HCLTech | Supercharging Progress™

Introducing iPEO: Advancing manufacturing excellence in aerospace and defense

HCLTech is proud to announce the release of iPEO in our continued commitment to manufacturing excellence across the A&D industry. iPEO builds on the foundation of SAP S/4HANA Manufacturing for production engineering and operations (PEO) with additional capabilities including:

- Out-time tracking for time-sensitive materials
- First-article inspection
- Super quality notification
- Bill of materials comparison
- Manufacturing queue mass processing
- Manufacturing queue notification enhancements
- Shop floor IoT connectivity
- Mass edit orders
- Easy PEO training

These capability enhancements are the direct result of HCLTech's close alignment with PEO development, solicited feedback from the A&D community and multiple PEO implementations

iPEO features and benefits

Out-time tracking

Features

- Tracks the amount of time that sensitive materials are exposed to environmental conditions
- Provides an SAP Fiori-based user interface for check-out/check-in functionality
- Tracks cumulative exposure time of parent/children/kitted materials until a concluding event such as curing takes place
- Coordinates out-time tracking with SAP PEO operation activities

Benefits

- Adds capabilities required for advanced manufacturing methods such as carbon composite fabrication
- Ensures that materials that reach or exceed cumulative exposure limitations aren't consumed in the manufacturing process
- Ensures an SAP S/4HANA clean core

First-article inspection

Features

- Automatically inserts first-article inspections in shop floor orders where new fit, form, function or process changes are being evaluated
- Preplans and intercepts FAI-relevant work orders
- Inserts additional process instruction and data collection requirements for specified operations
- Facilitates approval and dispositioning of first-article inspection

Benefits

- Enables first-article compliance and certification
- Brings FAI capabilities to PEO
- Digitizes AS9102 first-article inspection form data

Super quality notification

Features

- Facilitates a change management bridge for the period between engineering disposition and change incorporation when parts in flow require rework to comply with the change
- Pre-plans bridge operations effective for an interim period based on model unit configuration
- Intercepts shop floor orders on release and insert bridge operations

Benefits

- Facilitates a smooth change management transition for parts in flow
- Eliminates repetitive nonconformance documentation and disposition
- Provides authorization for shop floor workers to perform fit, form and function changes
- Ensures parts in flow comply with the new change requirements.

Bill of materials comparison

Features

- Allows users to compare and audit engineering, manufacturing and as-built bills of materials, including engineering bills of materials from external sources
- Supports BOM comparison across the digital thread regardless of whether the BOM is defined in PLM or PEO.
- Provides audit profiles, audit capabilities and additional usability enhancements

Benefits

- Enables confirmation of design compliance and continuity from engineering through product realization
- Ensures that product delivery complies with design intent
- Identifies noncompliance as early as possible in the manufacturing process
- Provides end-to-end BOM comparison

Manufacturing queue mass processing

Features

- High-volume manufacturing in S/4HANA Manufacturing PEO
- Mass processing capabilities across orders
- Grouping of order operations for concurrent work execution

Benefits

- Ability to group orders requiring the same process, such as plating or autoclave
- Eliminates repetitive keyboard entries when multiple quantities are undergoing concurrent processing
- Ability to apply data collection across multiple quantities with a single entry

Manufacturing queue notification enhancements

Features

- Provides heightened awareness of pending production impacts on the manufacturing queue
- Alerts shop floor supervisors and technicians of pending qualification expirations
- Alerts the shop floor of pending engineering changes
- Provides quality management-related notifications in the PEO manufacturing queue

Benefits

- Reduces rework and compliance violations
- Enhances worker qualification compliance
- Reduces rework due to missed engineering changes
- Alerts workers of ancillary quality notifications

