



Digital project execution solutions

End-to-end supply chain and materials management solutions for capital projects

Digital project management tools help Engineering, Procurement, and Construction (EPC) teams and shipyards plan, track, and execute projects efficiently. They streamline schedules, budgets, designs, resources, and collaboration, ensuring on-time, on-budget delivery while improving visibility, accountability, and decision-making across every phase of the project.



Solutions offering



Supply chain
management



Contract risk
management



Supply chain
management



Information
management



Document
management



Enterprise
resource
tracking



Technical bid
evaluation



Vendor package
management &
GHG tracking



Estimation &
project controls

Key Industry challenges

Material management remains one of the most critical factors impacting project success across capital project services, EPC, marine, and other capital-intensive industries. Fifty to sixty percent of construction costs are tied directly to materials, influencing as much as 80% of the construction process.¹ Despite this, 60% of companies report difficulties tracking materials across multiple projects, leading to frequent delays, rework, and cost overruns.² 70% of construction delays are attributed to material shortages,³ and 30% of an EPC's time is wasted—split between searching for misplaced materials and manually tracking purchase orders and shipments.⁴

References

1. MDPI 2024
2. McKinsey 2024
3. KPMG 2021
4. CII, 2018
5. McKinsey 2023

In addition, 40-70% of a construction company's total spend is tied to procurement, but outdated systems, disconnected spreadsheets, and fragmented workflows still dominate the industry.⁵ Poor supply chain visibility, manual bid evaluations, and slow material tracking all contribute to lost productivity, unplanned downtime, and escalating costs. Without a unified digital approach, companies struggle to optimize planning, ensure accountability, and meet increasingly aggressive project timelines and sustainability goals.

30% of an EPC's time is wasted—split between searching for misplaced materials and manually tracking purchase orders and shipments.⁴

Digital project execution solutions



Our digital project execution solutions transform how firms deliver capital projects by bridging the critical gaps across planning, procurement, and construction. By combining AVEVA's solutions for supply chain management through AVEVA™ Enterprise Resource Management (ERM), contract risk management through AVEVA™ Contract Risk Manager (CRM), and information management through AVEVA™ Asset Information Management (AIM) with innovative solutions from our strategic partners—WorkPacks for advanced work

packaging, Track'em for real-time resource tracking, Mintmesh for AI-driven bid evaluation, and Kraken IM for secure engineering data collaboration—we ensure the right material, in the right quantities, at the right cost, to the right place, with the right quality, at the right time. This is beyond project management, this collaboration is powered by CONNECT and is engineered to deliver faster, more predictable, and more efficient project outcomes.

Key capabilities: AVEVA™ Enterprise Resource Management (ERM)

Catalogue and specification management

Create, manage, and control material catalogues and engineering specifications across disciplines.

Material take-off and bill of materials (BOM) processing

Automate MTOs, generate BOMs from design data, and manage total material requirements.

Procurement and supply chain management

Handle requisitions, buyer queues, RFQs, bid evaluations, purchase orders, and expediting.

Warehouse and site material management

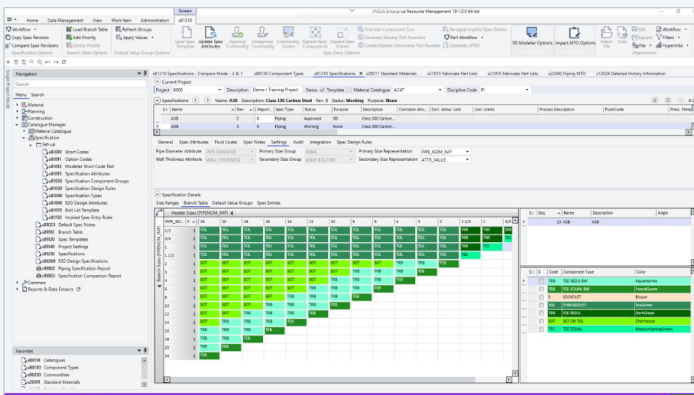
Manage material receipt, movement tickets, inspections, warehousing, and onsite material issuance.

Integration and interoperability

Seamlessly integrate with ERP, finance, project management, and engineering systems.

Change management and material forecasting

Control scope changes, adjust material needs, and forecast demands across the project lifecycle.



AVEVA Enterprise Resource Management Catalogue Manager

Advanced work packaging, planning, and construction readiness

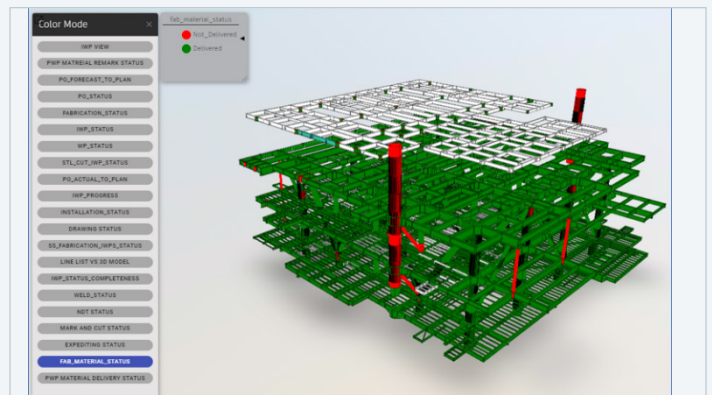
Automate the creation of work packages, enabling early path planning, advanced work packaging (AWP), and seamless integration between engineering, procurement, and construction teams for faster execution and improved field readiness ([WorkPacks](#), powered by AVEVA Enterprise Resource Management).

