A Digital Thread from Design to Production

Today, one of the main challenges of many organizations is to seamlessly transfer design plans into production steps without losing accuracy and integrity of data. When data is frequently changed while stored in multiple systems or silos, it cannot be easily accessed, visualized, secured, or managed. Custom one-off system integration is difficult to maintain or upgrade – yet a lack of data sharing leads to inefficiency, reduced quality, and inconsistency across the entire product development lifecycle.

iBASEt PLM Connectors provide out-of-the-box connectivity between Engineering (PLM) and Manufacturing (MES) applications to synchronize design specifications (As-Designed) with production flows (As-Built). Establish closed loop digital continuity between design and production to reconcile change management and improve quality during the product development process. Share As-Built records with engineering to drive product and process improvement.

Robust Data Sharing & Visualization
Complex product specifications are best shared with production via embedded CAD instructions, videos, or augmented reality visualization to ensure accurate knowledge transfer. PLM Connectors delivers this capability, ensuring work instructions provide a full visual experience to shop floor workers, resulting in higher quality.

Synchronized Data Exchange to Increase Efficiency
Compress approval cycles for Engineering Change Orders (ECOs) from weeks to hours with real-time system updates. Ensure access to current work instructions to avoid rework and improve efficiency. Changes are automatically updated as approved across systems, ensuring the right work instructions are always adhered.

Improve Data Quality
Enhance data transfer between PLM and MES systems to avoid production inconsistency and manage version control. With greater data accuracy, proprietary product design specifications are more secure, accurate, and up to date. All systems and technicians have access to the latest data, providing greater quality, traceability and product genealogy across the records.
Lower Business Costs

iBASEt PLM Connectors are available out-of-the-box, to enable quick deployment and onboarding of proactive flows and processes. Similarly, maintenance and upgrades are fast and easy, contributing to lower costs of ownership and IT requirements. Avoid tedious, and error-prone steps of transferring large data files that are hard to store, manage, and maintain. Increase productivity to reduce labor hours and costs. Establish digital continuity to ensure design and production intelligence is readily accessible on mobile, tablets, and smart devices throughout the shop floor.

Increase Traceability Intelligence

Get access to accurate and updated As-Designed / As-Built records. Timely access to the latest production and design information can improve traceability and effectiveness. With greater accountability and visibility into updated design and production specifications, it is possible to track and trace a more complete, accurate product history with proper authorization. This data – when collected in context as part of a digital thread – is an ideal foundation for improved performance in future containment, product genealogy, or root cause analyses.

Elevate Operational Agility

With accurate data available and trusted by engineering and production teams, greater confidence and intelligence is possible through data-driven decision support. This confidence, combined with an ability to easily incorporate changes into As-Designed and As-Built records, enables improved levels of enterprise agility. New market opportunities or competitive threats can now be resolved with greater precision and accuracy, leading to higher profitability and customer satisfaction.

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<thead>
<tr>
<th>Increase Visibility</th>
<th>Take Control</th>
<th>Drive Velocity</th>
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<tbody>
<tr>
<td>Reconcile As-Designed plans with As-Built production specs to access the latest and most accurate engineering designs throughout the shop floor.</td>
<td>Incorporate and track every design change in production.</td>
<td>Accelerate data transfer with greater accuracy &amp; data integrity.</td>
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<td>Leverage digital work instructions to notify and incorporate the latest process changes into operations.</td>
<td>Securely transfer eBOM, mBOM, and BOP across design and production systems.</td>
<td>Streamline production and sustainment SOPs with a closed network of digital systems.</td>
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<td>Embed data analytics across the entire product lifecycle to identify bottlenecks and avoid process delays.</td>
<td>Define specific built-in publishing preferences for each object that is send and received.</td>
<td>Accurately accommodate a high volume of ECOs and last-minute design changes.</td>
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<td>View status of every publication through a closed loop reporting system.</td>
<td>Create feedback loop for design improvement that maintains quality metrics.</td>
<td>Utilize digital work instructions to quickly update technicians with the latest process changes, 3D CAD models, animations and product specifications.</td>
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<td>Maintain conditional entries of your PLM tool: transform text, change units and set defaults.</td>
<td>Leverage digital integration to ramp up new product introduction.</td>
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About iBASEt

iBASEt is a leading provider of manufacturing, quality and MRO solutions that enable digital continuity across the enterprise. With 30+ years of experience in highly engineered, regulated industries, iBASEt simplifies the complex by empowering customers to gain real-time visibility, take control, and drive velocity across their operations and extended value chain. iBASEt works closely with industry-leaders, including Lockheed Martin, Northrop Grumman, Rolls Royce, Pratt & Whitney, and Patria Belgium Engine Center. Learn more at www.ibaset.com.