ACARP

Australian Coal Association Research Program

## **FINAL REPORT**

## Outbursting Scoping Study

C4034 March 1996

## 9.2.5 **AP Express Index**

 $\Delta P$  express method was developed (Paul, 1977) when the automatic equipment for K<sub>t</sub> determination was as yet not available for use underground in the mines. In this equipment about 70 g of coal sample in the range of 0.25 - 0.5 mm for bituminous (2 - 3 mm for anthracite) is enclosed. The sample is evacuated for 2 minutes and then methane gas is allowed into it to raise the gas pressure to 2 bars as quickly as possible. The gas flow into the chamber is closed. The chamber is immediately connected to a manometer and change in pressure over time is determined. The gas pressure after an elapse of one minute is read out from the manometer which gives the  $\Delta P_{exp}$  index.

The  $\Delta P_{exp}$  index has been related to the  $\Delta P_{0.60}$  value (Fig. 9.13) for anthracite samples and the corresponding value is 0.45.



Fig. 9.13. Relationship between  $\Delta P_{exp}$ . and  $\Delta P_{0-60}$  value (Paul, 1977)

Korngröße - Particle size.

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