

*CASE*Study

*Customized Performance
Tracking & Analysis for
Aggregate Operations*



Data to Optimize Aggregate Production

Capturing performance data and using it to adjust operations are competitive advantage across construction sectors. Requirements for aggregate operations, however, are specific and unique.

Alex Gribben from BARD Materials explains how B2W Software helped the company replace spreadsheets with a vastly improved production tracking and analysis system tailored to multiple production sites. Customized, electronic daily logs and reporting capabilities with B2W Track are the key components.



Alex Gribben
Assistant Director
Aggregate Production



Spreadsheets Held BARD Back

BARD previously relied on what Alex Gribben describes as very complex spreadsheets to track performance at eight to ten mobile production sites in operation at a given time.

“Logging into Excel on laptops to report quantities was cumbersome, and it was easy to make mistakes or delete formulas,” says Gribben. “We weren’t efficient or accurate, and we had trouble maintaining consistency across our sites.”

Once data was recorded on aggregate production, downtime and hours for employees and equipment, reporting and analysis required extensive manual effort, according to Gribben. Variations in how data was collected compounded this reporting challenge.



Easy, Accurate and Immediate

Supervisors at BARD sites now record performance data daily using mobile tablets. The B2W Track log is customized for their operations and is the same across all sites. Production reports based on the data arrive the next morning for comparison of actual and planned performance.

“B2W Track is far easier and more accurate than Excel,” explains Gribben. “We capture information while its

fresh, and it’s a simpler, systematic process. It’s also more consistent. Nobody can change the background settings or the methodology.”

Supervisors can work offline during the day at sites where connectivity may be a challenge. They then synch and submit logs when they get a connection.





Wednesday, 2/27 Field Log 31866

Menu ▾



Plant/Job

Rock Crushing Crew 1 - Quarry [45887-P]

Account

All

Add

Show Resources A-Z ▾	Total Hrs	[45887-P] Rock Crushing Crew 1 - Quarry			
		[101] Production	[201] Non-Production	[5000] 3/4" Road Stone - 3-025-001	[5003] 3/4" Clean - 3-075-002
		200.00 TON	5.00 HR	100.00 TON	100.00 TO
Aaron Baker [12460] 	10.00	10.00 RT	RT		
Adam Davidson [12455] 	10.00	5.00 RT	5.00 RT		
Angela James [12425] 	10.00	10.00 RT	RT		
Jarrett Royce [12400] 	10.00	10.00 RT	RT		
9944 [Volvo 220 Loader] 	10.00	10.00 OPR	OPR		
9361 [Volvo Haul Truck] 	10.00	10.00 OPR	OPR		

The "Grid View" design of the B2W daily log makes it easy to assign employee and equipment hours to production or non-production accounts and to enter material quantities.



SOFTWARE



HOME

JOBS

SCHEDULE

TRACK

MAINTAIN



Jobs

Job: 45887-P - Rock Crushing Crew 1 - Quarry

General Information

Estimate Items

Tracking Accounts

Production Targets

Materials

Subs & Vendors

Activity

Change Orders

Job Production Accounts

☐ Hide Completed

Overview			Quantities						Unit Costs			
Tracking ID	Account ID	Description	Estimated Quantity	Change Order Quantity	Total Estimated Quantity	Reported Quantity	UM	Percent of Estimate	Complete	Estimated Unit Cost	Reported Unit Cost	Estimated Production Rate
101	101	Production	0.00	0.00	0.00	200.00	TON	0.00%	No	\$0.00	\$17.73	
201	201	Non-Production	0.00	0.00	0.00	5.00	HR	0.00%	No	\$0.00	\$43.00	
5000	5000	3/4" Road Stone - 3-025-001	20,500.00	0.00	20,500.00	100.00	TON	0.49%	No	\$0.00	\$0.00	
5002	5002	1/4" Chips - 3-025-001	10,000.00	0.00	10,000.00	0.00	TON	0.00%	No	\$0.00	\$0.00	
5003	5003	3/4" Clean - 3-075-002	15,000.00	0.00	15,000.00	100.00	TON	0.67%	No	\$0.00	\$0.00	
5004	5004	3/8" Winter Chips - 3-038-001	55,000.00	0.00	55,000.00	0.00	TON	0.00%	No	\$0.00	\$0.00	
9001	9001	Downtime	0.00	0.00	0.00	0.00	HR	0.00%	No	\$0.00	\$0.00	

1

20 items per page

1 - 7 of 7 items

Job Overhead Accounts

[+ Create New Job Overhead Account](#)

There are no job overhead accounts to display.

[View Job List](#)

B2W Track was set up so that each type of material produced at BARD sites – as well as downtime – can be tracked as a separate production account.





Downtime



Scheduled - Safety Meeting
[SFTY]



Scheduled - Service
[SRVC]



1

☀ Scheduled - Safety Meeting [SFTY]

Description

Scheduled - Safety Meeting

UM

HR

Phases/Accounts

Production
101

Non-Production
201

Downtime
9001

2.00

Total

2.00

Downtime Notes



4



2



2



The daily log enables BARD to pick from a structured list of reasons for downtime and to assign hours accordingly.

Purpose-built Reporting

Rather than struggling with Excel or relying on generic options, Gribben and his team worked with B2W to design reporting capabilities for the specific needs of the company.

“B2W built custom reports and dashboards that provide instant feedback,” says Gribben. “We know right away when numbers don’t line up with what we expect. We can dig into it, figure out why and address issues fast.”

B2W Track reporting also makes it simple to analyze production at a site or compare across multiple sites. Each month, BARD exports data from daily logs directly into a system for comprehensive production and financial reports.

“This is now much more streamlined than with spreadsheets, with far less manual effort, redundant data entry and opportunities for error,” says Gribben.



Tracking Production, Hours and Downtime

BARD records and analyzes tonnage of various products produced at each site and hours for employees and equipment with B2W Track.

Unexpected downtime – a critical KPI for aggregate operations – is also easy to record and review. Managers and executives use the data to understand individual incidents and spot trends or patterns related to the performance of equipment in crushing lines, says Gribben.

They see, for example, if a certain piece of equipment is down more often than others.

“Having this information at our fingertips and being able to compare across sites helps us evaluate whether we need to upgrade or replace equipment,” explains Gribben. “We can also analyze how much we might be able to get production numbers up by making that investment,”



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The Way it's Supposed to Work

Some supervisors at BARD offered what Gribben calls minimal resistance to the new software at first. He says that's typical of any technology-based initiative in a construction environment.

"Once they got the tablets in their hands and saw how it worked – how easy it was – there were really no complaints," he says. "I don't think anyone would want to go back to the way we were doing it before with Excel."

Support requirements have also been minimal. "The software works the way it is supposed to work, so we really haven't had to call B2W for support," he adds.

Future plans at BARD include refining and adding more reports and dashboards to take further advantage of the production data.



INTERNATIONAL



Transforming Materials Responsibly to Build Better Lives, Communities and Country

BARD Materials has been a leading supplier of concrete and aggregates since 1946. The company is headquartered in Dyersville, Iowa and operates 25 Redi-mix plants along with dozens of quarries and sand pits throughout Iowa and Wisconsin.



B2W
Track



B2W
Maintain



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