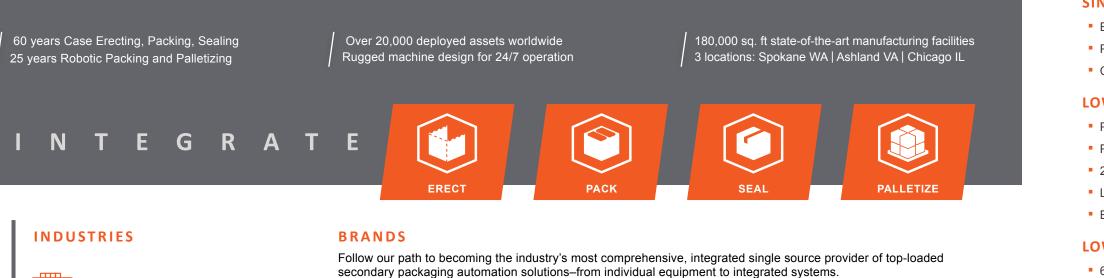
# COMPLETE SECONDARY PACKAGING AUTOMATION SOLUTIONS







We design, build, integrate and service secondary packaging automation solutions to help a diverse set of manufacturers and distributors meet their growth and profitability objectives.













E-COMM & WAREHOUSE DISTRIBUTION



Launched in 2015

Pearson Systems Solutions Group takes packaging line integration to the next level. Our specialists in system design, third-party equipment integration, product handling and project management ensure that no matter how complex, your turnkey solution will meet agreed upon expectations.

FLEXICELL

Flexicell exclusively focuses on solving picking, packing and palletizing automation challenges in the most efficient, flexible and scalable wavrobotically. With over 25 years of experience, Flexicell is the longest established robotics-only solution provider in the packaging industry.





Moen Industries' specialized expertise in bliss box and tray formers, as well as sealers, filled a strategic gap in Pearson's portfolio. Ideal for heavy, non-self-supporting products, bliss boxes provide a durable and cost-effective alternative to regular RSC and HSC cases.



Acauired in 2008

Acquired

in 2018

Goodman Packaging Equipment provided Pearson with advanced product handling expertise. The strategic acquisition enabled Pearson to pursue increasingly complex packing challenges and paved the way for our company to become the system integrator that we are today.

- 24/7 live service support

# PARTNER WITH PEARSON

## SINGLE SOURCE SUPPLIER FOR ENTIRE SECONDARY PACKAGING LINE

Erect, pack, seal and palletize with a uniform user interface Product handling and turnkey system design, build and integration

Comprehensive aftermarket service and support

## LOW TOTAL COST OF OWNERSHIP

- Premier industry lead times for faster delivery and shorter down payment cycles
- Pearson User Centric Design (UCD) to overcome human-related operating challenges
- 24/7 rugged machine design optimized for durability and long equipment life
- Long-term performance with Pearson's Complete Care Aftermarket Support
- Extensive training and FANUC Certified Service Provider status enables us to service FANUC robots

## LOW-RISK / RELIABLE SOLUTIONS

- 60 years of erecting, packing and sealing and 25 years of robotic integration experience guarantees reliable and thought-out solutions
- Dedicated R&D test area for proofs of concept
- Pearson's consultative process leads to tailored solutions with agreed upon results
- Project management provides ongoing visibility to meet timelines and budgets



# SYSTEM INTEGRATION

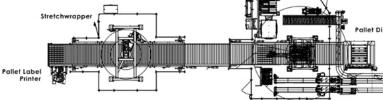
From line design to build, robotic testing and integration, material handling, mechanical and electrical engineering, project management, technical training, onsite validation and productivity support, Pearson's Systems Solutions Group is dedicated to providing turnkey solutions that maximize Overall Equipment Effectiveness (OEE) and minimize Total Cost of Ownership (TCO).

