accurate temperature acquisition, and can work reliably and stably under harsh environmental conditions. The entire system has fast data update, friendly, flexible and convenient operation interface, and can provide more detection information, historical records and analysis methods, rotary kiln status judgment information, etc. The system is specially designed for detecting the operating status of the rotary kiln. It can accurately detect hot spots caused by the shedding of refractory bricks of the rotary kiln and the skinning phenomenon of the kiln, so as to avoid high-frequency losses caused by damage to the kiln body and greatly extend the service life of the kiln body. Provide users with complete important parameters for detecting kiln operation



System performance features

- OPTKS400 kiln carcass scanning temperature measurement system is a new and latest scanning temperature measurement system that is completely computer-operated and fully digitally processed;
- It is suitable for large, medium and small production enterprises with rotary kilns at home and abroad. It has the characteristics of compact structure, strong versatility, stability and reliability, and simple installation, use and maintenance;
- The scanning thermometer is fast, non-contact and precise, and can adapt to the fastest rotary kiln (up to 6 rpm);
- The scanner angle is optional from 90° to 120°, suitable for large rotary kilns with a daily production of 5,000 tons and 10,000 tons in China;
- The scanner has a minimum measurement spot of 5cm, which is the best and highest performance thermometer at present;
- It can detect the smallest hot spot and find the red kiln in time.
- Its temperature resolution can reach $\pm 2^{\circ}\text{C}$. The carcass scanner system uses a lot of computer technology to digitize and image the measured data.
- The digitized signals and various calculation results are intuitively displayed on the monitor in a graphical manner. The displayed color temperature distribution image directly shows the furnace shell temperature value or furnace lining thickness. The operator can move the mouse on the monitoring screen to select the menu and observe the surface temperature and position of any point on the kiln carcass.

- The system saves the data of each measurement scanning cycle. The operator can browse the historical records at any time to compare the temperature changes of the kiln carcass before and after. Especially when the kiln lining in the kiln is abnormal, the specific time and trend of the abnormal situation can be queried and corresponding measures can be taken to ensure the safe and normal operation of the kiln.

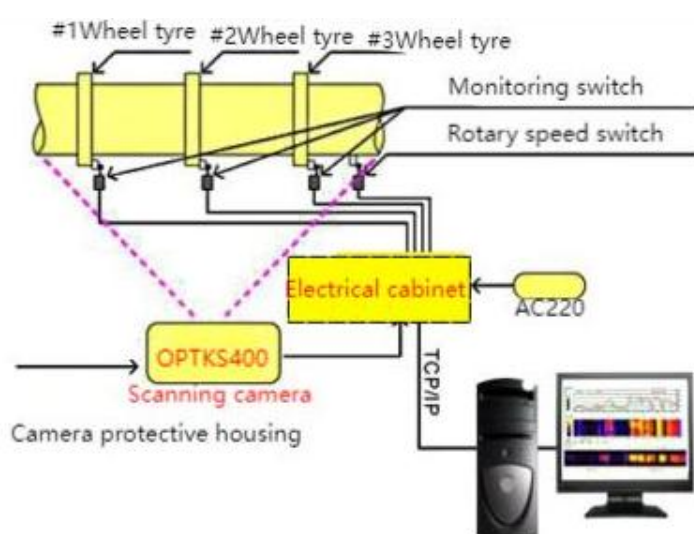
Technical parameter

Function	Norm
Temperature measurement range	50~600°C
Temperature measurement accuracy	±2°C (black body calibration)
Thermal sensitivity	0.08K
Optical resolution	30 meters can detect a minimum spot of 6cm
Scanning angle	Standard 90°, other angles can be optional or customized
Scanning frequency	20HZ~ 150HZ
Corresponding kiln speed	0.3~6r/min
Working mode	Continuous
Working temperature range	-30~50°C (electric heating or purge system can be installed in extremely cold or hot areas)

System composition

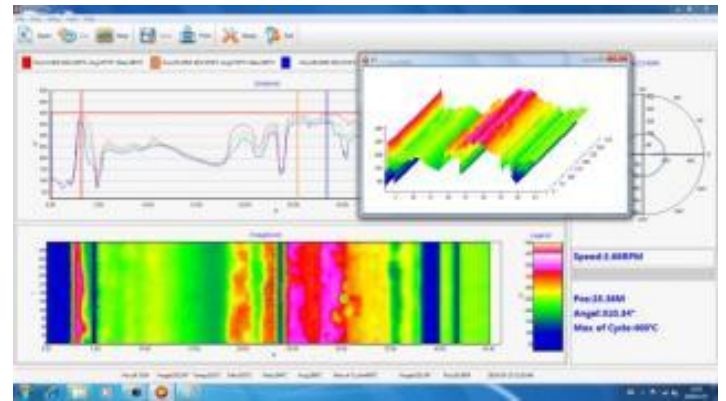
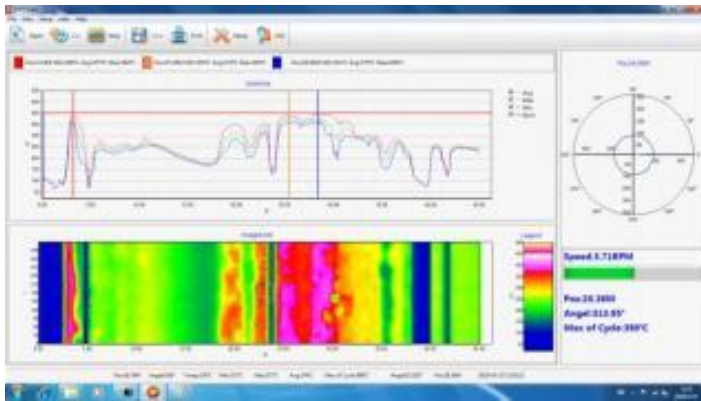
The OPTKS400 Linear Scanner System includes:

- High-performance infrared thermal imaging scanning thermometer and power supply device;
- One kiln rotation contact switch;
- Three wheel contact switches (wheel drift optional);
- Optical cable signal transmission line from the scanning head to the central control room;
- One data converter;
- A data receiving and processing system located in the central control room (computer, temperature analysis software and color printer).



System software function

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| <ul style="list-style-type: none"> ● Kiln history temperature record analysis function ● Refractory material management function, easy to repair and maintain the kiln ● Cross-section temperature quick analysis function ● Full kiln temperature curve analysis function | <ul style="list-style-type: none"> ● In-depth analysis function of kiln temperature and kiln lining thickness 3D graph ● New and old temperature data quick analysis and comparison function ● Production process fault alarm function ● Output color report ● Kiln speed monitoring, etc |
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On-Site Image

