THE PLEX SMART MANUFACTURING PLATFORM

SUPPORT FOR TOYOTA SUPPLY CHAIN REQUIREMENTS

You're a supplier to one of the most respected manufacturing companies in the world, known for outstanding quality and operational efficiency. But being part of that rare group of suppliers comes with a set of high expectations from Toyota. From the moment new business is awarded through end of production and service part programs, Toyota sets the bar high incorporating The Toyota Way set of principles in the supplier collaboration process.

The good news is that Toyota prioritizes supplier success as a priority in their relationships, and they provide a great deal of support in ensuring that success. Here are a few of the principles, expectations, and processes that Toyota expects and requires of their suppliers, and how the Plex Smart Manufacturing Platform supports and enables you to succeed in adhering to and meeting them.

TOYOTA SUPPLIER VISUALIZATION INITIATIVE

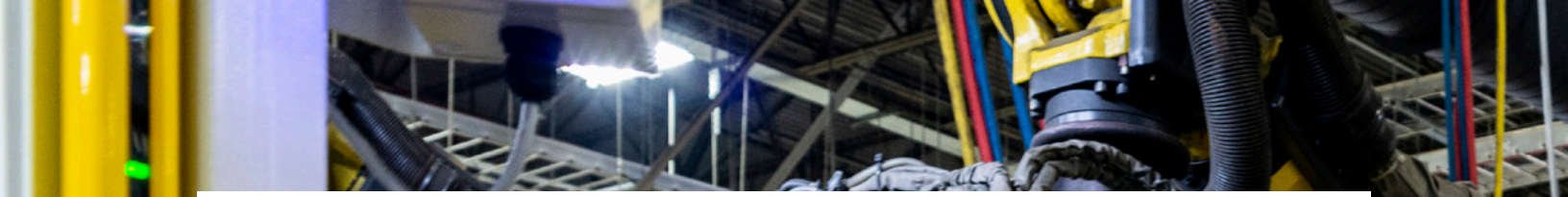
The Toyota Motor Manufacturing of America Supplier Visualization Initiative was established to provide greater visibility and control of the Toyota supply chain. As part of this initiative, Toyota implements a Shipping Confirmation System (SCS) to ensure accurate supplier shipping transactions and just-in-time (JIT) material delivery. The Plex Smart Manufacturing Platform has passed Toyota's 66-point certification program and is an approved platform that supports Toyota's initiative.

Plex Supports Toyota's Supplier Visualization Initiative with:

Real-time automated communication with the Toyota Shipping Confirmation System.

Full skid manifest allowing material to be tracked all the way from finished good customer to raw material supplier.

Returns management via RFID labels.



TOYOTA CORE PRINCIPLES:

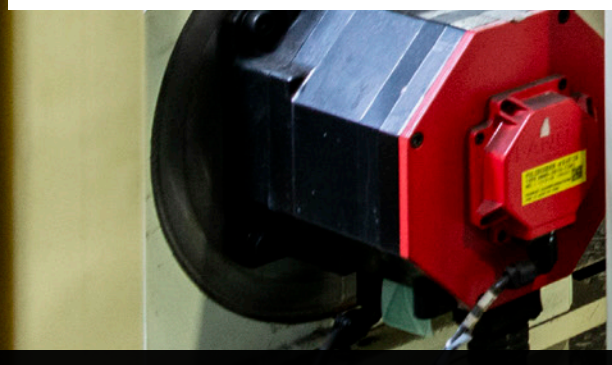
Toyota uses the following four core pillars to outline its processes and supplier requirements to drive efficiency, and Plex supports all of these:

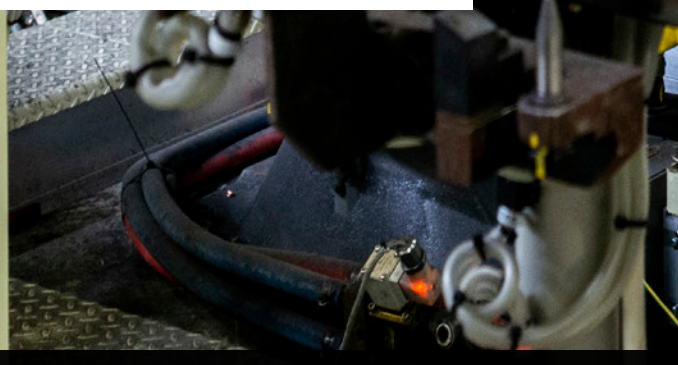
Kanban – Plex's real-time serialized inventory and the use of electronic Kanban cards ensure there is no lag between when material is consumed and cards are replenished.

