PerforMax Plant Optimization Scorecard

PerforMax Plant Optimization™ Scorecard Overview

The PerforMax Plant Optimization™ scorecard provides operations or plant managers using COMMANDbatch™ with a detailed operational overview (or 'story') of all aspects of the plant production. The Plant Scorecard unlocks information on weigh up time, discharge time, operator alarms, plants events, and more. The consistent format allows side by side comparison of different plants and identification of specific areas of improvement.

The PerforMax Plant Optimization philosophy is to provide long term, sustainable, and verifiable improvements to the concrete production process. Empowered by financial measurement of savings due to material and time reduction, reduced mechanical wear/tear, more consistent quality, and less response driven activities, a producer can make intelligent decisions on where to invest in improvements such as plant equipment, operator training, or process rework.

This introduction provides a high-level overview only.

Presenting the Plant Scorecard

The scorecard is organized is divided into five stories. Each story is accessible through a menu presented on the left-hand side of the screen. Each story can have one or more chapters.
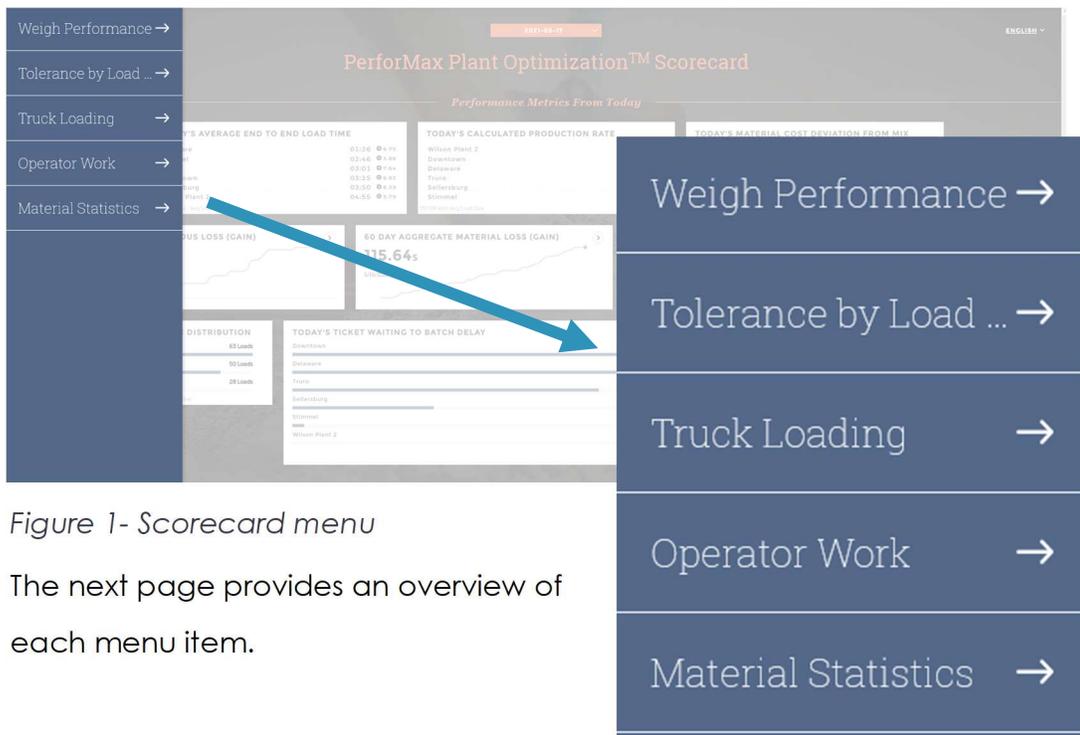

Figure 1- Scorecard menu

The next page provides an overview of

each menu item.

| Menu Name	Function
Weigh Performance	The purpose of this information is to provide the producer with statistics about how well the plant is performing. Specific chapters about fast feed accuracy, the number of time and jog feeds provide a sense of the overall health of the plant and quality of the tuning.
Tolerance By Load	This story details the compliance of each plant or of a selection of plants based on time and the load size.
Truck Loading	For dry batch plants, this story provides insight into how long it takes to charge the ready-mix truck with materials. Each chapter provides metrics including weigh up by yard, truck loading time by yard and side by side measurement of all plants is available. For wet mix plants measurements such as average mixer charge time, mixing time, mixer unload time, etc., are easily compared across plants.
Operator Work	Many plant operators suffer from an overwhelming number of error messages and warnings. Many operators may simply become fatigued and can ignore critical messages. This story presents the number and quantity of error messages; the producer can work with maintenance to address the most critical issues and ensure the operator stays attentive.
Material Statistics	If the system is configured with material costs, this story can show the producer how much potential profits are lost due to over batching of material.