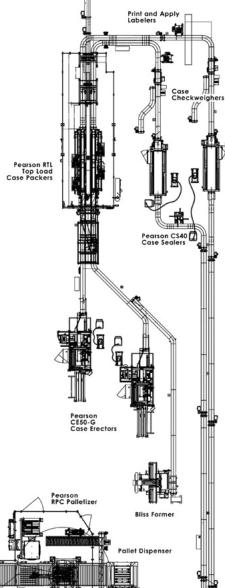
# 

## TURNKEY CAPABILITIES

- System Line Design
- Material and Product Handling
- Electrical and Controls Systems
- Vendor and Project Management
- Mechanical and Electrical Infrastructure
- Installation and Site Management
- Validation and Acceptance











Pearson Depallo Robot







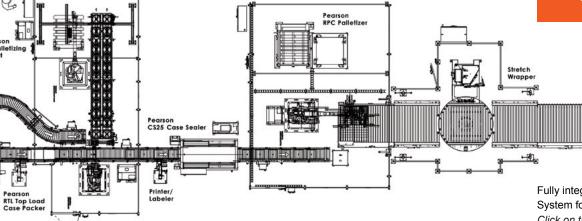
#### PARTNERSHIP BENEFITS

Choose all major line components from our product portfolio:

- Shorter lead times
- Uniform user interface and operation
- Uniform design philosophy and wiring
- Reduced failure points
- PackML compliance for ease-of-integration and serviceability

As a turnkey systems provider, rely on us for:

- Vendor management and a pre-qualified supplier network
- Comprehensive project and risk management
- Reliable support throughout design, build, install and start-up
- Cohesive System Validation



Fully integrated Erect, Pack, Seal, and Palletize System for Wire Spools *Click on the image to view the video* 



# ERECT

#### CASE ERECTOR **KEY BENEFITS:**

Designed for 24/7 continuous operation Tolerant of knockdown case variances Support for wide range of case sizes Reliable throughput

User-friendly HMI Fast changeovers Ergonomic magazine height







**KEY BENEFITS:** 

availability

Click on the image to view video. Please note, video highlights glue version. For additional videos go to www.PearsonPkg.com











	Compact Frame Vertical Case Erectors	5	Intermediate Frame Horizontal Case Erectors		Two Piece Bliss Former w/ H-Divider	Three Piece Bliss Formers		
	CE15	CE25	CE35	CE50	BF25	BF30	BF40	
Key Features	Powered dual chain drive magazine Independent articulated blank singulation Opposing vacuum case forming Score line control during flap folding Synchronous drive case movement	Powered dual chain drive magazine Independent articulated blank singulation Opposing vacuum case forming Score line control during flap folding Synchronous drive case movement	Powered dual chain drive magazine Independent articulated blank singulation Opposing vacuum case forming Score line control during flap folding Synchronous drive case movement Integrated case tip off	Powered dual chain drive magazine Independent articulated blank singulation Opposing vacuum case forming Score line control during flap folding Synchronous drive case movement Integrated case tip up	Gravity powered wrap and insert panel magazines Powered end panel magazines Independent articulated blank singulation Active forming section Cases exit machine upright reducing floor space	Gravity powered wrap and insert panel magazines Powered end panel magazines Independent articulated blank singulation Active forming section Cases exit machine upright reducing floor space	Gravity powered wrap and insert panel magazines Powered end panel magazines Independent articulated blank singulation Active forming section Cases exit machine upright reducing floor space	
Case Support	HSC RSC	HSC RSC RSC w/ integral divider CSSC	HSC RSC RSC w/ integral divider CSSC Ultra-small case sizes Oversized case sizes	HSC RSC RSC w/ integral divider CSSC Ultra-small case sizes	2-piece bliss box with H divider	3-piece bliss box	3-piece bliss box	
Speed	Up to 15 CPM	Up to 25 CPM	Up to 35 CPM	Up to 50 CPM	Up to 25 CPM	Up to 30 CPM	Up to 40 CPM	
Case Size Range (in)*	L 7.5-24   W 7.5-16   D 3-18.5	L 8-24   W 5.5-16   D 3-18.5	L 5-30   W 3.5-24   D 3.5-26	L 5-23.5   W 3.5-16   D 3.5-18	L 9-25   W 8-25   D 5-14	L 8-24   W 8-24   D 4-12	L 8-20   W 8-20   D 4-12	
Sealing	Таре	Tape • Hot Melt Glue	Tape • Hot Melt Glue	Hot Melt Glue	Hot Melt Glue	Hot Melt Glue	Hot Melt Glue	
Appx. Mach. Size (ft)	L8 W8 H7	L 12-13   W 5   H 6-7	L 15-20   W 6-10   H 6-8	L 20   W 8   H 8-9	L 14   W 7   H 11	L 13   W 11   H 10	L 12   W 13   H 8	
Controls	AB PLC	AB CompactLogix PLC PanelView Color HMI	AB CompactLogix PLC PanelView Color HMI	AB CompactLogix PLC PanelView Color HMI	AB CompactLogix PLC PanelView Color HMI	AB CompactLogix PLC PanelView Color HMI	AB CompactLogix PLC PanelView Color HMI	



