



CLOUD-BASED MONITORING FOR SURFACE PREP

Prepared for:





ABOUT US

- Originally established nearly 50 years ago to provide technical consulting, BlastOne has grown to become a global provider of surface preparation & coating systems
- BlastOne operates internationally from over 20 offices across North America, Australia, New Zealand, Europe, South America, and Malaysia.
- We stand behind our brand claim of Superior Performance. It's something we define as 'Performance3' – the result of combining superior **know-how** with superior **technology** and superior **equipment**.
- BlastOne's Construction division offers clients turn-key blast & coat facilities. We Design, Build, Maintain & Support.

WHY CHANGE

BLASTONE OBSERVATIONS:

- Ensuring the right processes are being used *will bring some efficiency*
- Upgrading equipment *will bring some efficiency*
- Using the correct, best performing abrasive *will bring some efficiency*
- Bringing in new technology *will bring some efficiency*
- Workforce training *will bring some efficiency*
- Each individual component that is improved *will bring some efficiency*
- Generally, when one of these improvements is implemented, some initial success is achieved.
- 85% of improvements are not sustained, due to lack of on-going support and training
- The blasting trade is generally trained in quality and techniques, not in equipment optimization and performance
- The deck plate trade is typically not paid by performance or efficiency, but by the hour



How can we sustain improvements and bring exponential results by combining it all together and utilize cloud-based technology to sustain improvements?

THE CURRENT STATE OF PLAY

ENSURING OPTIMAL PERFORMANCE: KEY INDICATORS

- Blast pot settings are key to efficient and effective blasting
- Low blast hose pressure and low abrasive flow rate reduce blasting effectiveness and increase project timeframes
- High abrasive flow rate is wasteful and costly
- Typically, blast pot settings are determined by the operator
- These settings are seldom adjusted to suit changes in blasting conditions or are set at non optimal settings
- The ability to accurately monitor and control abrasive consumption and system pressure are key factors in operational efficiency

