

# **Shuttle Car Cab Modifications**

# John Kelly & Garry O'Dwyer Pacific Coal's Kestrel Mine



## THE PROBLEM

Kestrel currently operates and maintains a fleet of 4 shuttle cars. Due to the design of the cab, the potential existed for a number of injuries to be sustained whilst operating the shuttle car, the most significant being those of a long-term ergonomic nature – back, shoulder, neck and knee injuries.

## THE SOLUTION

A number of engineering solutions were implemented to eliminate or minimize problems identified with the shuttle car cab. The modifications addressed both ergonomic and other potential health and safety hazards identified.

## **PROCESS STEPS**

- Shuttle Car Design Review Team established (consisting of Development Supervisor, 2 x Development Operator/Maintainers, Development Projects Supervisor, 2 x Engineers)
- 2. Ergonomic design review facilitated by Barbara McPhee Ergonomic Specialist
- 3. Boundaries and design modifications established
- 4. Modifications trialled and tested
- 5. Final product testing prior to implementation

#### COSTS

The modifications are available to Kestrel at a cost of \$10,500 per shuttle car.

#### TRANSFERABILITY

The design changes are applicable to all underground mining operation that utilize shuttle cars. The process steps adopted in reviewing the design of machinery is transferable to any other industry that may be considering reviewing the design of machinery at their operation.