



El valor de la evaluación de la base instalada

Syndi Velasco • Servicios BDL Andina • 11•01•2023



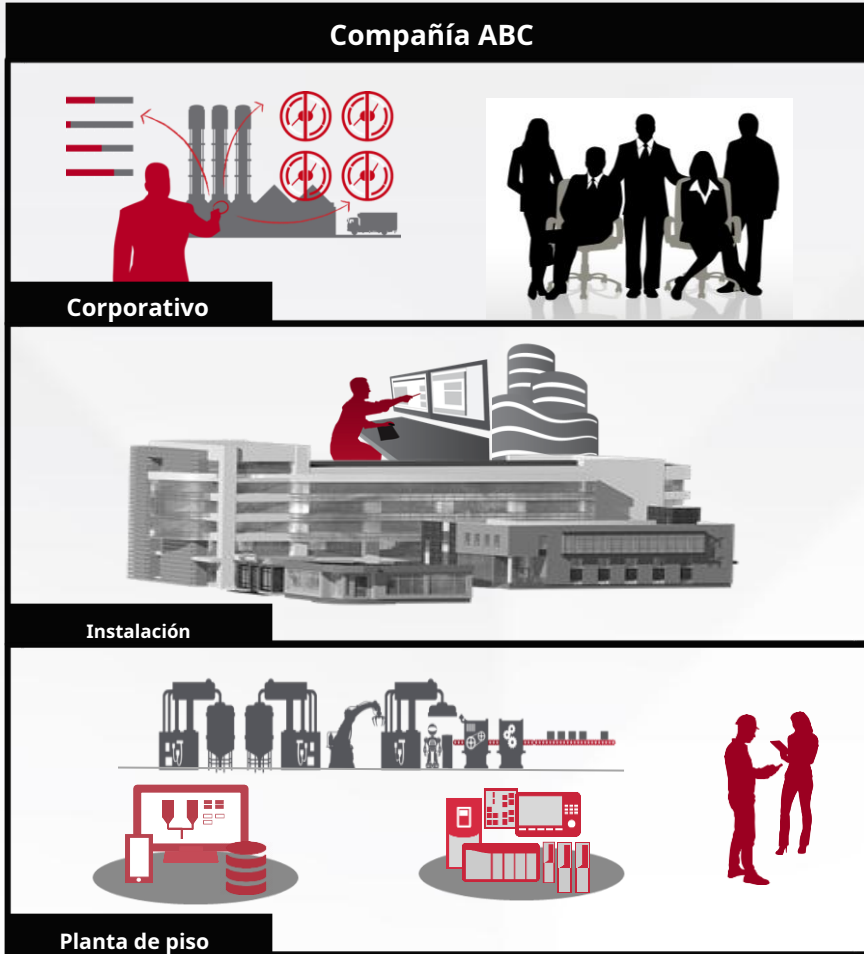
expanding human possibility®



INTERNO
Uso no autorizado y
divulgación externa prohibida



Preguntas frecuentes de las empresas industriales



¿Cómo sé que estoy haciendo las inversiones correctas?
¿Qué proyectos de capital debo priorizar?
¿Dónde están mis riesgos?
¿Cómo puedo mejorar mis operaciones?
Más...

¿Cómo puedo asegurarme de que mis recursos estén debidamente capacitados? ¿Cómo puedo saber qué activos son más críticos que otros?
¿Cómo puedo saber dónde impactan los cambios en el producto?
¿Mi base instalada?
¿Dónde debería gastar mi presupuesto?
Más...

¿Este producto tiene soporte técnico? ¿Dónde puedo obtenerlo?
¿A qué servicios tenemos acceso?
¿Dónde están mis controladores L75?
Más...

¿Cómo puedo tomar decisiones más informadas y basadas en datos?