#### **BLISS FORMER**

Designed for 24/7 continuous operation for maximum

Supports display/retail-ready and shipper cases

Tolerant of knockdown wrap and end panel variances Support for wide range of bliss box types/sizes User-friendly HMI





\*Range represents machine family. Actual ranges vary by individual model.



#### **CUSTOM ROBOTIC PACKING CAPABILITIES**

- Product handling and transfer including sorting, orienting, and collating
- Grouping of products to form pack patterns including vertical and/or horizontal loading techniques, interleaved, stacked, on edge, on end, rainbow or variety packs, bulk and shelf-ready
- Various product conveying technologies including servo-collating, diverting, tabletop, mat top and independent cart technology to meet the requirements of the application
- · Ability to meet requirements of food-grade, sanitary, washdown, freezer, and high-humidity environments
- Experience with articulated arm, delta and Scara robots to select best fit for the application based on capability, flexibility and changeover
- Vision guidance and line tracking to inspect, detect, sort and manipulate products on the fly or balance the load between robots
- · Application-specific custom end-of-arm tool with optional automatic tool changeover
- Robotic simulation for proof of concept and visualization
- Human Machine Interface (HMI) supported by our proprietary User Centric Design to enable operators and maintainers to quickly learn and efficiently use the equipment
- PackML standardized programming language to ease integration and servicing
- Support for a wide variety of products and case types including chipboard cartons, RSC and HSC corrugated cases, bliss boxes, trays, and warehouse totes



#### **TOP LOADER KEY BENEFITS:**

Configured to meet specific application requirements Highly reliable robotic arm design with MTBF of over 80,000 hours



Small footprint saves valuable floor space Comprehensive easy to use HMI simplifies machine operation Articulated pick and insert ensures reliable throughput



Click on the image to

www.PearsonPkg.com

view video. For additional videos go to



	Custom Robotic Top Loaders	Robotic Partition Inserters			Poly Bag Inserters	
		RPI20	RPI38	RPI55	BI18	BI25
Key Features	Custom end-of-arm tools Articulated arm or delta robot models Vision and line tracking solutions Continuous case motion designs More capabilities: see list to left of the table	Fast tool-less changeover Ergonomic blank load height Line tracking case conveying Robotic arm provides over 100,000 hrs MTBF	Fast tool-less changeover Ergonomic blank load height Line tracking case conveying Robotic arm provides over 100,000 hrs MTBF	Fast tool-less changeover Ergonomic blank load height Line tracking case conveying Robotic arm provides over 100,000 hrs MTBF	Patented mandrel design for consistent bag placement Anti-static bars for optimized bag handling Supports pre-sealed and perforated roll stock Opposing vacuum plenums 4 corner cuffing bars	Patented servo-controlled mandrel design for consistent bag placement Anti-static bars for optimized bag handling Supports pre-sealed and perforated roll stock Opposing vacuum plenums 4 corner cuffing bars
Case Support	Chipboard cartons RSC HSC Bliss boxes Trays Totes	RSC Tablock RSC HSC CSSC	RSC Tablock RSC HSC CSSC	RSC Tablock RSC HSC CSSC	RSC Tablock RSC HSC FOL Three-piece bliss shipper	RSC Tablock RSC HSC FOL Three-piece bliss shipper
Speed	Application specific ranging from 50-1,500 products/min	Up to 20 PPM	Up to 38 PPM	Up to 55 PPM	Up to 18 CPM	Up to 25 CPM
Case Size Range (in)*	Application specific	L 8-16   W 5-14   D 3-14	L 8-16   W 5-14   D 3-14	L 8-16   W 5-14   D 3-14	L 9.5-24   W 9.5-17   D 10-24	L 9.5-24   W 9.5-17   D 10-24
Approx. Mach. Size (ft)	Application specific	L11.9   W 10.7   H 7.5	L 16.5   W 10.7   H 7.5	L 22.75   W 10.7   H 7.5	L 10   W 8   H 8	L 10   W 8   H 9
Controls	FANUC PMC   AB CompactLogix PLC PanelView Color HMI	AB MicroLogix PLC PanelView Color HMI	AB MicroLogix PLC PanelView Color HMI	AB MicroLogix PLC PanelView Color HMI	AB MicroLogix PLC PanelView Color HMI	AB MicroLogix PLC PanelView Color HMI



