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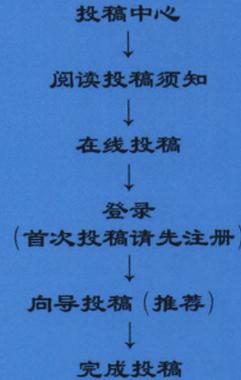
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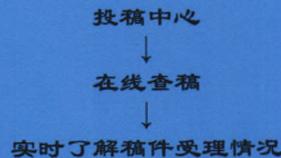
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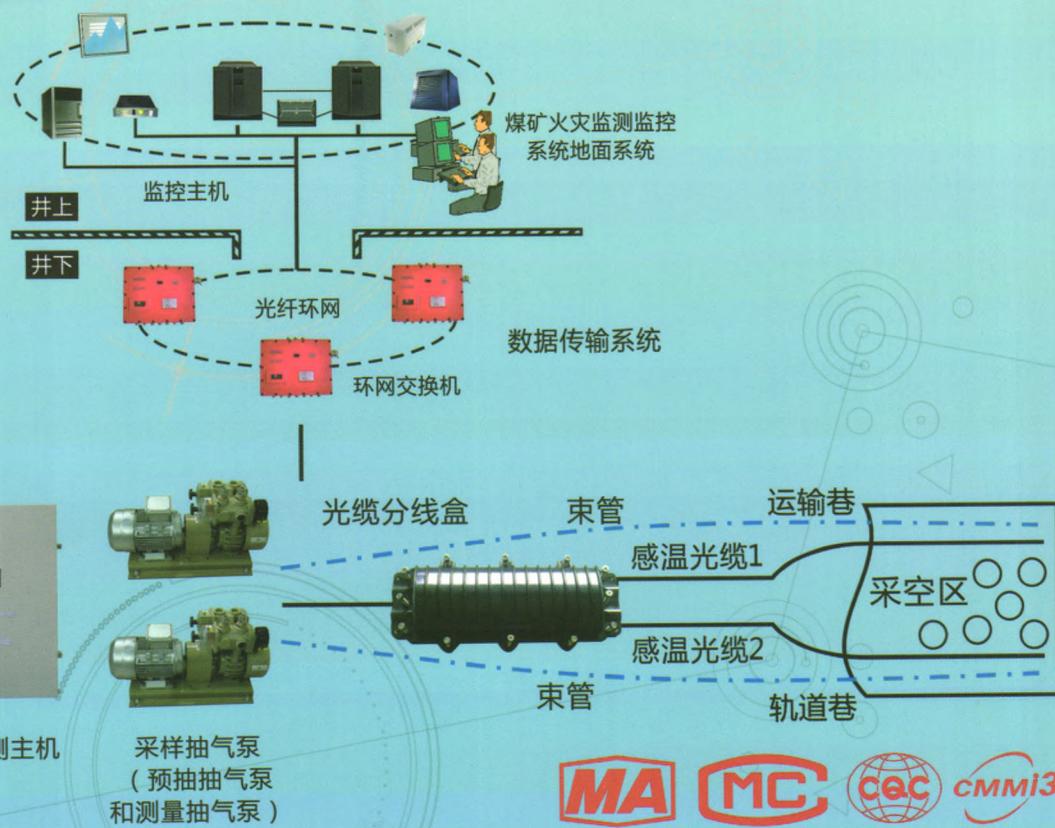
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矿用分布式激光火情监测系统是为解决现有束管系统在煤矿采空区火情监测中响应慢、管路维护困难、检测精度无法保证的缺陷，在井下采面利用光纤传感技术和激光调制吸收光谱技术连续监测采空区CH<sub>4</sub>、CO、C<sub>2</sub>H<sub>2</sub>、CO<sub>2</sub>、O<sub>2</sub>等气体浓度和采空区温度，实时将采集的数据通过光纤环网上传至地面，利用火情监测系统软件实现监测、预警、防火效果评估。

## 性能特征

- ◎ 最完善的火灾预测模型，包含温度、CO、CH<sub>4</sub>、C<sub>2</sub>H<sub>4</sub>、C<sub>2</sub>H<sub>2</sub>、O<sub>2</sub>、CO<sub>2</sub>，集分布式光纤传感和激光多气体检测技术为一体。
- ◎ 气体检测采用高分辨率激光吸收光谱技术，消除气体交叉干扰，测量不受粉尘、水汽的影响。
- ◎ 温度检测采用光纤传感技术，本质安全，铺设简单，无需维护，测量准确，可对采空区发火点精确定位。
- ◎ 本地实时连续测量，响应速度快，不受管路影响。

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