

Maintenance Efficiency KPIs

Maintenance Operations

When Newcrest Mining approached TEAMTECH to uncover the trends in their maintenance work order activity we anticipated some challenges.

- Who's being measured?
- How are they being measured?
- What's the impact of inefficiency?

The initial review identified significant maintenance activity ... no-one could be accused of not being busy. It wasn't until we charted the data that the real story started to surface.

Surprisingly, by graphing the actual maintenance activity against planned maintenance and comparing the against standard maintenance practices we were able to find areas for improvement.

The focus was on improvement, continuous improvement ... working smarter ... not working longer shifts or adding more manpower.

TEAMTECH consultants used Microsoft SQL Server Business Intelligence suite to capture and display the ERP data from Pronto across four Newcrest Sites.

The comparative analysis between sites, teams and work-groups, gave even greater insight to the entire operations and enabled Managers to share best practice techniques across teams.

Value

The Maintenance Vision Reports and Charts enabled Newcrest to:

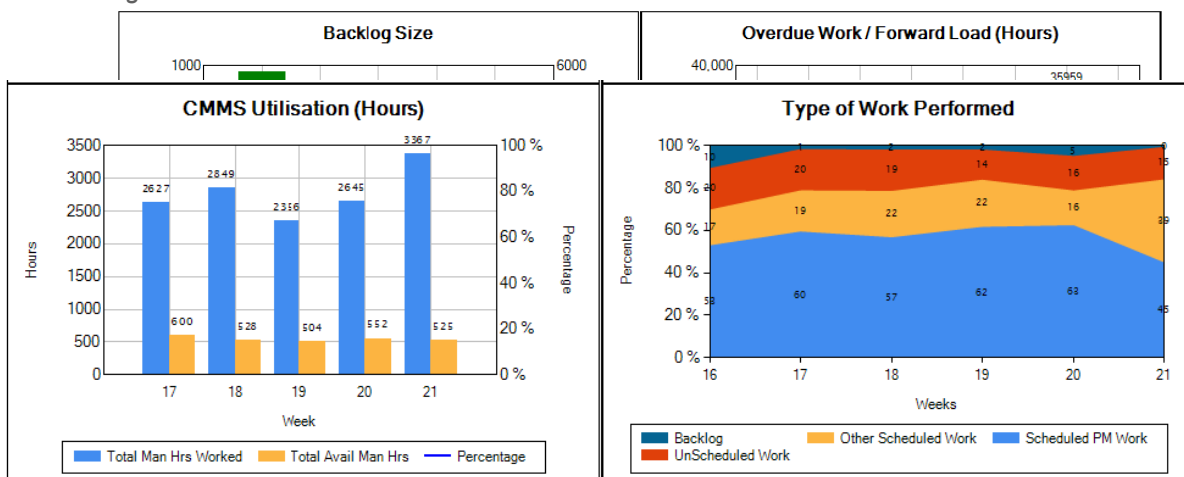
1. Understand and tune maintenance activity
2. Monitor preventative maintenance
3. Address back-logs and bottle-necks
4. Distribute work-load evenly
5. Audit maintenance processes
6. Reduce costs
7. Acknowledge and reward staff

Charts & Reports

- Scheduled Work Orders Completed
- jobs & hours
 - Work orders /day/week/month
 - Percentage complete vs planned

Drill through each chart

(cont'd)



Maintenance Efficiency KPIs

Charts & Reports

Schedule Loading & Manpower Availability
 - Analysis of scheduled man hours for planned work orders vs. available man hours from the ERP roster.

Scheduled Work
 - Actual vs budgeted man hours worked

Preventative Maintenance
 - PM work orders completed as a % of total

Work type performed
 - PM vs CM
 - Planned vs Unplanned

Backlog Size x Priority
 - estimated man hours by priority of work order

Overdue Work & Forward Load
 - view planned man hours x week overdue

Features & Benefits

- Clean clear screens to make recognition faster
- Drill down on any graph and review the supporting data
- Make multi-site comparisons and share best practice
- Import export charts and data to any Microsoft compliant application and generate management reports faster
- Display reports on demand or schedule printed output for weekly or daily review
- Make the full data set available for audit and compliance review ... valuable for break-fix investigations and those challenging discussions with the production team

About TEAMTECH Australia

TEAMTECH Australia is a systems integration practice focused on plant, people and process efficiency in the resources sector. TEAMTECH consultants are skilled in integrating data from the underlying process control systems and making it visible and available to the broad range of manufacturing, ERP, EAM and business intelligence applications.

Our services include:
 Application development
 Business process rationalisation
 Financial analysis & modelling
 Maintenance optimization
 Mass and energy balancing
 Metallurgical accounting
 Mining and mineral processing modeling
 Process control

Drill through to the supporting data

Type of work performed Detail Report		
Site	Cadia Valley	Rep Code
		Cadia Valley
Start of Week	Friday, 25 May 2007	End of Week
	Hours	%Total
Scheduled PM Work	1519.3	45.27 %
Other Scheduled Work	1312	39.10 %
Unscheduled Work	514.5	15.33 %
Backlog	10	0.30 %
Total Hours	3355.8	

Scheduled Start Date	Completion Date	Job Code	Job Cost Description
Other Unplanned			
30 May 2007	29 May 2007	630155	Clean fluro lenses on ore sizing cam
29 May 2007		628282	Whisker line inspections
25 May 2007	30 May 2007	630853	Replace broken indicator lens on jurr
28 May 2007	28 May 2007	631239	Replace missing bolts in flushing he:
27 May 2007	27 May 2007	631241	Tighten loose bucket teeth
28 May 2007	28 May 2007	631243	Repair broken hand rails behind cabi
28 May 2007	27 May 2007	631244	Check backhoe components. Reassemb

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