Real-time material and asset tracking

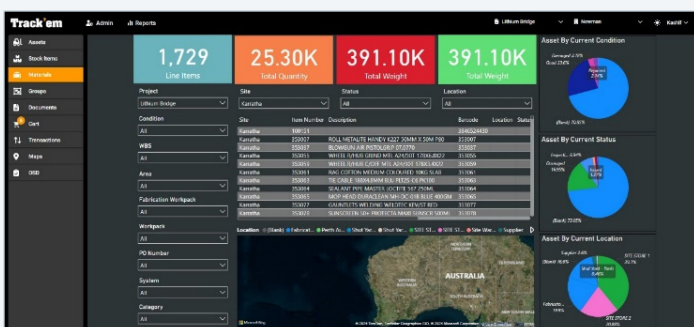
Get real-time tracking of materials, equipment, and assets from procurement to installation, increasing supply chain visibility, reducing material loss, and improving warehouse and site logistics efficiency ([Track'em](#) powered by AVEVA Enterprise Resource Management).

AI-powered Bid Evaluation

Unlock new procurement capabilities by leveraging AI to automate technical bid evaluations. Quickly analyze supplier offers and engineering requirements to accelerate decision-making, enhance transparency, and ensure technically qualified supplier selections ([Mintmesh](#) powered by AVEVA Enterprise Resource Management).



WorkPacks Virtual Construction Model



Track'em – Enterprise Resource Tracking (ERT)

[illegible]

Mintmesh – RUDY

Benefits at a glance

Why leading EPCs and shipyards trust AVEVA solutions

25% increase in project productivity

Streamlined planning and construction workflows boost field productivity significantly.

(Source: WorkPacks)

10% reduction in total installed cost (TIC)

Smarter planning, material management, and work packaging lower overall project costs.

(Source: WorkPacks)

3% to 5% reduction in material costs

Real-time material tracking minimizes waste, loss, and rework across the project lifecycle.

41% faster bid evaluation and decision-making

AI-powered analysis accelerates supplier selection and improves sourcing efficiency.

(Source: Mintmesh RUDY)

20% improvement in project predictability

Real-time data visibility helps you better forecast project risks, material needs, and scheduling.

400% to 700% ROI on resource tracking

Enhanced supply chain transparency and asset management deliver massive return on investment.

(Source: Track'em)

Reduced supply chain bottlenecks

Live tracking of materials and automated updates improve warehouse and site logistics.

Faster collaboration across teams and locations

Centralized data access enables engineering, procurement, and construction teams to work seamlessly.

Enhanced compliance and auditability

Verified data trails and engineering information certifications strengthen regulatory and contractual compliance.