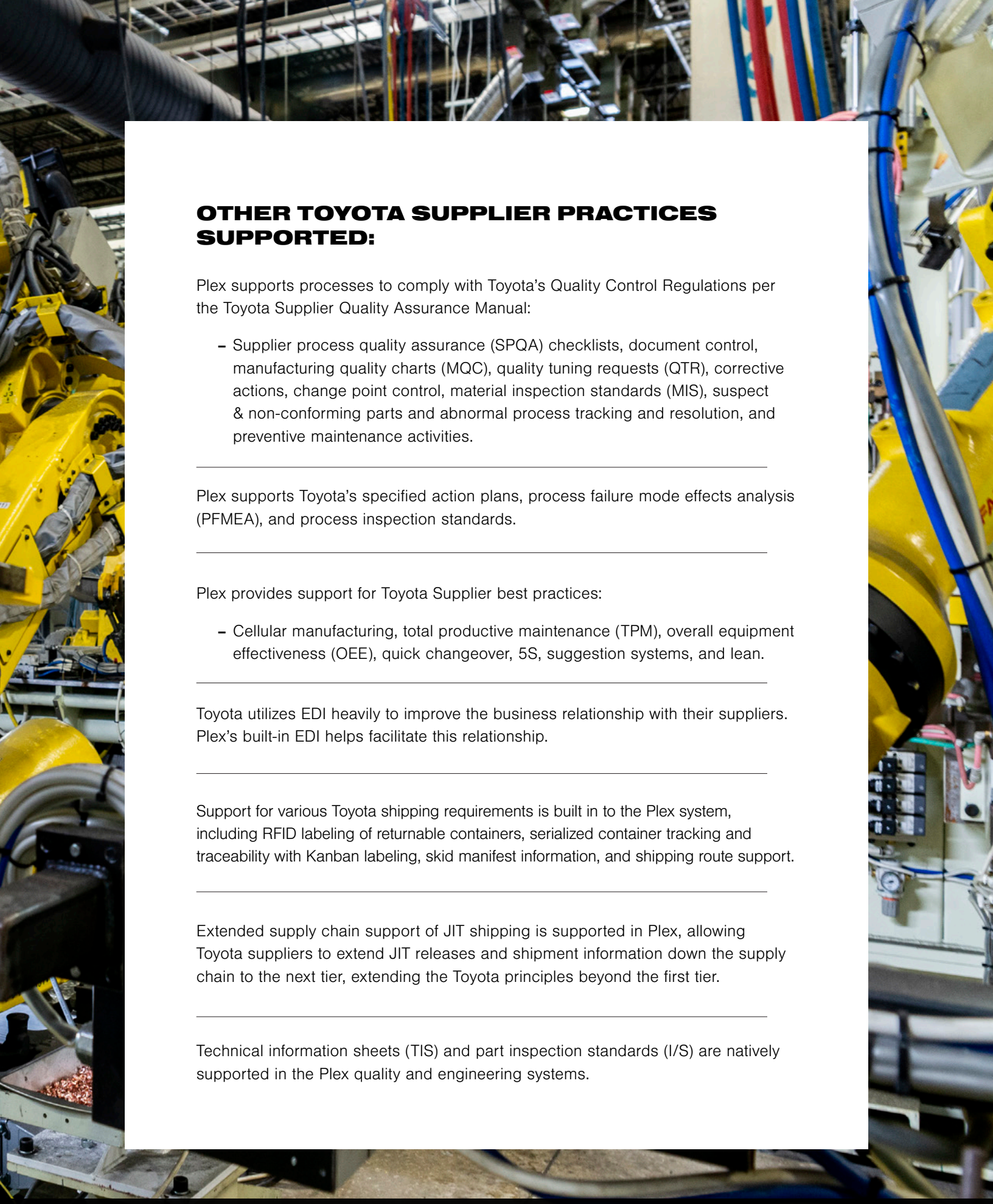
Jidoka – Plex's integrated quality system enables suppliers to build control plans, in-process inspections and associated reaction plans directly into the manufacturing process.

