

## GBI DRAGLINE BENCHMARKING

### WHY BENCHMARK?

Benchmarking is a widely accepted business tool to identify your position and performance against yourself and the rest of the world. It is the process of seeking out and studying the best internal practices that produce superior performance to:

- identify strengths and weaknesses;
- support continuous improvement; and
- measure and monitor the effectiveness of change programs.

### THE TWO PHASES TO BENCHMARKING

- What is best performance and how do we stack up against others?
- How can we identify and learn from leading practitioners in a specific business process?

### CAN YOU ACCURATELY BENCHMARK DRAGLINES?

The simple answer is yes. The total output from a dragline (measured as dig rate multiplied by digging hours) is an important component in the overall productivity equation for a mine. Then you can look at digging hours and the different components of it. The dig rate can be broken into payload and cycle time. Each of these can be broken down further. You can be as broad or as specific as you like. **At the end of the exercise you will receive specific data about your dragline.**

### BUT MY DRAGLINE OPERATION IS DIFFERENT?

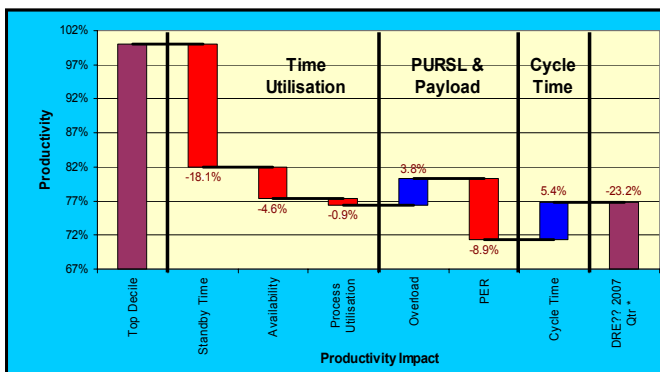
Every dragline operation is different. There are big draglines and small draglines. Good buckets and bad buckets. Hard digging and soft digging. Long strike lengths and short strike lengths. We know how to handle all the differences and our people can advise you what you can learn from it.

### THE GBI DIFFERENCE

Every benchmark or report will be personally delivered to your site by one or more of our operations, IT or engineering people. They will advise you what the results mean for you. All GBI work carries an absolute guarantee – if you don't think you have received value for money then you just contact us and we will not charge you until you are happy.

### WHO BENCHMARKS DRAGLINES?

- BHP Billiton (Aust, SA & USA)
- Rio Tinto (Aust. & USA)
- Anglo Coal(Aust. & SA),
- North American Coal Corp (USA)
- XStrata (Aust. & SA)
- Peabody (USA)
- Arch (USA)
- Kiewit
- Others



Summary Bucket and Rigging Performance

Dragline	Bucket / Rigging Characteristic		
	Correct Capacity to Achieve Best Practice Sus. Load	Efficient Payload Achieved	Efficient Steel Usage
DL1	✓	✓	✗
DL2	✓	✓	✓
DL3	✗	✗	✗
DL4	✗	✓	✓
DL5	✗	✗	✗
DL6	✓	✓	✓
DL7	✗	✗	✓
DL8	✓	✓	✗
DL9	✗	✗	✗
DL10	✗	✗	✓

## EQUIPMENT LIST

GBI holds and collects extensive equipment production monitor data for a comprehensive range of large mining equipment. The following list shows the types of equipment for which we hold benchmarks by make and model.

Draglines	
	BE1260W
	BE1300W
	BE1350W
	BE1370W
	BE1570W
	BE2570W/WS
	Marion M7700
	Marion M7900
	Marion M8050
	Marion M8200
	Marion M8750
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Excavators	
	Demag H285
	Demag H485
	Hitachi EX3500
	Hitachi EX3600
	Hitachi EX5500
	Komatsu PC4000
	Komatsu PC5500
	Komatsu PC8000
	Terex O&K RH170
	Terex O&K RH200
	Terex O&K RH340

Front End Loaders	
	CAT994/D/F
	Komatsu WA1200
	Komatsu WA900
	LeTorneau LT1100
	LeTorneau LT1350
	LeTorneau LT1400
	LeTorneau LT1800
	LeTorneau LT1850

Electric rope shovels	
	Demag BE495B
	Demag BE495HR
	P&H2300XP/LR
	P&H2800XP/A/B
	P&H4100A
	P&H4100XPB

Trucks	
	Cat777
	Cat785B
	Cat785C
	Cat789B
	Cat789C
	Cat793
	Cat797
	Euclid EH3000
	Euclid EH5000

	Euclid R170
	Komatsu 630EH
	Komatsu 730E
	Komatsu 830E
	Komatsu 930E
	Liebherr T262
	Liebherr T282
	Terex MT3600
	Terex MT3700
	Terex MT4400
	Wabco 170E

Drills	
	BE 39R
	BE 49R
	BE 59R
	BE 61R
	DT D25
	DT D40
	DT D400
	DT D45
	DT D55
	DT D75
	DT D90
	GD120
	GD70
	IR DML35
	IR DMLSP
	IR DMM3
	P&H 120
	P&H XP250
	SVE SK50

For more information on dragline benchmarking please contact Laura Seviour on 07 31478300 or [Laura.Seviour@gbimining.com](mailto:Laura.Seviour@gbimining.com)