Digital project executions solutions integration

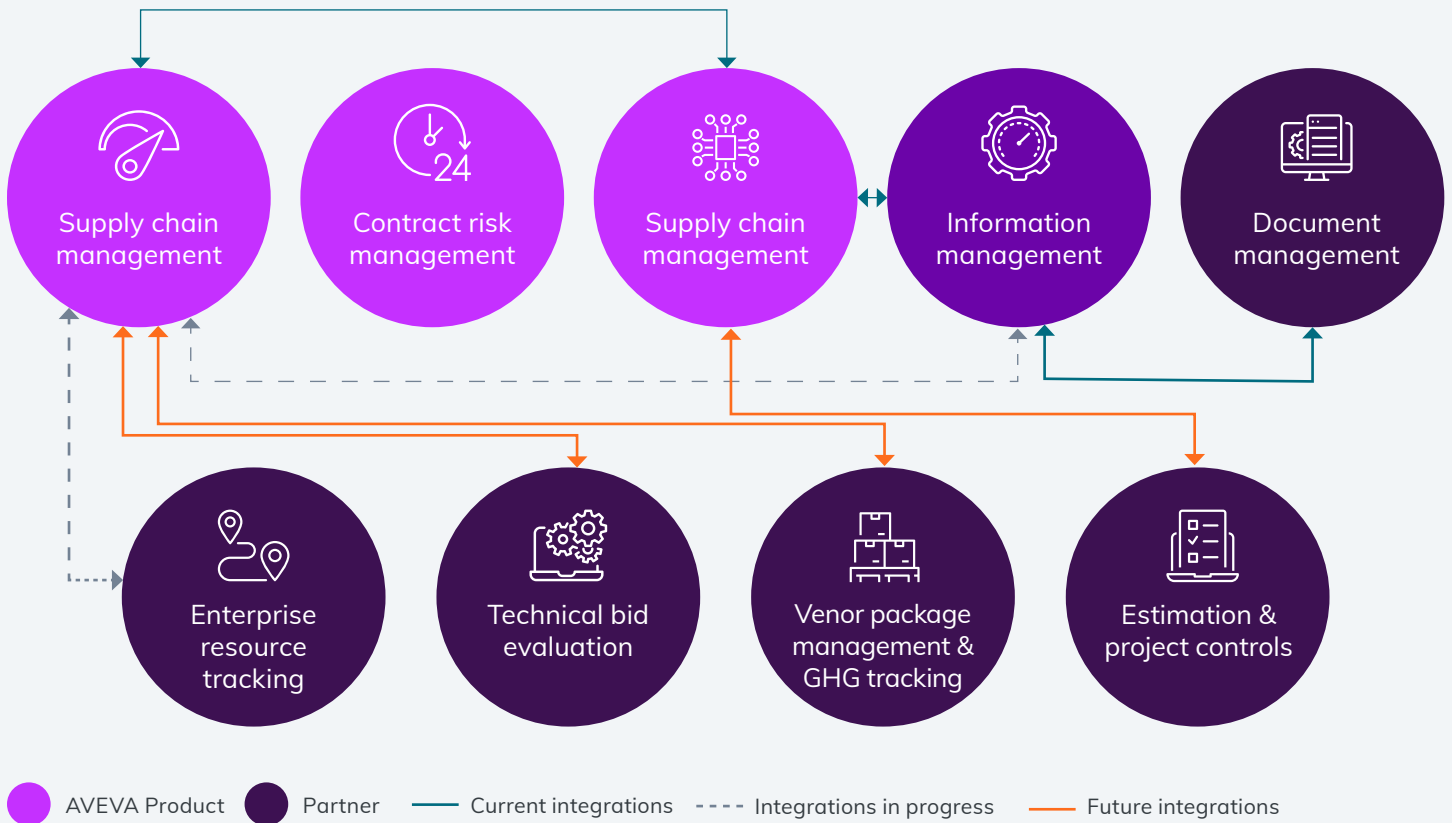
Seamless integration across the digital project execution ecosystem

Our digital project execution suite is designed to work as a connected ecosystem, integrating best-in-class solutions to deliver full visibility, control, and collaboration across the project lifecycle:

- **AVEVA Enterprise Resource Management** integrates with **WorkPacks** for advanced work packaging (AWP) and construction planning, as well as with **Track'em** for real-time resource tracking and material visibility.
- **AVEVA Enterprise Resource Management** also integrates with **Kraken IM Halcyon** to enable secure, verified engineering data collaboration in future releases.
- **AVEVA Contract Risk Management** and **AVEVA Enterprise Resource Management** integrate with **Mintmesh (RUDY)** to streamline and automate technical bid evaluations and supplier recommendations.
- **WorkPacks** integrates with **RIB CostX** for unified quantity take-off and estimating and with **AVEVA Asset Information Management** for complete asset and engineering data visibility.
- **AVEVA Asset Information Management** integrates with **Assai Document Control Management System** to manage, control, and deliver project documentation in a single source of truth.
- **AVEVA Asset Information Management** also integrates with **ERM** to ensure engineering, materials, and asset information flow seamlessly across procurement, construction, and operations.

Together, these integrated solutions empower EPCs, shipyards, and owners to break down data silos, automate critical processes, and deliver faster, smarter, and more predictable project outcomes—all through a connected digital thread.

CONNECT



ERM case studies

SAIPEM



Challenge: Traditionally, SAIPEM's engineers relied on manual calculations or in-house software to generate bills of quantities (BoQ), often leading to inconsistencies and varying levels of complexity across projects.

Results: SAIPEM used AVEVA Enterprise Resource Management to create a centralized engineering catalogue increased material traceability, eliminated information bottlenecks, and delivered full end-to-end visibility across the entire material management process.

Chantier Davie



Challenge: The goal was to increase traceability, improve processes, consolidate methods across teams, and meet critical design deadlines with greater efficiency.

Results: Better design processes enable teams from multiple locations to collaborate on the same model. Improved visibility of material status and progress plans reduces the number of tools needed, streamlining operations.

Aker Carbon Capture



Challenge: Keep costs under control and scale quickly as new projects move from planning to execution.

Results: A streamlined process reduces material waste and drives more efficient supply chain operations. Real-time visibility of project progress improves collaboration and builds trust across fast-growing teams.

For more information on AVEVA Enterprise Resource Management please visit: aveva.com/enterprise-resource-management

For more information on WorkPacks please visit: aveva.com/workpacks

For more information on Track'em Enterprise Resource Tracking please visit: trackem.com.au

For more information on Mintmesh RUDY please visit: mintmesh.ai