Executive Summary
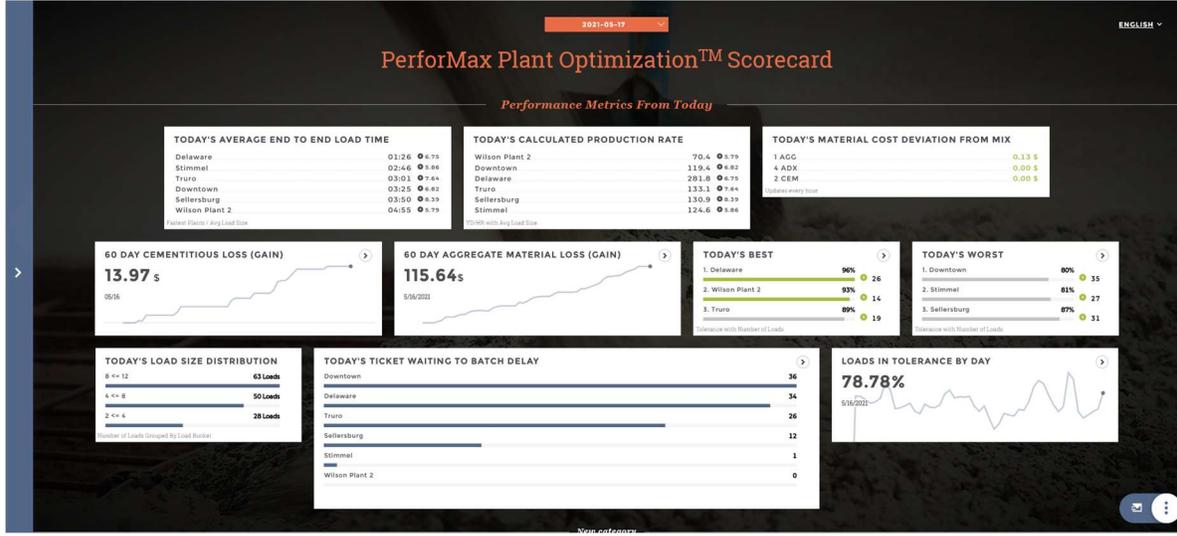
Figure 2- Executive Summary

The initial screen highlights critical parameters primarily for today's business. Information such as truck throughput, average loading time and load size, as well as delays at the plant are highlighted.
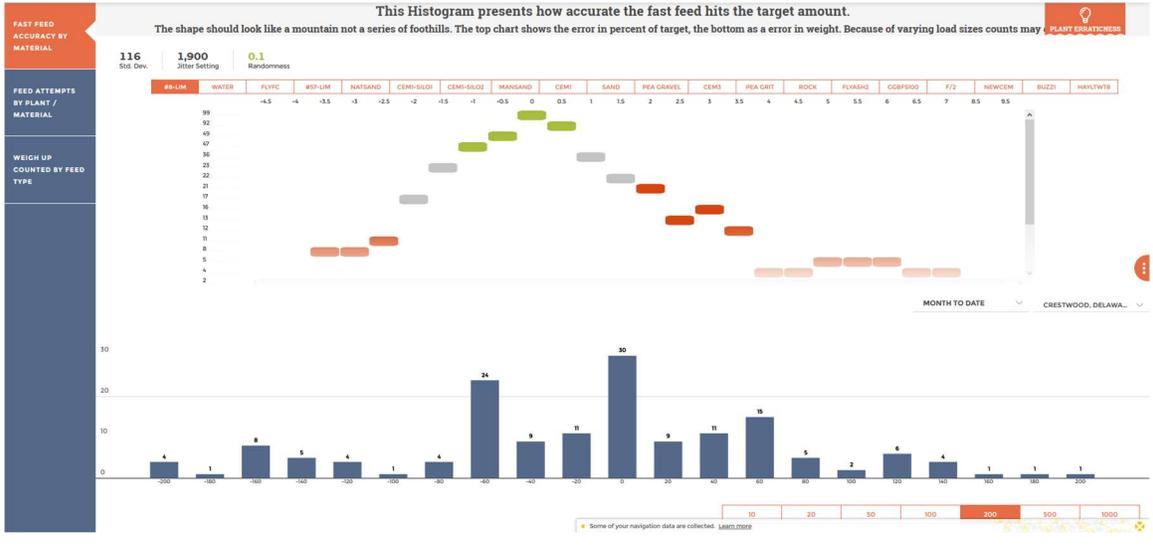
Batching Accuracy

Figure 3 - Batching Histogram

The Weigh Performance story provides an amazingly easy way to understand how well the plant is performing by material. Of particular interest is something known as 'erraticness' which is key to getting consistent performance.

