HEXAGON

Solution Brochure

iConstruct™

A powerful scalable solution for AWP

iConstruct is a building information modeling (BIM) software, suitable for a large range of industries worldwide. It uses advanced features to improve project performance and drive collaboration and efficiency across the project lifecycle by ensuring a high-quality conditioned model.

With agnostic capabilities, iConstruct aligns engineering, procurement and construction to calculate the feasibility of installation work packages enabling effective creation. In addition, it has direct integration to business systems and providing a suitable solution for small to large global capital projects..

Markets

iConstruct is the award-winning BIM software that saves up to 200 hours per month for Planners, BIM/VDC Coordinators and other engineering professionals in Energy & Resources, Infrastructure and AEC industries.

Key Benefits of iConstruct

Quick AWP implementation process

Integrates with, rather than replaces, existing fit-for-purpose business systems

Organizes model hierarchy and data to drastically improve navigability

Automates recurring workflows

Leverage Autodesk Navisworks®, one of industry's leading agnostic platforms

iConstruct complements various applications in the Hexagon ecosystem. Ease of integration with Hexagon's Intergraph Smart® Materials, HxGN SDx, Intergraph Smart Construction and others brings iConstruct to another level.

Rapid Return on Investment

Why iConstruct?

Model Conditioning

Enhance the model coordination and data management with various tools. Restructure raw engineering models into an AWP-compliant model. ReConstruct reorganizes and groups a model's hierarchy to align to a project's different stages. It also improves file portability by exporting a cropped model based on section planes, properties, disciplines or area.

AWP Deliverables

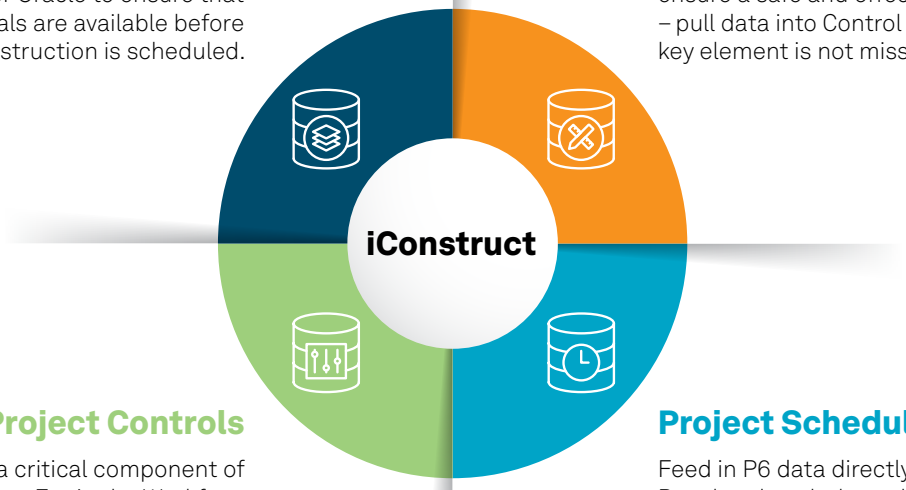
AWP facilitates the breakdown of a large scope of work into smaller Work Breakdown Structures (WBS). This gives crews the information they need to work effectively and efficiently, boosting project performance.

Control Panel

iConstruct Control Panel is purpose-built to support CII-defined Advanced Work Packaging and Workface Planning from the field. It creates and tracks any type of package, aggregates data from all departments supporting the AWP process, and manages constraints all in a single source. It uses iConstruct's fully automated constraint management or adds manually as required. It creates Gantt charts of scheduled IWP activities and pushes directly to Navisworks' Timeliner.

Automate Recurring Tasks

BIMflow is a powerful feature in iConstruct that automates and schedules frequently used workflows. It maximizes productivity for all engineering projects and streamlines processes by effectively incorporating model updates and eliminates repetitive work.



Materials

Call in Procurement data from SAP or Oracle to ensure that materials are available before construction is scheduled.

Engineering

Document approval status is key to ensure a safe and effective installation – pull data into Control Panel so this key element is not missed.

Project Controls

Efficiency is a critical component of any project. Equip the Workface Planner for success with available hours and materials.

Project Schedule

Feed in P6 data directly into Control Panel and push through to a Gantt chart to display the installation with other IWP components.

User Input

Various Model
and Data Sources

- Base Model
- User Data

Model Conditioning

Add and Manage Data
and Restructure Model

- Reconstruct
- Data Links
- Integrator
- Audit

Work Packaging

Preconstruction
Work Planning

- Audit
- Color Code

Reporting

Align Tasks / Send Reports
of the New Model and Data

- Export Data
- View Report

Task Automation

Automate and Schedule Frequently used
iConstruct and Naviswork Routines

- BIMflow

Smart Construction vs. iConstruct

Smart Construction is considered to be the most advanced, fully integrated Advanced Work Packaging solution on the market, particularly for Complex Mega Projects that are fully designed on SmartPlant Design (and Tekla). It can however be perceived by the market to be complex to implement, higher on ongoing administration cost and time and somewhat rigid with non-SmartPlant Design models.

By comparison, iConstruct is built on Naviswork, and can work with any 3D dataset: AutoCAD®, MicroStation™, PDS®, Intergraph Smart 3D, Aveva, CADWorx®, etc., and it does not require a database, so deployment and admin costs are minimal. This allows iConstruct to reach those projects and investments that are outside of the Smart Construction ideal project profile. iConstruct does not have the complete feature set of Smart Construction, but it meets the needs of many projects.

	Smart Construction	iConstruct MAX
Ideal Project Size	Mega	Large to Small
Platform	On Premises	On Premises
Effort of Implementation	High	Low
SmartPlant Suite Integration	High	Mid
Approval Workflows	High	
Multi-User	Yes	External Database Sync
Configuration Ability	Low	High
3D Model Agnostic	Low	High
Integration with External Data Sources	Low	High
Automation	High	Mid
Dependencies	SmartPlant® Foundation	Autodesk Navisworks

About Hexagon

Hexagon is the global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Asset Lifecycle Intelligence division helps clients design, construct, and operate more profitable, safe, and sustainable industrial facilities. We empower customers to unlock data, accelerate industrial project modernization and digital maturity, increase productivity, and move the sustainability needle.

Our technologies help produce actionable insights that enable better decision-making and intelligence across the asset lifecycle of industrial projects, leading to improvements in safety, quality, efficiency, and productivity, which contribute to Economic and Environmental Sustainability.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,000 employees in 50 countries and net sales of approximately 5.5bn USD. Learn more at hexagon.com and follow us @HexagonAB.

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