

external diameter of 73mm.

- 3) The gas velocity is the main cause of coal particle breakage and attrition during the sampling process and the optimum level was 20m/s in the inner drill pipe.
- 4) The function of the vacuum pump should meet the demand of a static pressure of above 40kPa and an air flow rate of approximately $1000\pi D^2 m^3/min$ for successfully sampling from a distance of 50m.

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