INSTRUCTION MANUAL

HERAEUS WIRELESS QUICK TAP

WIRELESS QUIK-TAPtm TIMESAVER SENSOR

Wireless Quik-Tap, the Timesaver Sensor, measures the temperature and oxygen activity by fully penetrating into the molten metal. It features excellent accuracy with high reliability. The sensor sends the data to the measuring station via a wireless link. The sensor is equipped with a heat resistant cable to the radio module. The sensor is built with a type B-IPTS 68 thermocouple wire. Quik-Tap sensors are available in two types: one for temperature measurement, and another for temperature/oxygen readings.

FEATURES

- Designed to penetrate into the molten steel
- Measurement results within seconds
- Long survival for best success rates
- Compatible with existing hardware

TECHNICAL DATA

- Thermocouple type B, calibration IPTS 68
- Thermocouple accuracy 0/+4 degrees C at 1554 degrees C
- Celox oxygen cell accuracy +/- 2 mV
- Sensor size: 400 mm long, 104 mm diameter
- Weight: 6 kg

DATA COMPUTATION

Wireless Quik-Tap Sensors are used together with the Multi-Lab Quik-Tap Instrument. The Multi-Lab Quik-Tap is a programmable analytical instrument for combined oxygen and temperature or temperature only measurements. Measuring traces, results and other information are clearly shown on the display. More than 400 measurements are memorized and can be recalled to the screen and sent to a printer or other computer.

WIRELESS QUIK-TAPtm DROP SYSTEM

Exclusively for the BOF shops, Heraeus Eletro-Nite developed the Wireless Quik-Tap Drop System for temperature and oxygen activity measurement. Using this system, costly reblows, waiting times and converter turn-downs are reduced drastically. The Wireless Quik-Tap Drop System suits those steel plants using direct tapping or requiring a stand by system for their existing sublance installation. Its compact construction allows easy installation and maintenance.

APPLICATIONS

Using the Wireless Quik-Tap Drop System, the Wireless Quik-Tap Sensor becomes and integral part of the BOF process control.

The T probe measures the bath temperature during oxygen blow, allowing adjustments to the oxygen flow to achieve a higher percentage of target tap temperatures.

The TO probe is used to measure the bath temperature and the oxygen activity after the oxygen blow to determine the carbon content and the primary deoxidant additional during tap.

OPERATION

Wireless Quik-Tap cartridges are loaded into the Wireless Quik-Tap Drop System in advance of operation. See Quik-Tap Drop System manual for loading instructions.

When measurement is desired, press the DROP button on the Multi-Lab Quik-Tap Instrument. Readings will appear on the Instrument screen.

WIRELESS LINK

- Frequency: 916.5 MHz

- Modulation: FSK

- Output conforms to FCC 15.249

- Receiver: high sensitivity with diversity antennas

FCC NOTICE

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.