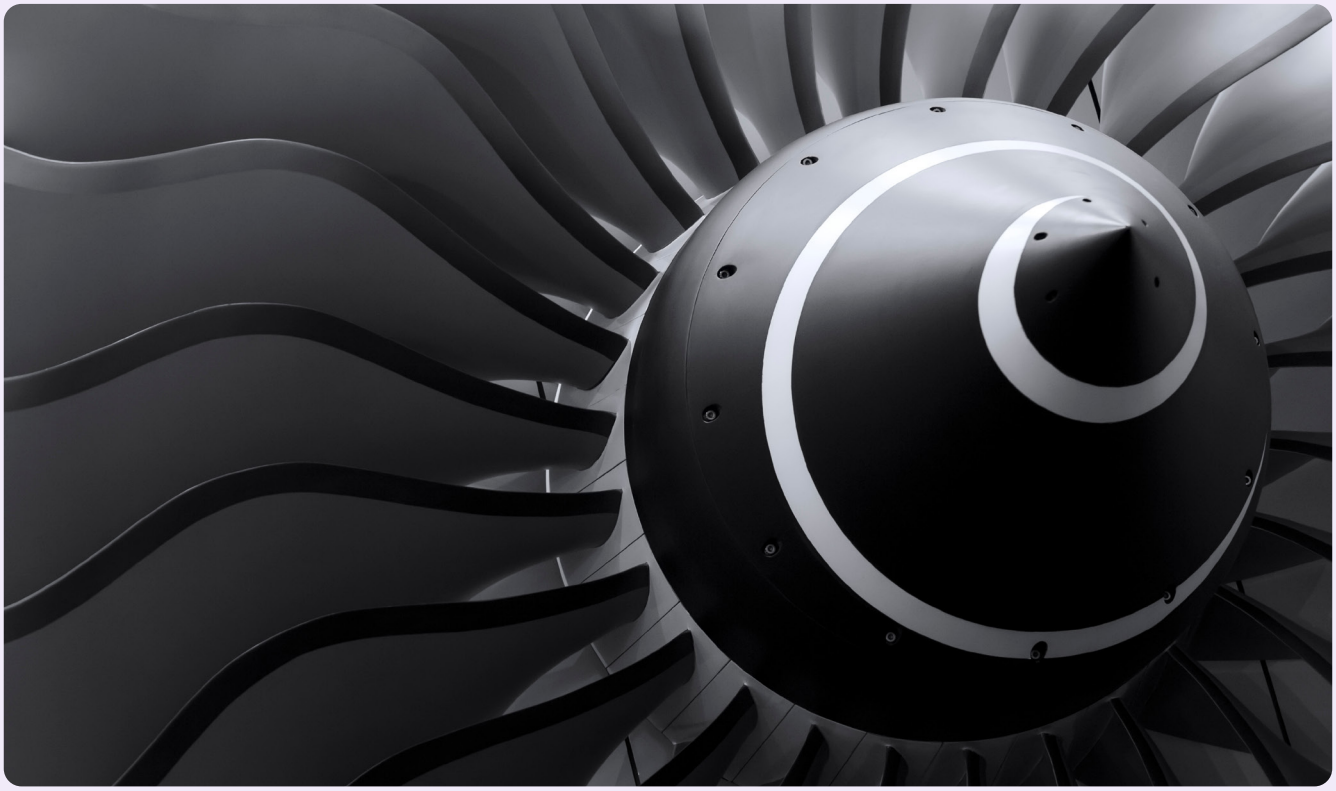
Shop floor IoT connectivity

Features

- Enables IoT connectivity between PEO and handheld devices/program-driven machines on the shop floor
- Captures data from handheld devices such as torque wrenches and barcode scanners
- Triggers robotic and machine tool programs in context with PEO operation activities

Benefits

- Eliminates human error resulting from transcribed data collection and incorrect keyboard entries
- Eliminates swivel chair integration between manufacturing execution systems and shop floor machinery
- Ensures accurate data collection
- Ensures that proper programs are called for connected machinery and robots



Mass edit orders

Features

- Propagates changes to shop floor orders for work in process
- Updates an order and propagates the same change to additional released orders
- Takes into account operation completion status in the change propagation cycle
- Flags orders requiring manual intervention due to operation completion status

Benefits

- Eliminates repetitive manual order change management processes
- Increases manufacturing engineering efficiency

Easy PEO training

Features

- Provides contextual PEO training suitable for classroom training and independent reference
- Suitable for production engineers, production supervisors, production operators and quality engineers
- Includes topics such as manufacturing engineering, manufacturing operations management, shop floor execution and shop floor quality management
- Provides step-by-step functional guidance with visual references

Benefits

- Provides SAP S/4HANA Manufacturing best practice training
- Template-based training allows easy change management for customer-specific requirements
- Facilitates rapid return on PEO investment

Please reach out to HCLTech for additional information on iPEO or more information or a demo of SAP S/4HANA Manufacturing for PEO.

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