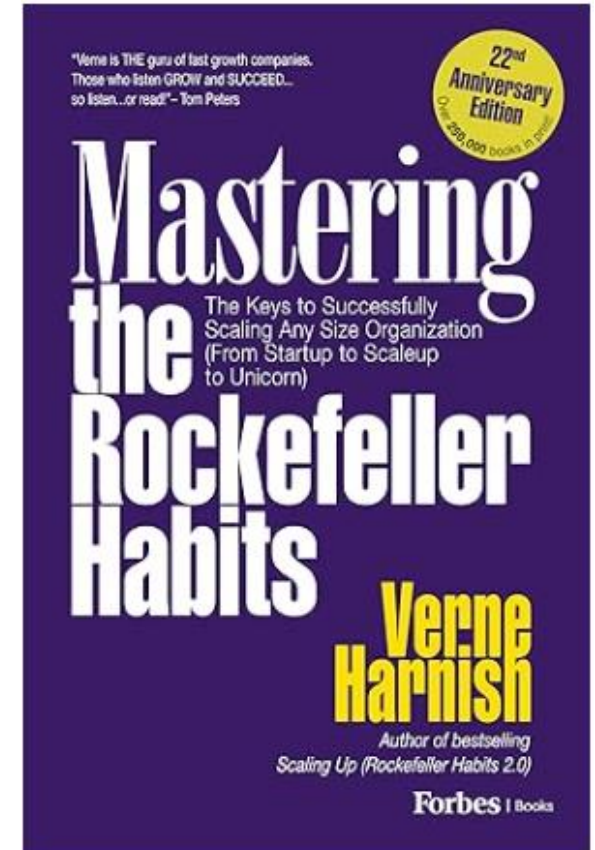


STREAMLINE YOUR OPERATIONS W/ CLOUD-BASED TECH

21ST CENTURY CLOUD BASED TECHNOLOGY

- Live dashboards
- Training and support
- Focus on key metrics

*Recommend reading:
Mastering the Rockefeller Habits*





INTELLIBLAST

REAL-TIME JOBSITE METRICS

TO MAXIMIZE YOUR PRODUCTIVITY

THE FEATURES



Remotely monitor all system inputs to determine system efficiency



Control abrasive flow rate to maintain optimal blasting



Raise alarms on connected mobile devices when system settings are not optimal

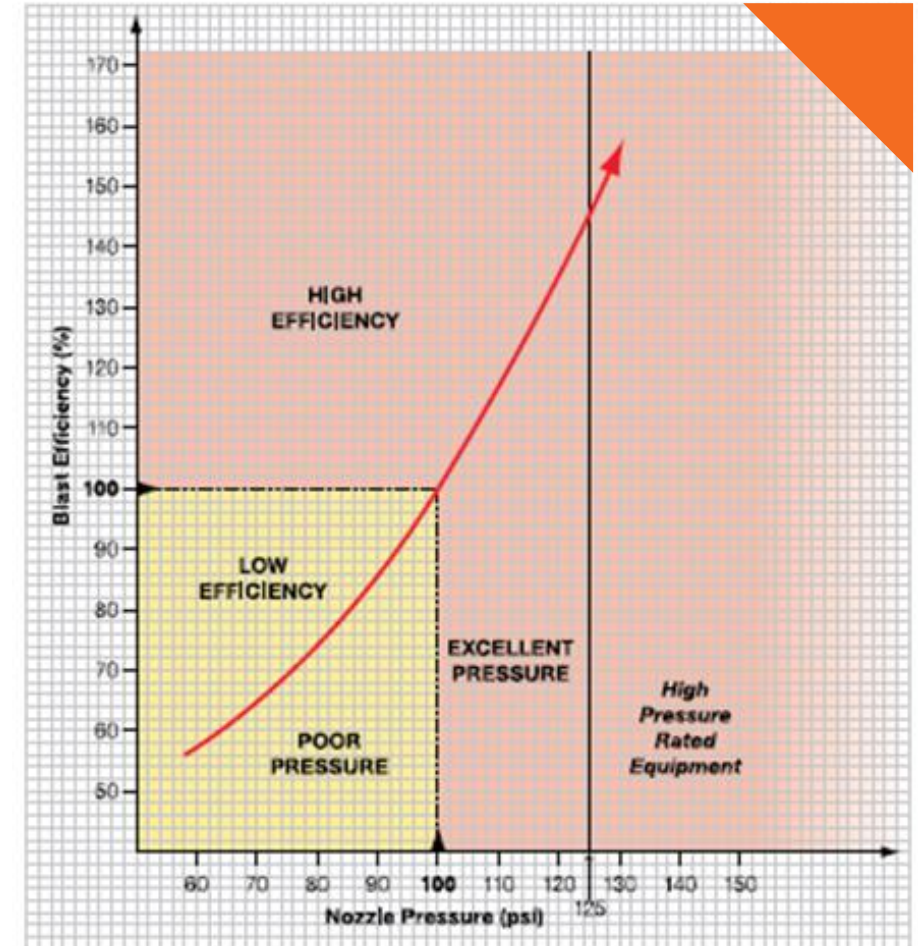


Report system usage and performance over a selectable timeframe

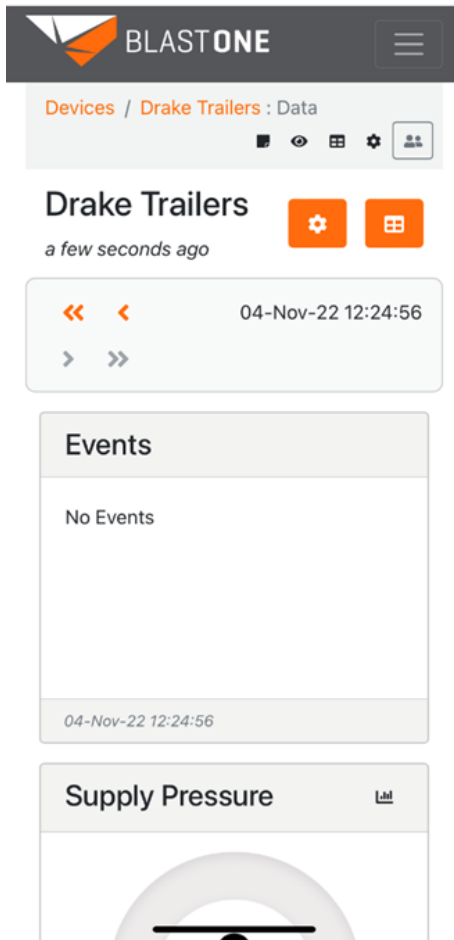


BENEFITS OF INTELLIGENT BLASTING SYSTEMS

- Monitor key “health” metrics remotely
- Optimal system performance
- Faster cleaning rate
- Reduced waste
- Lower project cost
- What is measured can be managed, optimizing performance and finishing projects faster
- Early warning signs of lower productivity – compressor issues, pressure loss, excess abrasive consumption
- Can be used to monitor subcontractors performance metrics