Reduce costes y mejora tu mantenimiento decisiones



Decrease costs

Simplified budgeting for inventory and repairs

Repair components vs. buying new

Reduce quantity of repairs and extend component life

Minimize total cost of inventory ownership



Maximize productivity

Improve Mean Time to Repair (MTTR) and Mean Time Between Failures (MTBF)

Critical parts available on-site

Identify common failure modes

Digital tools enable faster decision-making

Increase machine uptime



Optimize inventory

Access reports and dashboards to increase your installed base visibility and manage your assets

Match your spares to your production needs

Flexible options to update inventory as your installed base changes

Support for legacy and non-Allen-Bradley® parts

El impacto de la evaluación de la base instalada

Le ayudamos a lograr estos resultados comerciales:



Reducido

Mantenimiento, reparación y mano de obra

Gastar



Reducido

Inventario

Costos



Menos

No planeado

Falta del tiempo



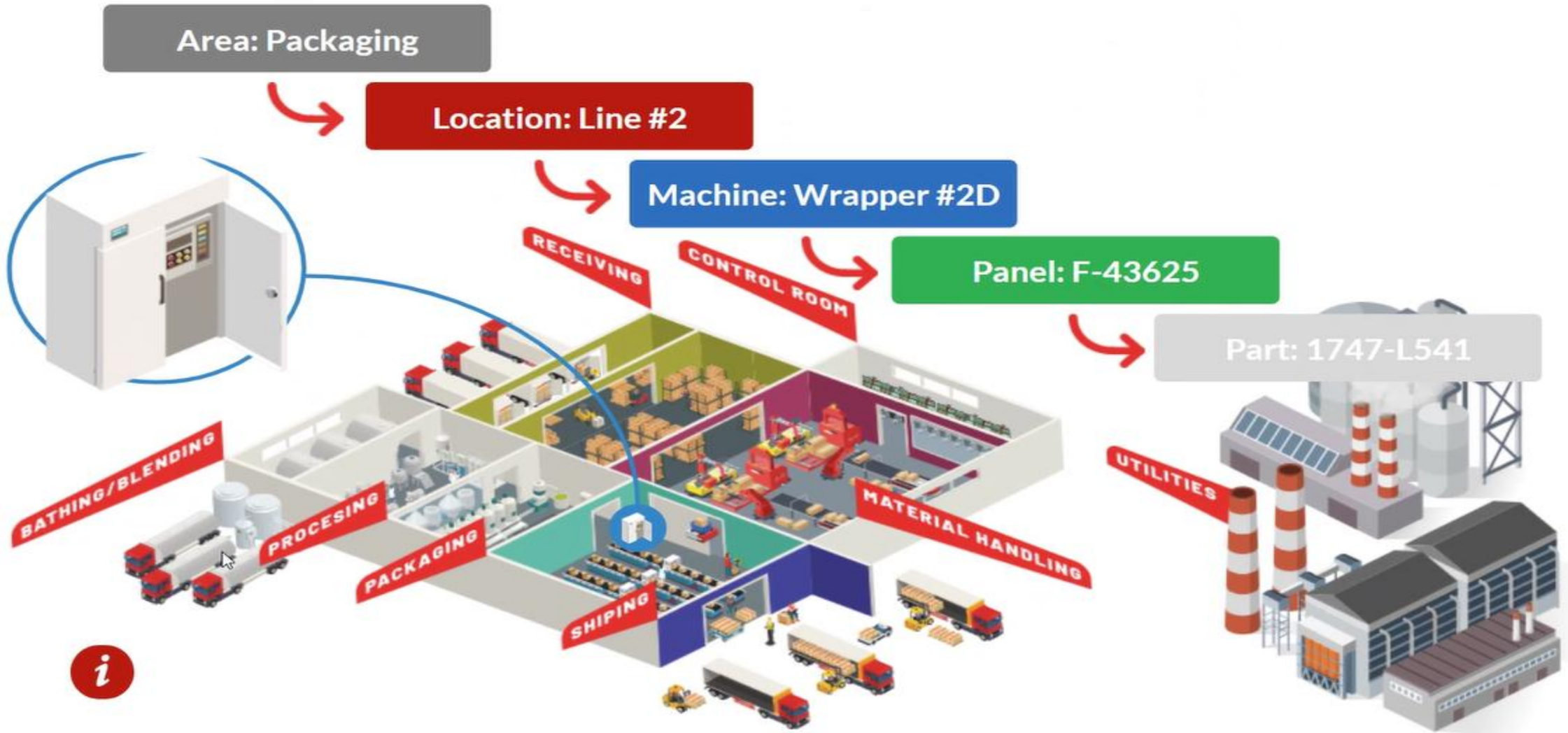
Mejorado

Fiabilidad

