

Provides the execution visibility needed to avoid project surprises.

During project execution, HD Performance integrates accounting, schedule and estimating systems with actual jobsite data to provide owners, EPCMs and contractors the performance visibility they need to take corrective actions that can keep projects on time and within budget.

With flexible percent complete calculations and automatic earned value measurement, HD Performance is the best way to control and forecast costs, revenues, man-hours, and productivity to ensure successful project completion.

## Four Key Elements of Project Controls

- 1) Budget management
- 2) Progress measurement
- 3) Change assessment
- 4) Forecasting

A detailed cost model based on the original estimate underpins these functions and continually evolves as the project moves towards completion.

## Forecast Rationally

Select the best forecast method to use for each item, depending on its progress and other criteria. Enter manual forecasts with a required explanation and a full audit trail. Base forecasts on performance trends and averages to date, with the ability to apply improvement factors. Drive forecasts from bottom-up estimates developed using the full estimating toolset. Batch forecasting speeds the entire process by making it easy to apply performance factors across multiple items.

## Calculate Quantity and Percent Complete

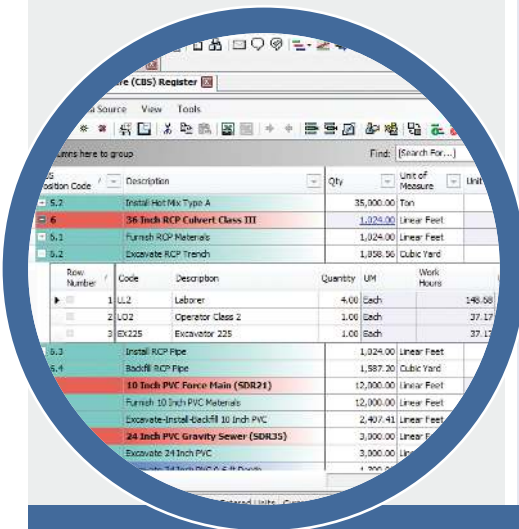
Track planned quantities, man-hours and equipment hours against actual quantities, man-hours and equipment hours complete. Quantities can drive percent complete calculations or percent complete can be entered directly. Scheduling integration drives percent complete, keeping progress and schedule aligned while providing total visibility.

## Reconcile Project Costs with ERP Systems

Compare calculated accrued actuals from work performed with ERP accounting accruals and actuals. Reconcile project progress with ERP systems to identify missing invoices or misaligned reports from the field. Simplify project reconciliation with work performed vs. work cost status to proactively identify project cost and productivity discrepancies.

## Measure Progress, Plan

Centralize progress measurement information, leveraging budget activities to calculate percent complete, budgeted cost of work scheduled (BCWS), earned value, actual cost of work performed (ACWP), cost variance, estimate at completion (EAC) and forecast variance values against budget values.





## Resolve Planned Quantities

View planned vs. actual quantities to compare and reconcile accounting quantities reported. Calculate planned vs. actual progress at the activity or project level. Determine estimated quantities based on costs incurred.

## Report Earned Value

Quantities, materials, man-hours, equipment hours and percent complete calculate estimated actual costs. Earned value results from work performed from duration of effort, producing an estimated earn cost to compare to actuals.

## Maintain Live Schedule and Scope Updates

Available connectivity can keep estimates and schedules aligned with the latest date and scope updates. Live interaction with Primavera P6, Microsoft Project or CAE Studio 5D Planner simplifies cost and resource loading the schedule, enabling accurate updates to scope and schedule in seconds.

## Plan Daily Work

Once the WBS and budget have been established within HD Performance, superintendents and project engineers can leverage the HD Field solution to assign foremen, employees and equipment to specific tasks for execution in the field. As daily work progresses, actual hours

and quantities from the jobsite can be reviewed by managers to help them understand actual performance against plan.

## Collect Timesheets

Leverage field data collection to receive man-hours, equipment hours, progress quantities, actual costs and notes. Timesheets can be collected via popular tablets with the HD Field solution or from outside systems including ERP, Excel or other timekeeping systems that connect via the HD API. On top of quantitative data, timesheets can record notes for each activity. Collected timesheets can flow directly into payroll systems for processing.

## Track Commitments

The commitments feature tracks the amount of the current budget that has been committed for expenditure to a particular company. This committed amount can be tracked separately from the budgeted amount. It enables an owner to answer these important questions:

- What is the total value of our commitments to date on this project? As the owner, how much would we be on the hook for if we were to cancel the project today?
- How does the committed amount for a specific scope of work compare to what we had budgeted for that work? If we committed less than we had budgeted, that money can possibly be spent elsewhere.
- How do the as-built costs for a particular contractor compare to the amount we committed to them? Are they billing us more than we committed to them?

## Approve, Manage Time

Manage and approve collected time by job code, foreman, status, period, and other variables. Time can be approved and selectively published to update progress activities. Collected time can be calculated against the budget plan to calculate productivity, providing immediate insight into production and forecast completion. Approved timesheets can flow directly into payroll systems for processing.

## Control Budgets

View and manage three sets of budget and planning data – original budget, current budget and current estimate – with multiple ways to calculate and view variances compared to actuals. Change logs identify all modifications to the estimate.

## Measure Contract Changes

The budget / contract changes register provides a mechanism for effectively tracking and managing all budget and contract changes, including budget moves and contingency draw downs, with a full audit trail of changes once the original budget has been established for a project.