CASE STUDY – NEO BASIC MODEL



BLAST ONE

Devices / Drake Trailers : Data

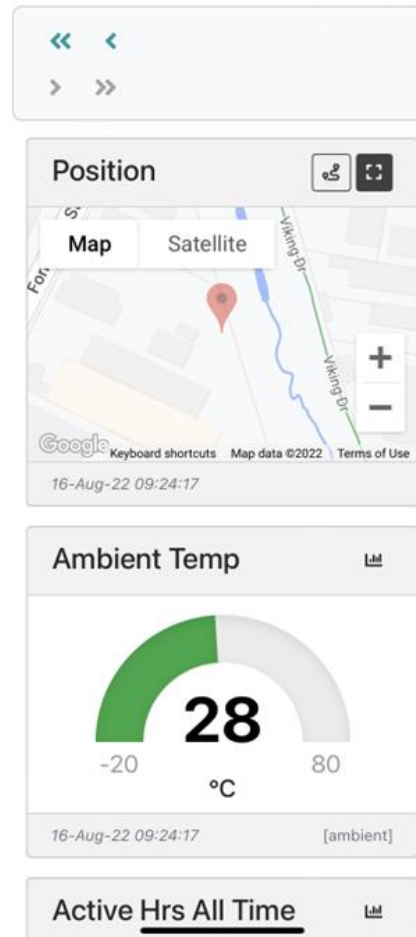
Drake Trailers
a few seconds ago

04-Nov-22 12:24:56

Events
No Events

04-Nov-22 12:24:56

Supply Pressure



Position

Map Satellite

16-Aug-22 09:24:17

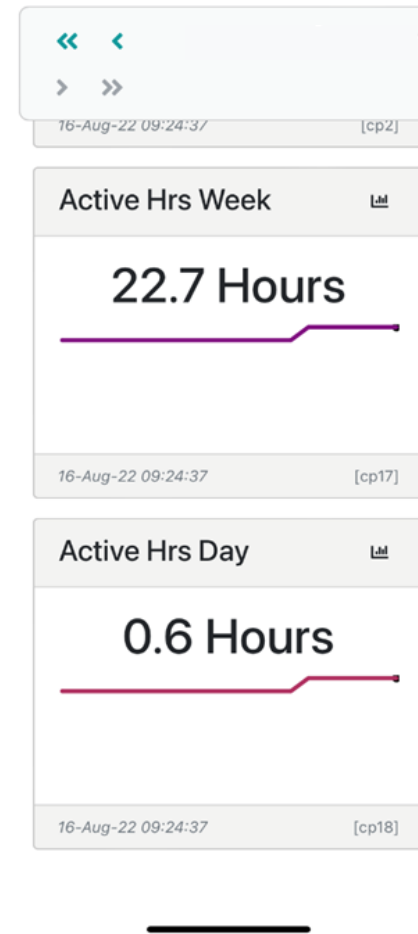
Ambient Temp

28 °C

-20 80

16-Aug-22 09:24:17 [ambient]

Active Hrs All Time



16-Aug-22 09:24:37 [cp2]

Active Hrs Week

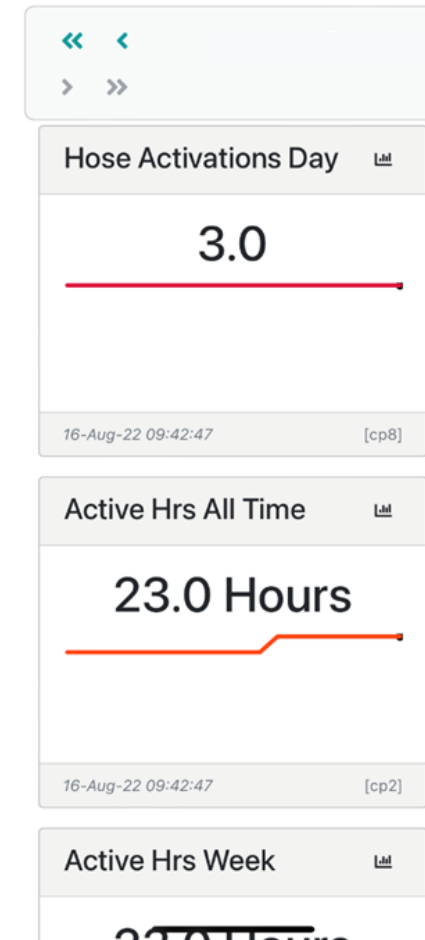
22.7 Hours

16-Aug-22 09:24:37 [cp17]

Active Hrs Day

0.6 Hours

16-Aug-22 09:24:37 [cp18]



16-Aug-22 09:42:47 [cp8]

Hose Activations Day

3.0

16-Aug-22 09:42:47 [cp2]

Active Hrs All Time

23.0 Hours

16-Aug-22 09:42:47 [cp2]

Active Hrs Week

CASE STUDY – RECENT RESULTS AT SHIPYARD

A recent test was completed to compare results between traditional methods, and PEATS methods, incorporating cloud-based reporting to help manage the project.

