



WORKING UNDERGROUND

A lot of people contact WCM asking 'what's it really like underground in a modern coal mine and would it suit me'. Here, we have tried to explain some more about the day to day operations.

1



START OF SHIFT

At the start of your shift arrive at the mine, head to the locker-room and change into your work clothes, with all of your PPE. No contraband (electronic equipment, batteries etc) to be carried underground – head to lamp room to collect lamp, self rescuer and other safety equipment.

SHIFT HANDOVER

The shift supervisors meet to discuss progress and issues from the last shift and agree priorities and targets for the incoming shift.



2

3



TRAVEL TO WORKING PLACE UNDERGROUND

All underground workers, including mining teams, workshops, fitters, electricians and deputies/supervisors travel into the mine using Driftrunner man transport vehicles which can be driven directly to the workplace from surface to underground.

MINING OPERATIONS

All mining is carried out using the latest modern mining equipment, including large bolter miner machines which install rockbolts (roof supports) while also cutting the roadway ahead.

Continuous miners are also used to cut coal during mining, these being remote controlled using a joystick type controller.

Coal is moved from the cutting machines to the conveyor system using shuttle cars, these are driven by a driver in the cab of the machine. All of these machines are electrically powered.

Conveyors are used to bring all of the coal to surface via the drift tunnels.



4



5



EQUIPMENT MAINTENANCE

A key element to ensure high productivity is the ongoing maintenance of all of the mining equipment, pumps, conveyors, mobile plant etc.

An underground workshop will be located at the bottom of the main drifts and will undertake many of the routine repairs; this area will also include stores, electrical and mechanical workshops and offices.

MATERIAL TRANSPORTATION

Materials for the mining process will include rockbolts, resin, mesh, oil, grease etc. These will be transported into the mine using dedicated transport units, with equipment pre-packed into pods on surface for delivery to the working panels.

A dedicated transport team will operate this key aspect of the mine logistics to ensure the mining teams always have materials to hand.



6

7



ENVIRONMENTAL CONDITIONS

Modern coal mines have very efficient ventilation with high airflows of clean air circulating throughout the underground workings. Lighting is provided in all of the main working areas.

Extensive monitoring of the air, any gases and other conditions is undertaken continuously and reported to the surface control room. This also includes the location of all equipment and miners underground at any time.

Stone dusting is a technique used to further reduce coal dust in the air (note the white powder shown in the photo).

Daily inspections of all workplaces underground are carried out by trained deputies to ensure the safety of the mine.

END OF SHIFT

At the end of the working shift the mining teams exit the mine using the driftrunners with handover to the incoming shift.

Extensive shower facilities with clean and dirty changing areas are provided, together with a medical centre, washing service and canteen facilities.



8

West Cumbria Mining Ltd

Haig Museum
Solway Rd, Kells,
Whitehaven, Cumbria
CA28 9BG

4th Floor, Oakfield House
35 Perrymount Rd
Haywards Heath
RH16 3BW

 www.westcumbriamining.com
 info@westcumbriamining.com
 01946 848333

