

# Client Reference

## Mining Coal



### Client Background

Our client is one of the leading role players in the South African mining environment with various operations locally and internationally.

Our client mainly produces power station coal to SA's national power utility, Eskom, as well as semi-coke and related products to the ferrous alloys industry.



### Key Challenges

- The LDVs (bakkies and golf carts) are pivotal to the operation of the mine as they are the main source of human and equipment transport. The LDVs are operated in extreme conditions and the cost of maintaining these vehicles is excessive.
- Because of the high number of maintenance and repairs required, the LDV maintenance budget was overspent by 25% by the end of the second quarter.
- Costs per vehicle are not being tracked and hence history of work performed and costs per asset cannot accurately be determined.
- Available information is limited and data accuracy and integrity had to be verified and cleaned to a useable level.
- The purpose of the intervention was to identify the reasons for the over-expenditure and identify actions to reduce/control the costs to be within an acceptable limit.



### Value Add

- Spares and services order history enabled the Focused Improvement team to identify the main expenses for the first two quarters of the year. This data was analysed and a Pareto Analysis highlighted the 80/20 cost items.
- With the supporting costs information and highest expenses identified, facilitation sessions were conducted with the maintenance foreman to determine the reasons for the over-expenditure.
- The investigation resulted in a proposed action plan to eliminate or reduce some of the high cost items and to enable the foreman to manage his maintenance costs within his budget.
- Further, the proposed action plan highlighted procedural changes to help ensure sustainability of the solution and continued management/control of costs.
- Tools and templates were developed to assist the foreman to manage his budget, costs, spares and services.

***“This focused intervention will help me to have more control over my costs and to manage my costs within my annual budget. If I can manage my costs, I can do more effective maintenance with my available funds.”***

***Client Foreman***

### Pragma Intervention

- Analysed and cleaned available plant maintenance costs information.
- Used Pareto Analysis to determine the main cost-contributing items.
- Facilitated root cause analysis to identify the root causes and other contributing factors.
- Developed comprehensive action plan to address the identified root causes and other contributing factors in order to reduce cost and ensure sustainability of budget control.
- Developed tools and templates to assist the foreman to manage his budget/costs.
- Compiled an A3 project report.



### Tools and Technology

- Pareto Analysis
- Microsoft Excel (Data processing)
- Brainstorming/facilitation sessions
- Available plant and asset technical information
- Focused Improvement
- DMAIC process
- Why-Why analysis to identify the root causes and possible contributing factors
- Structured problem solving
- Analytical data analysis
- MindMap building software for Why-Why analysis.