The main purpose of this test was to *increase throughput*.

An initial “Base-line assessment” was conducted to measure current metrics:

- Nozzle on-time
- Pressure at the nozzle
- Speed of blasting
- Abrasive consumption

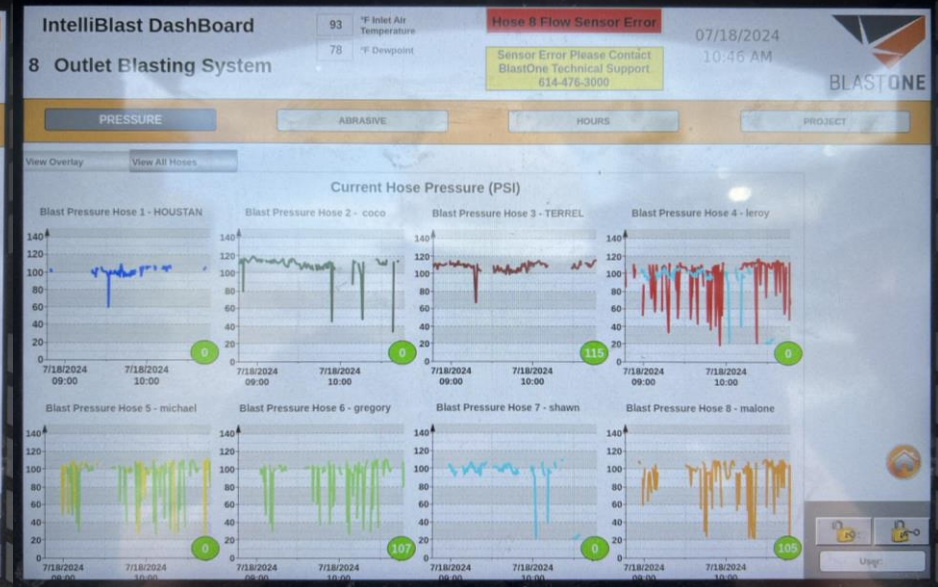
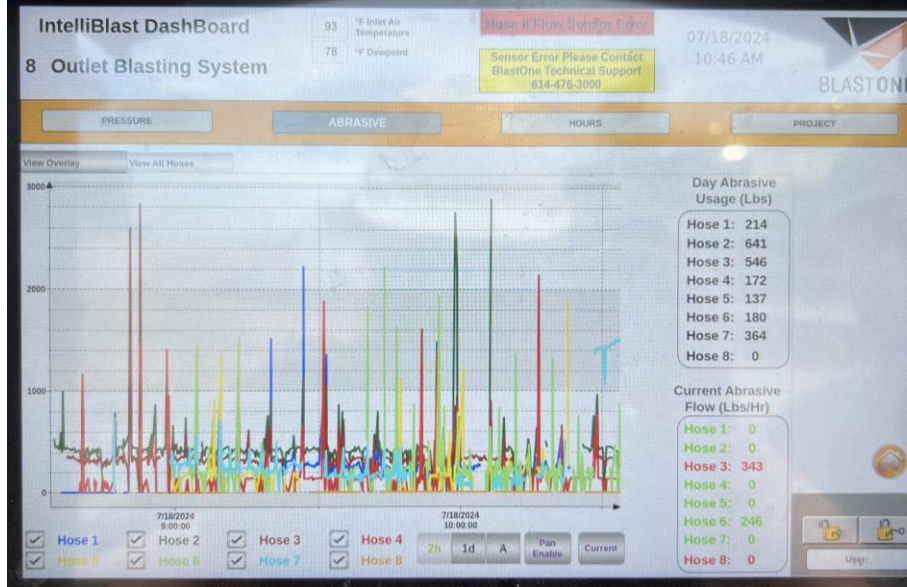
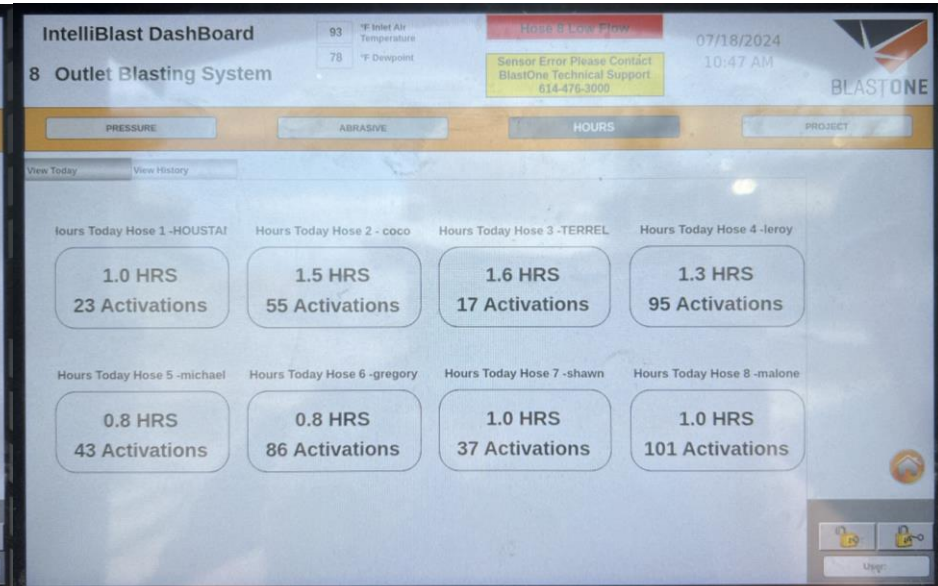
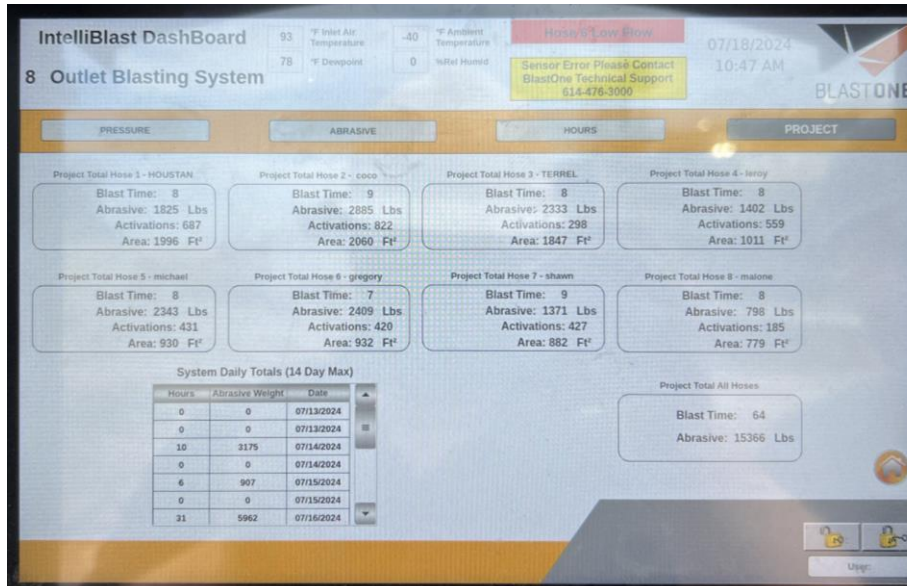


CASE STUDY – RECENT RESULTS AT SHIPYARD

Results showed the impact of live reporting:

1. Pressure was improved by 15% due to the visibility of data
2. Abrasive consumption was reduced by 83% due to using a higher performing abrasive and the visibility of consumption meant there was ability to tune in the valves
3. Training was conducted for new blasters given the data on activations.
4. There was more blasting done per day due to increased competition between blasters to get more done.
5. Overall Throughput was increased by 43% due to increased speed.
 - a) *Total area blasted increased from approx. 20,000ft² to 28,000ft while achieving this in 22% less hours.*







WHAT'S NEXT?

CULTURE CHANGE

If we are serious about competing with China, we have to change the culture in our industry.

A FEW NON-TRADITIONAL IDEAS TO HELP THIS:

- ❖ Implement proper reporting (live).
- ❖ Train the foremen and blasters on KPI's, and what the key metrics are that drive productivity and efficiency
- ❖ Implement a systems-level approach to surface preparation.
- ❖ Recognize the bottleneck and ensure this is understood by management
- ❖ Keep the "Why" before every deck plate worker.
- ❖ Put incentives in place that drive win-win results.
- ❖ Develop a set of requirements that drive productivity results and supports quality



THANK YOU!



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