Kaizen (continuous improvement) – Plex's production control panel gives operators full visibility to Toyota production targets and objectives. This includes a full suggestion system utilizing the Kaizen philosophy, putting more responsibility on operators and empowering them to offer improvements directly from the production line.

Just In Time (JIT) – Through the use of Plex's real-time inventory visibility of raw material and work-in-process, Plex customers have the information they need for planning purposes to produce only what's needed and no more/less. JIT shipping also supports multiple shipments to the same plant.







OTHER TOYOTA SUPPLIER PRACTICES SUPPORTED:

Plex supports processes to comply with Toyota's Quality Control Regulations per the Toyota Supplier Quality Assurance Manual:

- Supplier process quality assurance (SPQA) checklists, document control, manufacturing quality charts (MQC), quality tuning requests (QTR), corrective actions, change point control, material inspection standards (MIS), suspect & non-conforming parts and abnormal process tracking and resolution, and preventive maintenance activities.

Plex supports Toyota's specified action plans, process failure mode effects analysis (PFMEA), and process inspection standards.

Plex provides support for Toyota Supplier best practices:

- Cellular manufacturing, total productive maintenance (TPM), overall equipment effectiveness (OEE), quick changeover, 5S, suggestion systems, and lean.

Toyota utilizes EDI heavily to improve the business relationship with their suppliers. Plex's built-in EDI helps facilitate this relationship.

Support for various Toyota shipping requirements is built in to the Plex system, including RFID labeling of returnable containers, serialized container tracking and traceability with Kanban labeling, skid manifest information, and shipping route support.

Extended supply chain support of JIT shipping is supported in Plex, allowing Toyota suppliers to extend JIT releases and shipment information down the supply chain to the next tier, extending the Toyota principles beyond the first tier.

Technical information sheets (TIS) and part inspection standards (I/S) are natively supported in the Plex quality and engineering systems.

EMBRACING THE TOYOTA WAY

Toyotetsu America Inc. (TTAI) is one of Toyota's largest North American suppliers and fully embraces The Toyota Way in lean manufacturing. TTAI is a true JIT operation and carries only two hours of inventory at any time in a million-square-foot facility. This is accomplished by following the Toyota Production System and utilizing Plex's built-in electronic Kanban system paired with 100% PLC Integrated workstations. As products flow down the line they're recorded in the Plex Smart Manufacturing Platform automatically, providing key work-in-process visibility and allowing them to react quickly to any changes that may occur.

TTAI has worked closely with Plex and Toyota to enable:

- Integration of the Toyota Production System throughout their supply chain.
- Visibility and traceability from Toyota Tier 1 suppliers to the raw material suppliers.
- Integration to the Toyota Supplier Portal (Toyota certified).

TTAI has also realized:

- 100% machine integration for driving OEE from the shop floor to the top floor.
- Digital management of its lean processes, including Kanban, JIT, and sequencing, helping the company maintain a maximum of two hours of inventory in a million-square-foot facility.

ABOUT PLEX

Plex Systems, Inc.® is the leader in cloud-delivered smart manufacturing solutions, empowering the world's manufacturers to make awesome products. Our platform gives manufacturers the ability to connect, automate, track, and analyze every aspect of their business to drive transformation. The Plex Smart Manufacturing Platform includes solutions for manufacturing execution (MES), ERP, quality, supply chain planning and management, Industrial IoT, and analytics to connect people, systems, machines, and supply chains, enabling them to lead with precision, efficiency, and agility.