OCTAVE
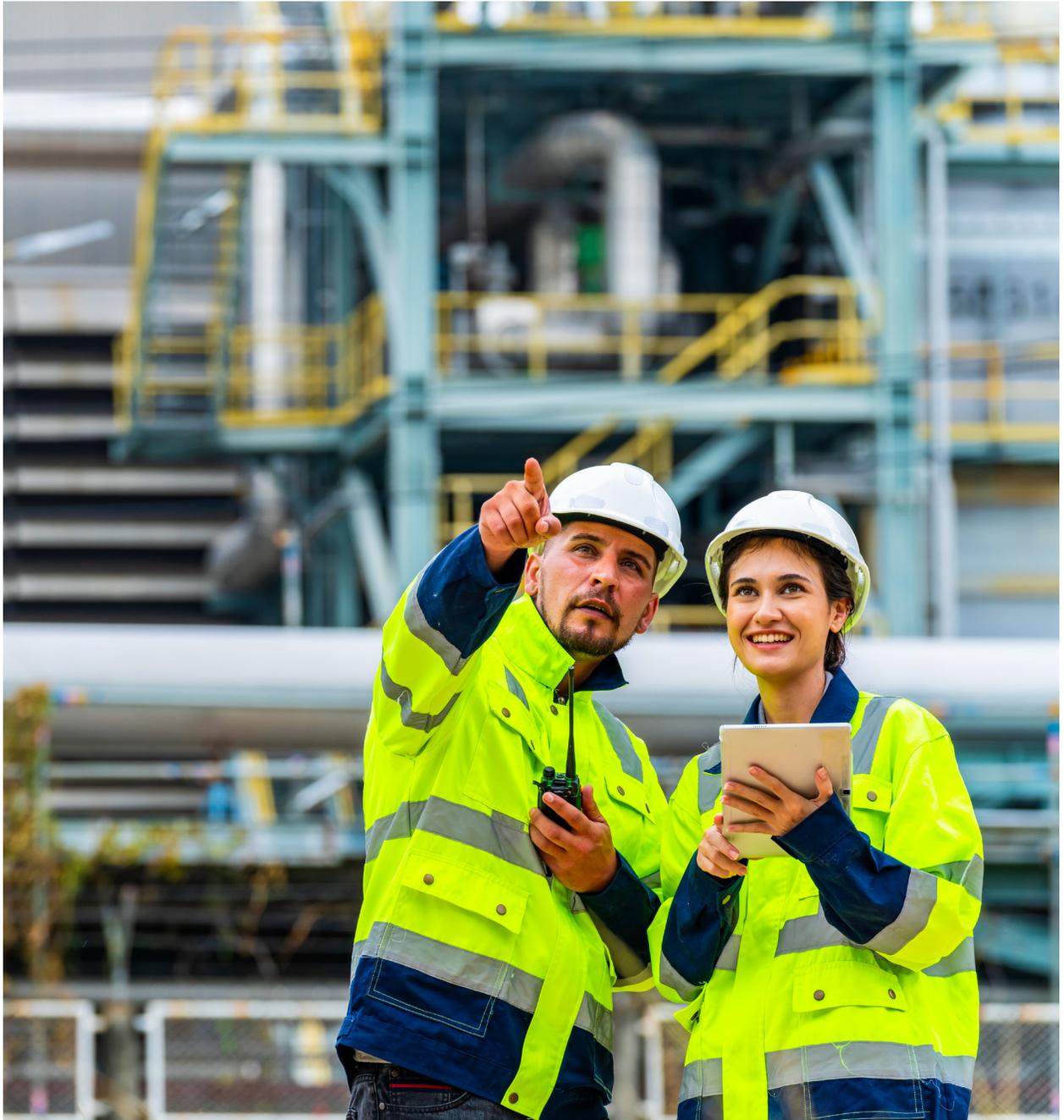
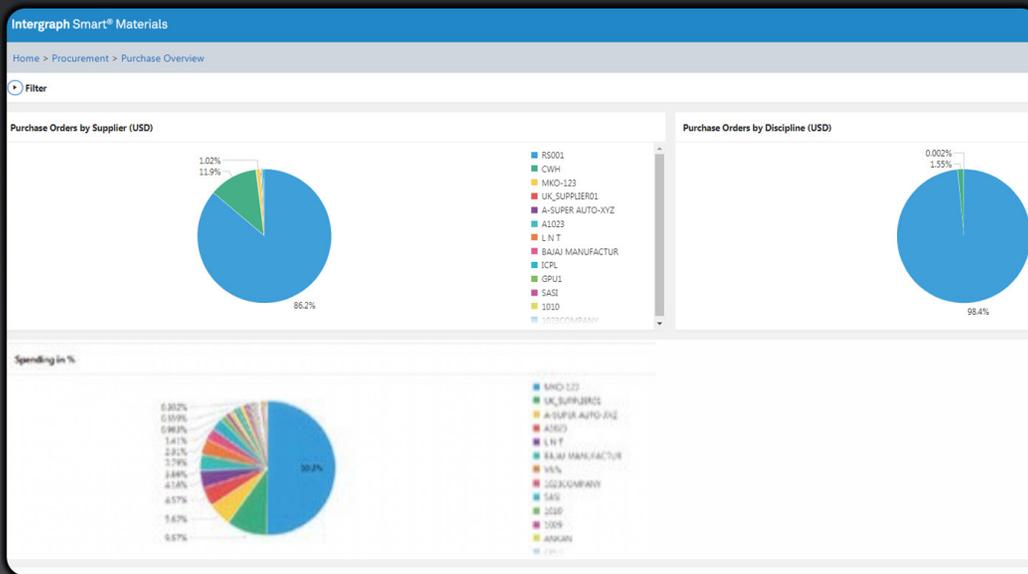# Market-leading capital project supply chain management