# FLEXiCELL

- Continuous Motion D Style Side Grip Conveyor eliminates need to stop cases to have inserted installed

#### **BAG INSERTER KEY BENEFITS:**

Small footprint

Smooth and consistent bag placement Fast changeovers with scales, pointers, and quick release handles Advanced mandrel design for consistent bag insertion Inserts and cuffs bag for simplified drop packing applications Supports both flat and gusseted bags













#### CASE SEALER **KEY BENEFITS:**

Designed for 24/7 continuous operation for maximum availability Reliable throughput Support for wide range of case sizes User-friendly HMI Fast changeovers















	Compact Frame Case Sealer	Intermediate Frame Case Sealers		Case Sealer For Small and Random Case Sealer Irregular Cases		Bliss/Tray Side Flange Sealer	Bag Uncuffer	
	CS15	CS25	CS40	CS50	CS30-RT	SS45	UC15	
Key Features	Fully automatic Continuous motion Independent roller system for smooth and reliable case transfer	Standard metering stop Radiused trailing flap kicker Precision closing plows Spring loaded self-compensating side belts Squaring rollers	Standard metering stop Radiused trailing flap kicker Precision closing plows Spring loaded self-compensating side belts Squaring rollers	Standard metering stop Radiused trailing flap kicker Precision closing plows Spring loaded self-compensating side belts Squaring rollers	Automatically adjusts to support a wide case range Standard metering stop Radiused trailing flap kicker Precision closing plows Spring loaded self-compensating side belts Squaring rollers	Fully automatic Continuous motion Minimizes flagging and skewing issues Urethane compression wheels provide positive glue bond	Integrated side rail guards 6 precision tabs reliably un-cuffs bag Case flaps are fully controlled during bag closing Fast changeover	
Case Support	RSC CSSC	RSC CSSC FOL Bliss shipper	RSC CSSC FOL Bliss shipper	RSC CSSC Bliss shipper Ultra-small cases sizes	RSC CSSC Bliss shipper	Tray Bliss	RSC HSC	
Speed	15-29 CPM depending on case length	25-42 CPM depending on case length	40-67 CPM depending on case length	Up to 50 CPM	Up to 30 CPM	Up to 45 CPM	Up to 15 CPM	
Case Size Range (in)*	L 6-24   W 4-16   D 3-18.5	L 8-24   W 5-16   D 4.5-18.5	L 8-24   W 5-16   D 4.5-18.5	L 5-16   W 3.5-12   D 3.75-14	L 10-20   W 9-17   D 2.75-10	L 7-18   W 8-20   D 4-14	L 9.5-28   W 6.5-17   D 4.75-19.25	
Sealing	Таре	Hot Melt Glue • Tape	Hot Melt Glue • Tape	Hot Melt Glue	Таре	Hot Melt Glue	Fan Fold • Tape	
Approx. Mach. Size (ft)	L6 W4 H5	L 8-9   W 4-5   H 5-6	L 8-12   W 5   H 5	L 13   W 5   H 5	L 16-19   W 6   H 4-8	L 14   W 5   H 5	L 12-15   W 6   H 6-7	
Controls	AB MicroLogix PLC	AB CompactLogic PLC PanelView Color HMI	AB MicroLogix PLC PanelView Color HMI	AB MicroLogix PLC PanelView Color HMI				

#### BLISS/TRAY SIDE SEALER **KEY BENEFITS:**

Supports wide tray range Fast changeovers with scales, pointers and quick release handles Reliable throughput



#### **BAG UNCUFFER KEY BENEFITS:**

Small footprint Fast changeovers with scales, pointers and quick release handles Reliable throughput



\*Range represents machine family. Actual ranges vary by individual model.





