Sequence
Work Instructions . . . Made Easy

* Indicates new for Sequence V3.0	LockStep Free	LockStep	Sequence Enterprise	Description
Authoring				
Intelligent Editing Console	✓	✓	✓	Automatic loading of appropriate editor into user interface for selected object means no time wasted in navigating other applications or interfaces.
Integrated Text Editor	✓	✓	✓	Text steps are created in a text editor designed with just the right amount of functionality. All of the tools are visible on the tool bar and there is no need to search menus for commonly used features.
Integrated Picture Editor		✓	✓	This built-in picture editor is used to perform common editing functions (including crop, changing contrast or brightness, and annotating** an image with arrows and text callouts). **Picture annotations are always grouped with the image and stored in the picture repository for easy editing.
Integrated Spreadsheet Editor	✓	✓	✓	The integrated editor allows users to perform spreadsheet functions that are most commonly used in documenting work instructions
"Direct to Sequence" Picture Addition	✓	✓	✓	Pictures are added by automatic download when pictures are taken on an attached camera. See System Requirements for supported cameras using this feature.
Drag and Drop Pictures onto the Graphical Instruction Tree	✓	✓	✓	Pictures are added to work instructions by dragging a picture from Microsoft folders directly onto the graphical instruction tree.
Indented Graphical Instruction Tree View	✓	✓	✓	Information is presented in a view representative of the manufacturing process - a **subassembly** is made up of **parts** assembled in **operations** completed by performing discrete **instructions.** This feature reduces the workload to collecting the right pieces of information and putting them into the correct order--we take care of the formatting.
Drag and Drop Manipulation	✓	✓	✓	The graphical instruction tree makes it simple to reorder, copy, or paste information in your work instructions. Drag and drop capabilities combined with the automatic formatting functionality make line balancing and updates exceptionally easy.
Global Parts and Assemblies	✓	✓	✓	Parts and Assemblies are global objects that can be reused and if attributes change, all processes are updated automatically to reflect the change.
Global Tools	✓	✓	✓	Tools are global objects that can be reused and if attributes of the tool change, all processes are updated automatically.
"Save and Create Next Step"	✓	✓	✓	Current step is automatically saved and a new step added to the tree. This feature saves time when documenting step-by-step processes found in manufacturing. This is one of the key features which allows the writer to document the process on the factory floor in one build cycle.
Global Work Instructions/Common Routings			✓	Sequence allows authors to create 'global' steps enabling reuse of information and improving maintenance. When a "global" changes, the information within it changes everywhere it is used. This can include best practices or common processes that are inserted into larger work instructions. This could also include completely common work instructions/routings that are used for multiple products. Judicious use of 'globals' will substantially reduce the cost of developing and maintaining a large number of instructions while increasing quality and standardization.
Expert/Novice Work Instructions			✓	As opposed to maintaining separate documents for expert and novice operators, novice instructions are organized as indented details to the expert instructions on the Graphical Instruction Tree. As such, instructions are presented at detail based on the skill-level of the operator.
BOM/Tool Assignment by Work Area			✓	Rather than a summary BOM and Bill of Tools for the whole process, operators receive a tools and parts list exclusive to their particular task.
Variable Text in Common Routings			✓	Imagine a common instruction that is used in a family of products where the only difference is the length of a cable. This feature allows authors to maintain one "global instruction" for all those scenarios while inserting the cable length as variable text.
*Links to External Files			✓	Sequence allows you to include links to files on your network for viewing in their native formats; for example, CAD files, material certifications, etc. Documents referenced in file links are copied to the repository for historical purposes when a document is retired so "Open Previous Version" would apply to contents of file.

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Paper Deployment				
Automatic Formatting to PDF Documents	✔	✔	✔	No need to manually format your documents! In just seconds, LockStep automatically formats work instructions into PDF documents suited for different audiences or purposes. (see some sample PDFs)
Multiple PDF Formats	(2)	(9)	(9)	Work instructions can be printed in a variety of PDF formats including standardized worksheets for veteran employees, or detailed instructions for the trainee. Click and pick a format!
Small Document Size	✔	✔	✔	LockStep stores pictures and text in a format which uses less than 10% of the space required for the same information in a Microsoft Word Document.
Print Expert/Novice Instructions Based on Operator Skill Level			✔	Operators can be defined as expert or novice based on their skill level and experience. Sequence automatically prints the instructions with the appropriate level of detail presented to an operator.
Content Management				
Automated Version Control/Audit Trail	✔	✔	✔	Automatically maintains draft, published, and retired versions of instructions. Opening any previous version of an instruction is just one click away.
Multi-User Collaboration			✔	A single centralized database allows enterprise-wide collaboration, access, and control of instructions.
User-Based Security			✔	User-based security creates individual profiles and determines what actions those users can perform and what parts / assemblies they can access. Privileges include: viewing, editing, approving, quality, and administrative.
Check-In/Check-Out of Instructions			✔	Controlled check-in/check-out functionality maintains order in a multi-user environment.
Automated Release Note Management			✔	Sequence maintains a summary of all changes associated with a work instruction including approver, date approved, superceding date, and reason for change. A full set of release notes provides an audit trail for all changes to a work instruction.
*Electronic Approval Process with Single or Multiple Approvers			✔	Formal process for routing a set of instructions through a designated "approver" before release to the shop floor. Approval can be done by single individual or through an "approval routing" approval routing to an audience which specifies the required/courtesy approvers, signature order, and out-of-office designees users..
*Administrative approval through WebSequence			✔	Administrative can approve in WebSequence eliminating the necessity of having WinSequence licenses for users who need a simple way to approve instructions
Electronic Redline Notes			✔	Similar to margin notes on a printed copy, these notes let you draw attention to specific aspects of your instruction. Redlines can also be used to document suggested changes between collaborators. Authors must address redline notes before approving a new version.
Library Filter	✔	✔	✔	Advanced search engine to find ANY information (step, tool, part, operation, etc.) in LockStep for reuse in other work instructions.
Rapid Document Retrieval	✔	✔	✔	Advanced cataloging and retrieval functions put specific work instructions at your fingertips in one step. This feature saves the user from manually searching folders in Microsoft Windows.
Favorites Folder	✔	✔	✔	Folder for organizing shortcuts to commonly used documents.
Integration with ERP/ MRP/ PLM Data				
Automatic Sync of BOMs and/or Routings			✔	Sequence can automatically update parts, BOMs and routings as a result of changes in ERP/MRP data. With up-to-date BOM and routing information, management of affected work instruction content is made significantly easier. No dual entry is required to display accurate BOM information to operators eliminating costly errors.
Link Specific Instructions to Work Orders			✔	Sequence automatically imports work orders from ERP/MRP systems and associates them with specific instructions. This provides conclusive traceability for on-going regulatory and compliance requirements for how your products are built.
Automatic Email Notification when ERP Data Changes			✔	Optional feature that sends authors an email notification when ERP/MRP data changes. Authors will have access to notes that specifically state what changed.