Octave Loop Core

Octave Loop Core (formerly HxGN Supply Chain Core) is a comprehensive materials and contracts management solution that helps EPCs, owners and fabricators reduce risk, control costs and accelerate schedules for capital projects.

Built on decades of experience, this modern, SaaS-only and entirely web-based solution covers all aspects of project supply chain management, from bill of material (BOM) intake and change management to material planning and procurement, expediting and logistics, contracts management and site material readiness. A collaborative portal unifies stakeholders, enabling streamlined sourcing, digital workflows and real-time oversight of materials, logistics and contractors operating across global supply chains, while integrated analytics provide actionable insights to identify bottlenecks and optimize decision-making. A powerful, flexible and scalable capital project supply chain management solution, Loop Core enables organizations to achieve successful outcomes on projects of all sizes and complexities.

Driving business value

Modular and secure, Loop Core addresses the needs of owners, fabricators and EPCs by:

- Lowering total project costs through improved labor productivity and optimized inventory

- Accelerating schedules via seamless integration into design and cost systems

- Increasing competitiveness through shortened procurement cycles and schedule assurance

- Reducing procurement costs with secure, self-service supplier and contractor onboarding

- Streamlining subcontract management from planning to final progress tracking through a secure, collaborative portal

- Improving risk management through better project performance, enhanced cash flow

- Oversight and exception-based control

- Enabling global project execution by providing consistent, accurate data for effective project work-sharing

- Facilitating data reuse across the asset lifecycle, including operations, maintenance and shutdown, turnaround and outage events

Bill of materials and requisitions

Loop Core manages BOMs from estimates and front-end design through detailed design to the as-built plant, updating requisitions when engineering changes occur and identifying shortages and/or surpluses early in the procurement process. BOMs from 2D/3D design tools are validated for completeness, then grouped into requisitions using rule-driven workflows. Relevant documents and vendor data can be attached before final approval and procurement release, ensuring accurate material requirements and efficient purchasing.