#### **CUSTOM ROBOTIC PALLETIZATION CAPABILITIES**

- Slow- to medium-speed case and row palletizers, high-speed full layer palletizers and depalletizers
- Ability to meet stringent requirements of food-grade, sanitary, washdown, freezer and high-humidity environments
- Pallet patterns include column-stacked, interlocked or pin-wheel configurations, mixed loads or variable pattern placement programming
- Availability of low-level or high-level infeed options
- Accurate sorting of cases from single infeed to multiple outfeeds using barcodes
- Insertion of slip sheets and single- or multiple-tier sheets to steady the product on the pallet
- Pallet handling using conveyors, transfer carts and automated or autonomous guided vehicles
- Safety guarding to include options such as fencing, light curtains or area sensors
- Application-specific, customized end-of-arm tools with optional automatic tool changeover
- Four- to six-axes robots, selected to meet the application's speed, product weight and size requirements
- Integration of stretch wrappers and other third-party OEM equipment
- Easy-to-use Human Machine Interface (HMI) supported by our proprietary User Centric Design including the ability to restrict access depending on authority level
- Easy-to-use Pallet Configuration Tool to quickly create, modify, copy or clear recipes on the HMI or adjust parameters such as case or pallet height or number of layers
- PackML standardized programming language to ease integration and servicing
- Support for wide variety of applications, including corrugated cases and cartons, bliss boxes, trays, totes, bags, bales, pails, drums, bundles, bottles and jugs



#### CUSTOM PALLETIZER **KEY BENEFITS:**

Click on the image

to view video. For additional

or <u>Flexicell.com</u>

videos go to PearsonPkg.com

Custom designed for each project requirement and plant layout Flexibility to palletize a variety of products and pallet patterns Flexibility to palletize multiple lines with a single robot Highly reliable robotic arm design with over 80,000 hours MTBF



#### STANDARD PALLETIZER **KEY BENEFITS:**

Continuous operation Reliable Cost-efficient User-friendly



	Custom Palletizing	Compact Palletizer	Dual Floor Position Palletizer	Over / Under Palletizer	Pallet Handling Palletizer
		RPC-C	RPC-DF	RPC-OU	RPC-PH
	Slow to medium-speed case and row palletizers High-speed full layer palletizers Tailored pallet patterns to fit application	The smallest, fully contained palletizing unit for a single pallet and load/unload function utilizing a pallet jack or forklift	The robot completes one pallet station before switching to the other, allowing time to replace the full pallet without stopping the work cell	Empty pallets are supplied on the bottom level and full pallets are discharged on the upper level	An empty pallet is picked by the robot and placed at the palletizing location; full pallets are conveyed out of the work cell
Footprint	Application specific	10'8" x 7'9" Preassembled for easy installation	12'10" x 9'8" Preassembled for easy installation	14'9" x 9'5" Preassembled for easy installation	19'9" x 11'2" Preassembled for easy installation
Max. Case Rate	Application specific	Up to 12 CPM	Up to 12 CPM	Up to 12 CPM	Up to 12 CPM
Max. Case Weight	Application specific	Up to 40 lbs	Up to 40 lbs	Up to 40 lbs	Up to 40 lbs
Max. Pallet Height	Application specific	Up to 72 in	Up to 72 in	Up to 72 in	Up to 72 in
Case Infeed & Positioning Conveyor	Multiple infeed/discharge configurations	TGW IntelliROL motorized roller conveyor with reference pusher	TGW IntelliROL motorized roller conveyor with reference pusher	TGW IntelliROL motorized roller conveyor with reference pusher	TGW IntelliROL motorized roller conveyor with reference pusher
Robot	Application-specific four- to six-axes	FANUC M710iC/50H	FANUC M710iC/50H	FANUC M710iC/50H	FANUC M710iC/50H
End-of-Arm Tooling	Application-specific custom design Automatic tool changeover	Vacuum gripper for single case handling	Vacuum gripper for single case handling	Vacuum gripper for single case handling	Vacuum gripper for single case handling
Pallet Handling	Conveyors Transfer carts Autonomous guided vehicles	Manual	Manual	Conveyor	Conveyor
Safety Guarding	Fully-interlocked perimeter guard package using fencing, light curtains or area sensors	Includes light curtain at pallet exit location	Includes light curtain at pallet exit location	Includes light curtain at pallet exit location	Includes light curtain at pallet exit location
Control Cabinet	AB PLC	AB PLC	AB PLC	AB PLC	AB PLC
Operator Interface	10 in AB PanelView Color HMI Pallet Configuration Tool	10 in AB PanelView Color HMI Pallet Configuration Tool	10 in AB PanelView Color HMI Pallet Configuration Tool	10 in AB PanelView Color HMI Pallet Configuration Tool	10 in AB PanelView Color HMI Pallet Configuration Tool