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Paperless/Electronic Deployment to Shop Floor				
Real-time, Controlled Deployment			✔	Deploying work instructions electronically allows real-time updates to the shop floor when they are approved. This eliminates the never-ending task of updating paper documents and surprises during ISO audits revealing outdated versions of instructions on the shop floor.
Tablet Compatability			✔	WebSequence enhanced to work with iPad (Safari), Chrome, Firefox, in addition to Internet Explorer.
Restrict Operator Access to Current Published Version of Instructions			✔	Operators have access to only the most recently published version of an instruction... guaranteed! This prevents costly shop floor errors. The moment a work instruction is approved, it is immediately available for access.
*Access Instructions by Work Order			✔	Operators can view instructions by work order, as well as collect data (see the data collection feature below), eliminating guesswork associated with who worked on a work order, which instruction was used, and any data collected. Instructions for work orders can now be modified even if the work order has data collected against it. The "Rework" work order allows the user to modify the instructions and does not destroy the history of what work has been done and what instructions were shown prior to modifying the instructions.
*Shop Floor Redline Capability			✔	Designated users can electronically mark-up instructions on work orders in production. The next time a user encounters the marked version of the instruction they must authenticate that they are aware of the redline.
*Shop Floor Proceed with Non-Compliance			✔	Designated users can electronically mark-up an instruction step in a current work order. The proceed-with-exception option allows authorized approval of deviations from the instructions for that one work order.
*Electronic Kaizen Capability with iPad2			✔	The "Submit Request" capability of WebSequence has been enhanced to allow image capture with iPad2 integrated camera for streamlined shop floor continuous improvement. Both images and text are submitted to engineering in the form of a note with attached media on the respective instruction.
*File Link Archiving			✔	When products have multiple options, Sequence will automatically display to an operator the configuration-specific instructions for a given work order. This eliminates operator confusion by only showing the necessary instructions to execute a work order. In addition, this automates the traceability associated with the variety of ways a configured product can be built.
Play Video or Audio for Operators			✔	In addition to traditional pictures, video and/or audio can be played for operators at individual work instruction steps.
Links to External Files			✔	Sequence allows you to include links to files on your network for viewing in their native formats; for example, CAD files, material certifications, etc.
Present Expert/Novice Instructions Based on Operator Skill Level			✔	Operators can be defined as expert or novice based on their skill level and experience. Sequence automatically configures the level of detail presented to an operator.
Data Collection from Shop Floor Operators			✔	For customers that deploy instructions by work order and need to maintain records from operators, Sequence allows the capture of information. This can include electronic signatures by operator/supervisor or production data like serial numbers, oven temperatures, etc. Data can then be used to provide an as-built record of production for specific products. See "Access Instructions by Work Order" for more detail.
*Real-Time Feedback from Shop Floor Operators			✔	Instead of leaving their station to fill out a paper form, operators can click a "Submit Request" button to provide instant feedback Without leaving the current work instruction. An email is automatically sent to manufacturing engineers containing the request, operator's name, product, specific work instruction step, along with a date time stamp. Our customers indicate they are now learning more about "unspoken" issues in production.
*Expertise Based Verification			✔	Authors can specify a quality "group" for each shop floor verification. For example one step may require a "Welding" signature while another step in the same instruction may require a "Safety" signature.
Operator Acknowledgement of Change Notifications			✔	When an operator attempts to access an instruction after a change, Sequence requires the operator to acknowledge the change before proceeding. Sequence maintains a log of all acknowledgements for all operators.

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21 CFR Part 11 Security				
*Password Maintenance / Security			✔	•Passwords can be forced to expire after a specified number of days •Custom control of password strength •Reuse of old passwords is forbidden •Uniqueness requirement for Username / Password •Accounts disabled after specified number of unsuccessful login attempts
*User Authentication			✔	•Require user authentication of administrative personnel when changes are made to configurations •Require user authentication for submit request in WebSequence •Require user authentication on Information Popup window in WebSequence •Require user authentication on Alert Popup window in WebSequence •Require user authentication win WebSequence when reading version notes
*Personnel Record Retention			✔	Disable "delete" for users, groups in Administrative tab if the user or group has generated any electronic record
*Captured Data Security			✔	•Allow users to append data without overwriting previous data •Allow work order instructions to be modified for re-work with no loss of previously captured data
*File Link Archiving			✔	Documents referenced in file links are copied to the repository for historical purposes when a document is retired so "Open Previous Version" would apply to contents of file links as well.