Tolerance By Load
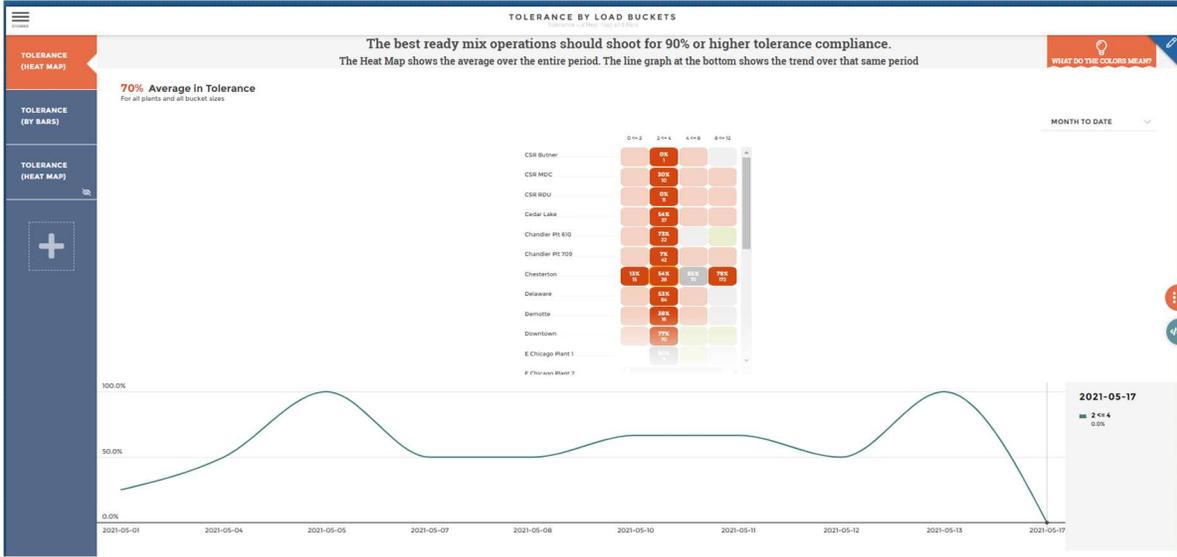
Figure 4 - Tolerance

The Tolerance By Load story has three chapters the provide insight into compliance with company tolerance standards. The heat map uses go/no go colors including green, gray, and red to show best performance versus the worst. Quality can be reviewed over the last 60 days allowing for confirmation that tuning efforts were effective.
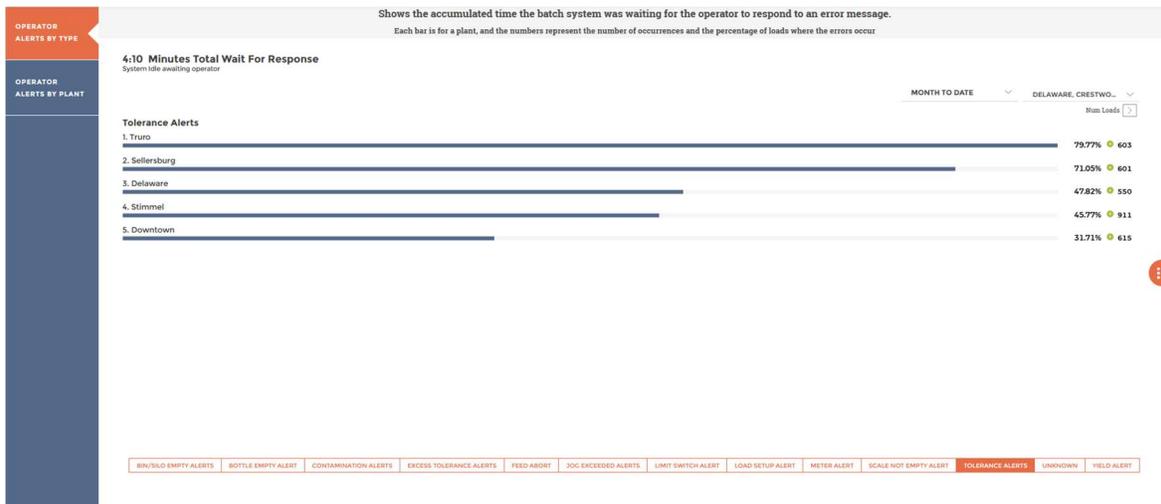
Operator Work

Figure 5 - Operator Work

This story shows where production is been affected by tolerance errors, plant alerts, etc. Alerts are broken into categories such as Empty Alerts, Plant Alarms, Tolerance or Yield. Different presentations provide for by plant for by category analysis.

Other features

The system provides for built in glossary for common terms and definitions. Instantly grab a screenshot and email it with comments to coworkers. Export data to excel or csv files for further evaluation.

The PerforMax Plant Optimization™ Scorecard is accessible via any computer or mobile device 24/7/365 via monthly subscription.