Small footprint Low maintenance Short lead times Quick start-up cycles







# **USER CENTRIC DESIGN**

## WHAT IS UCD?

A design philosophy focused on the user of the equipment to overcome common challenges:

## UCD COMPONENTS

#### Mechanical

- Reduced changeover points
- Improved access to changeover points
- Ergonomic adjustments
- Improved visibility inside machine
- Easy-to-recognize changeover points and adjustment settings

#### Human Machine Interface

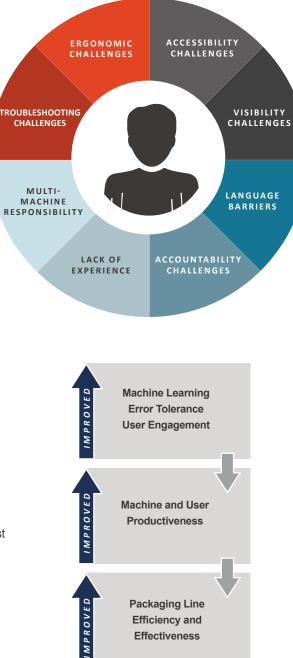
- Large, colored, high-contrast screen
- Larger images, icons and interactive maps
- Standardized design, terminology and icon usage
- Reduced page count, simplified navigation and information
- Interactive changeover guide
- Interactive fault recovery guide
- Live sensor map
- Preventive maintenance
- Output test for manual control over individual air cylinders and vacuum sections

#### Supplemental Items

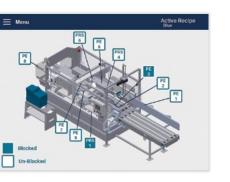
- PackML consistent programming language for faster integrations and improved serviceability
- Remote Access to HMI and PLC for reduced service lead times and cost

## IMPACT

- Improves changeover and fault recovery speed
- Enables inexperienced and new users to be independent faster
- Promotes equipment maintenance and extended machine life







Line Design

•	
Machine Requirement Consultation	
Project Management	
Commissioning Support	
Training	
Technical	
Support	
Remote Access	
Parts	
Preventive Maintenance	
Equipment Upgrades	
Custom	
Modifications	
Machine	
Rebuilds	

# COMPLETE CARE

We want to be your single source supplier. A real partner-that simple! Through our comprehensive service offering, you are well positioned to select the right solution, meet your production goals and maintain optimal system performance.

> From equipment selection to material handling, third party integration and structural requirements, rely on our applications engineering team to design an optimal solution within given constraints.

An experienced and highly technical support team helps determine necessary machine configurations to meet your specific needs.

All projects are supported by PMP-certified project managers to ensure schedule and budget goals are met.

Seasoned technicians verify the equipment's mechanical, electrical and safety functions and proper setup for case sizes. They perform test runs, fine tune as necessary and ensure operator and maintenance personnel are proficient with the machine's operation and changeover process.

Invest in the expertise of your own internal resources. Through customized, hands-on training we expand and deepen the skills and knowledge of your operators, programmers and training staff and enable them to become more efficient at operating, maintaining and troubleshooting your systems.

Always available when you need us-24/7 live support. We also provide production run support, technical consulting, machine audits and safety inspections.

Opt for secure, remote connectivity for fast, efficient help without the expense of an on-site service technician. Increase response time and lower your maintenance cost.

Whether you need emergency parts, want to restock your spare part kits or require assistance with identifying a part, our team is only a call away. We maintain an inventory of quality-approved spare parts and consumables.

A holistic preventive maintenance program ensures that your equipment performs at its maximum potential and reduces the risk of unexpected downtime and major repairs.

Check with your Aftermarket Sales Manager for performance enhancing electrical or mechanical upgrades for your equipment. In addition, guarding upgrades are available to meet customer-specific requirements.

Depend on us for machine design changes and engineered solutions to accommodate case or bag size modifications, product or pack pattern changes, new pallet configurations, etc.

Return equipment to like-new operating condition. Increase production, optimize performance and extend the life of your equipment with in-field or factory rebuilds and reinstate your 1-year machine warranty.





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