Supplier and contractor portal

Loop Core centralizes supplier and subcontractor management in a collaborative portal with secure online access. Teams can review performance histories, define selection criteria and manage all data in one place. This collaboration extends beyond sourcing, as teams continue to collaborate via the portal during project execution – providing an end-to-end solution that integrates teams across every phase of supplier and subcontractor management.

Purchasing and contracts management

By centralizing requisitions, inquiries, purchasing and subcontract data, Loop Core shortens procurement cycles, enhances team coordination, and fosters collaboration and accountability. It provides comprehensive purchasing and subcontract management – from sourcing and planning to RFQs, awards, change management, progress control, invoice verification and closeout, all within a secure, centralized portal.

Expediting, inspections and logistics

Loop Core facilitates reliable, real-time data exchange across engineering, procurement, logistics and inspection teams, maintaining data integrity through every revision. Seamless transitions from expediting to inspection and shipping keep information accurate and up to date. Suppliers can submit updates and packing details in Loop Core, while freight forwarders can provide transportation and logistics updates – ensuring project stakeholders stay aligned and processes remain efficient.

Inventory and warehouse management

In Loop Core, data created during expediting and logistics activities streamlines site and warehouse receiving, automating inventory reconciliation, material issuing and overage, shortage and damage (OSD) reporting. Materials can be tracked and issued to crews and subcontractors in multiple ways, including by drawings or work packages, providing flexibility and visibility into construction progress.

Construction material planning

Loop Core's forecasting engine optimizes construction material planning by reliably predicting material availability against work package demand at any time during the procurement cycle and at any point in the supply chain. This reduces schedule risk and enables contractors to optimize their work plans and maximize productivity.
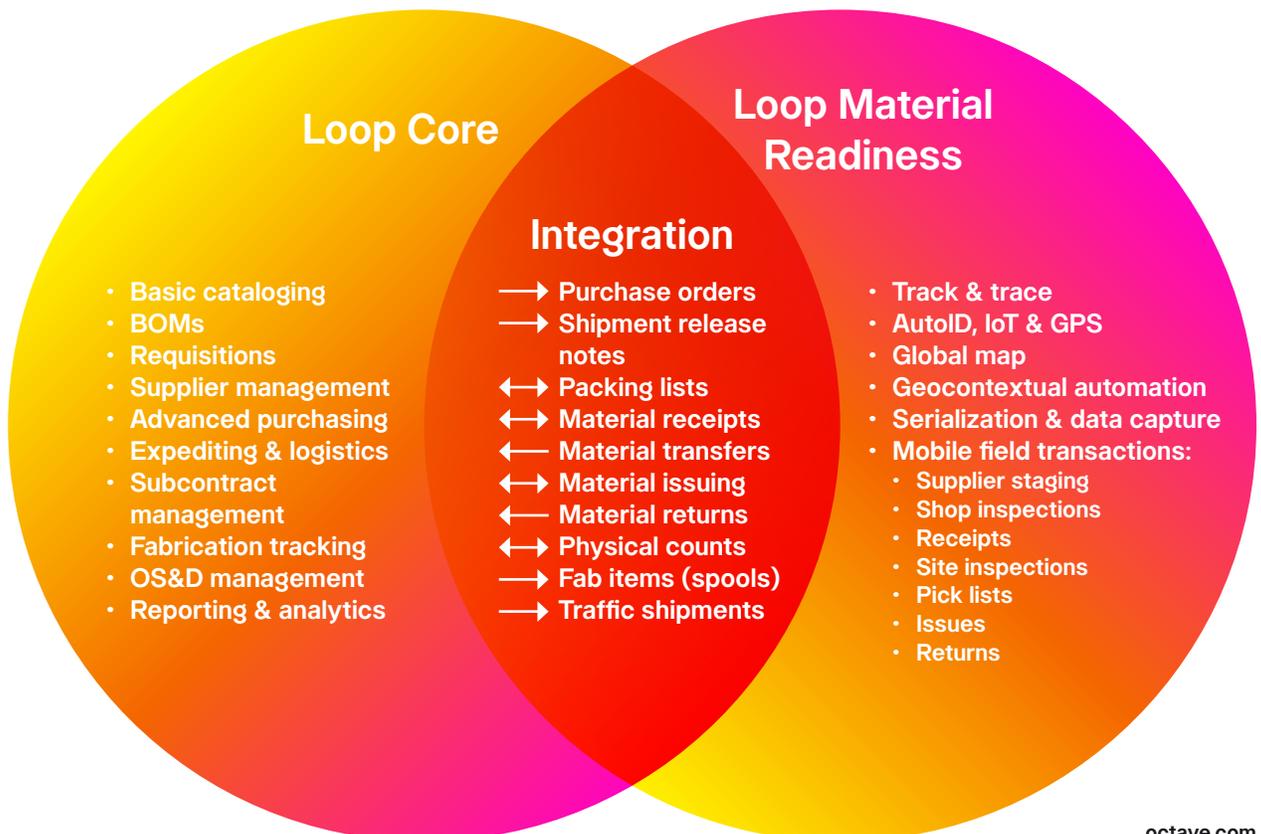
Maximize visibility with Octave Loop Material Readiness

