

Coal and Coke Testing, and Assessment



Customer Needs

The mechanical and chemical properties of cokes and the properties of the coals, affect the efficiency and stability of ironmaking blast furnace operation.

What We Offer

Facilities are available for measuring most drum indices, sizing and reactivity testing according to standard methods. Coke handling properties and size stabilisation are assessed by means of automated shatter tests.

Chemical, mineralogical and petrographic techniques.

Coke optical textures and structures

Diagnostic facilities include the following:

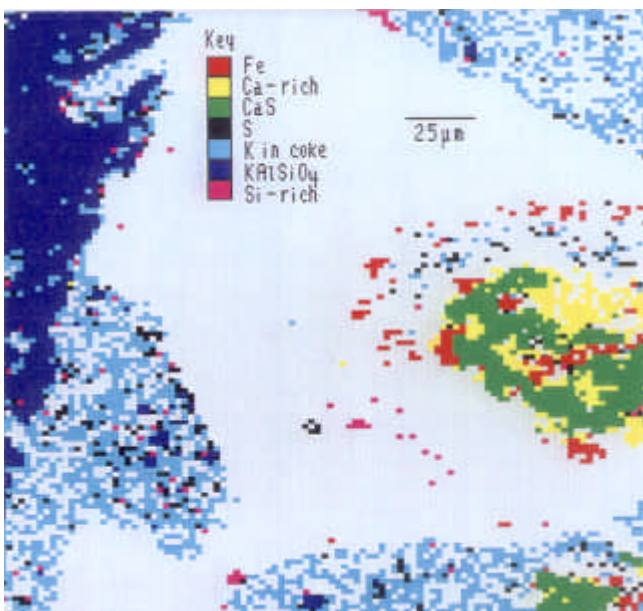
- Leica image analysis system
- Optical microscopy for coal and coke petrography
- Scanning electron microscopy and microanalysis
- X-Ray diffraction for phase analysis
- X-Ray fluorescence, atomic absorption and flame photometry for chemical analysis

Customer Benefits

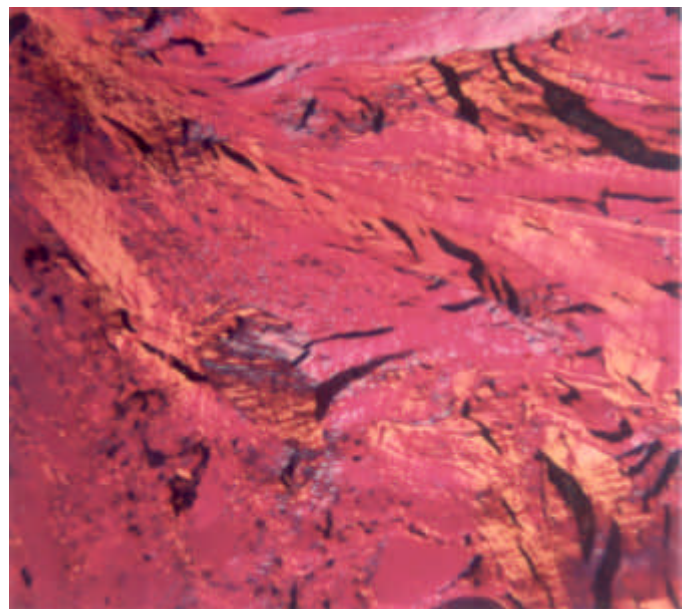
- Assessing new coals and coal blends
- Optimising coal costs (i.e. value in use blends)
- Extending coke oven life (expect >35 years)
- Assessing/improving coke quality and BF operations
- Assessing effectiveness of injectants.



IMAGE ANALYSIS SYSTEM



ELEMENT DISTRIBUTION IN DEADMAN COKE



MICROGRAPH OF COKE OPTICAL TEXTURE