



SOLUTION SHEET



A look inside Halifax Shipyard, the most modern shipyard in North America. Image courtesy of Irving Shipbuilding.

INTERGRAPH SMART® PRODUCTION ENTERPRISE POWERED BY NESTIX

In the onshore, construction, mining, offshore, and shipbuilding industry, you need production-proven solutions that will help you stay one step ahead of the competition. Intergraph® Smart Production Enterprise now offers a powerful tool to provide support for not only the module and block production process but also for the pipe shops, given a unique single solution for the complete fabrication process. Starting from all major design solutions (including fully-integrated change management) and continuing through part production until completed spool, module, and block assembly. Getting ahead and staying ahead of your competition requires your continuous improvement and support of lean manufacturing [digitally enabled lean: Industry 4.0]. Intergraph's Smart Production Enterprise Powered by NESTIX enables the constant capture of your production knowledge to enhance project quality and increase your productivity.

Why Intergraph Smart® Production?

Change Management

Manage all changes to the production process consistently throughout with a data-centric approach.

Control Production

Access real-time feedback from shop floor machines and workstations to provide valuable insights on work progress at any given time.

Improve Material Utilization

By integrating inventory, actual usage, and remnant management into the process, significant material optimization can be achieved.

Advantages of Software

Smart Production solutions provide:

- Intelligent integration with engineering & design solutions that can lead to a significant reduction in time spent on work preparation
- Consistent and automatic management of change
- Smart backwards and forwards scheduling functionality resulting in an optimized shop floor
- A production schedule with individual work center instructions, thereby shortening throughput times and improving resource utilization
- Improved material management through powerful nesting and remnant management



- Real-time interactions with resources, machines and work centers (through different technologies, such as PC monitors, QR or bar codes, and RFID and other) and therefore up-to-date business intelligence information, such as availability to produce (materials) as well as capacity to produce (resources)
- Full traceability of materials, logistics, and production

Key Features

Increase Design/Production Visibility

Using Intergraph Smart® 3D planning assembly hierarchy setup as the basis, the system visualizes in detail real-time production status compared to plan.

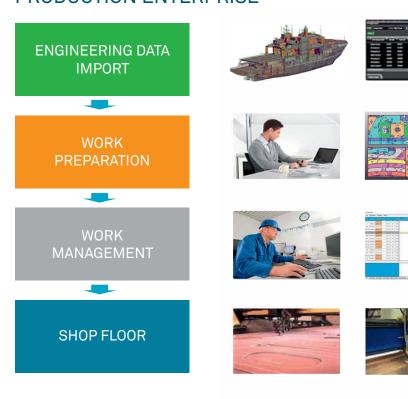
Efficient Load Balancing

Based on production routing and previously established estimates, Smart Production allows backward and forward scheduling based on available resources and capacity (load balancing) to allow the creation of an accurate work preparation plan.

Easy Production Scheduling

Just-in-time production scheduling is supported throughout the complete process, including assembly and sub-assembly stages using the part fabrication scheduling into account.

SMART FABRICATION PROCESS WITH SMART PRODUCTION ENTERPRISE



- Assembly structures
- Part geometries, Panels
- Work Pack (WP) schedules
- Production routing
- Capacity planning
- · Part nesting, Remnant mngmt
- · Changes management
- · Material reservation
- Workshop sequencing and balancing
- Queueing work phases
- · Guidance for shop floor
- Cutting
- · Part fabrication
- Panel and assembly production
- Buffers and internal logistics

About Hexagon PPM

Hexagon PPM is the world's leading provider of enterprise engineering design software and project control solutions. By transforming unstructured information into a smart digital asset, our clients are empowered to visualize, build, and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire life cycle.

Hexagon PPM is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technology solutions that drive productivity and quality across geospatial and industrial landscapes.