Fully integrated with Loop Core, Octave Loop Material Readiness (formerly Jovix) is an award-winning application designed specifically for industrial construction. By digitalizing and automating manual, paper-based work processes, Loop Material Readiness provides real-time visibility to all stakeholders throughout the project supply chain. Employing a combination of web-based server software, mobile IoT devices, smart RFID tags and barcode labels, Loop Material Readiness removes impediments to productivity and ensures workers have the materials and information they need to spend more time on tools.

Loop Material Readiness has been proven to:

• Improve direct and indirect labor productivity

• Significantly reduce instances of lost materials and expensive reprocurement events

• Improve data integrity and accuracy

• Improve quality

• Improve supply chain visibility

• Reduce reporting burdens

• Find materials 10x faster

The native Loop Material Readiness integration with Loop Core extends visibility to suppliers, modularization yards, and the workface. By keeping project supply chain data aligned with real-world conditions, Loop Material Readiness provides actionable insights for reliable planning, improved efficiency and greater construction productivity.

Loop Core

- Basic cataloging
- BOMs
- Requisitions
- Supplier management
- Advanced purchasing
- Expediting & logistics
- Subcontract management
- Fabrication tracking
- OS&D management
- Reporting & analytics

Integration

⟶ Purchase orders
⟶ Shipment release notes
⟷ Packing lists
⟷ Material receipts
⟵ Material transfers
⟷ Material issuing
⟵ Material returns
⟷ Physical counts
⟶ Fab items (spools)
⟶ Traffic shipments

Loop Material Readiness

- Track & trace
- AutoID, IoT & GPS
- Global map
- Geocontextual automation
- Serialization & data capture
- Mobile field transactions:
  - Supplier staging
  - Shop inspections
  - Receipts
  - Site inspections
  - Pick lists
  - Issues
  - Returns

Drive standardization with Octave Forte Reference Data (formerly Intergraph Smart Reference Data) and Standard Database (SDB)
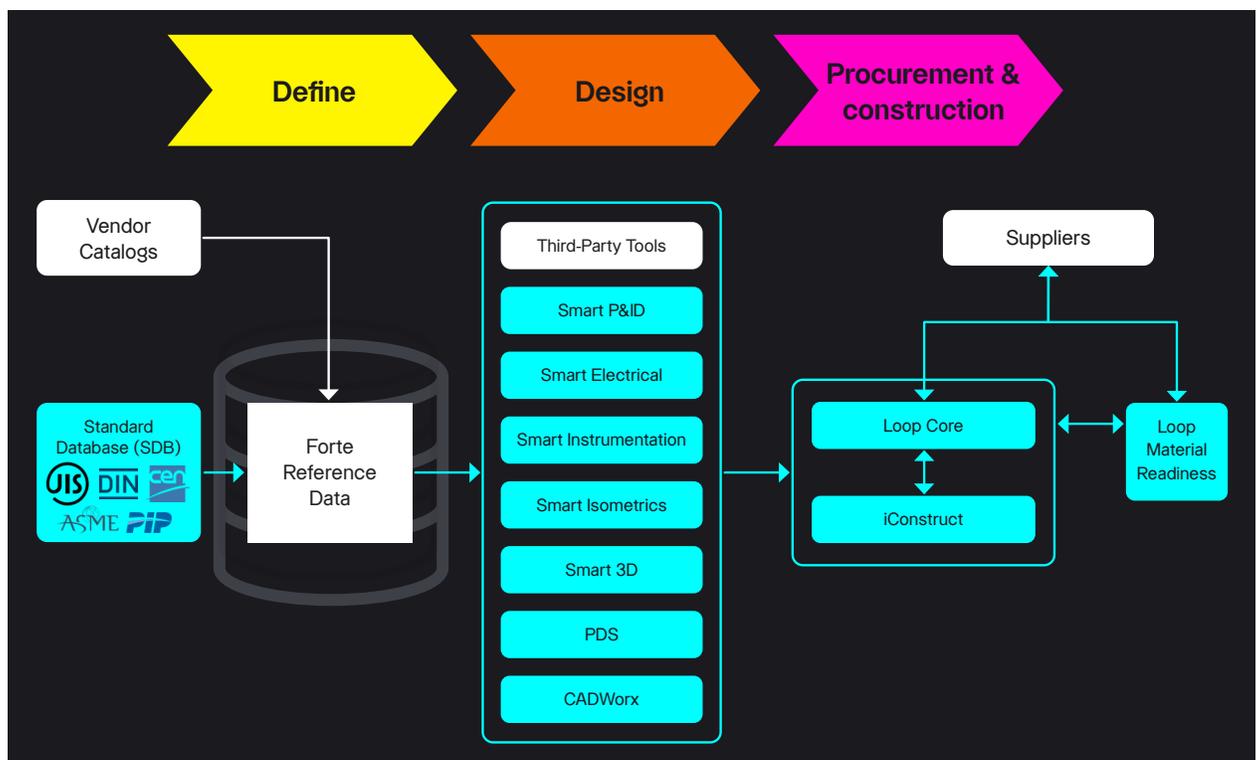
Fully integrated with Loop Core, Forte Reference Data is a powerful, AI-enabled catalog and specification management solution that ensures consistent, high-quality data across design, engineering and procurement workflows. Through seamless integration with Octave Forte 3D (formerly Intergraph Smart 3D), Octave Facets P&ID (formerly Intergraph Smart P&ID), and other third-party design tools, Forte Reference Data provides a single source of truth for cross-functional collaboration and efficient change management.

For accelerated setup, Forte Reference Data provides a ready-to-use catalog aligned to industry standards, multi-discipline sample data and pre-configured interfaces for leading design and engineering tools.

Forte Reference Data and SDB have been proven to:

- Standardize material usage and eliminate catalog redundancy

- Leverage AI for intelligent mapping and catalog harmonization

- Enforce best practice adoption through a customizable, rule-based catalog

- Establish robust specification control access across disciplines

- Integrate design and supply chain data seamlessly

- Improve procurement accuracy and reduce material costs

- Enhance collaboration between engineering and procurement teams

- Improve data quality, consistency and overall project efficiency

By implementing Forte Reference Data and SDB alongside Loop Core, organizations gain a comprehensive solution that streamlines material management, drives cost savings and boosts productivity across the entire project lifecycle.

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property, and assets– for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency, and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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