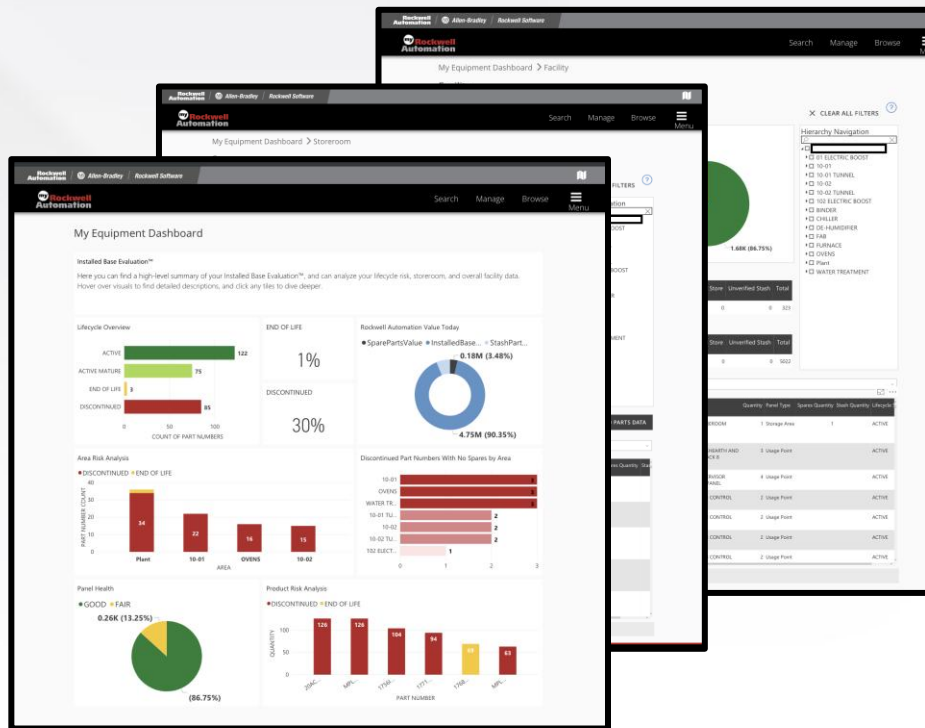
- **Evaluar el riesgo en sus piezas y su condición ambiental.**
- **Conozca los riesgos de obsolescencia Identifique los repuestos faltantes del inventario**
- **Identificar el repuesto del inventario faltante**
- **Definir planes de mejora y modernización**



¿Cómo funciona?



Obtén acceso al Software Mi Equipo por 1 año con total cobertura



- Colaborar con el miembro del equipo a través de la función “compartir”
- Terarquía del asno común
- Vista en tiempo real del riesgo del ciclo de vida con actualizaciones automáticas del ciclo de vida
- Fuente única y verificada de datos
- Accesible a través de dispositivos

Alcance de los productos básicos de la IBE				
Nivel de recopilación de evaluación base instalada	Nivel 1 Rockwell Automation Reparable	Nivel 2 Rockwell Automation & Reparable por terceros	Nivel 3 Rockwell Automation Repairable & <u>Consumible</u>	Nivel 4 Rockwell Automation & Reparable por terceros & Consumible
Interfaces humano-máquina (HMI)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Controladores lógicos programables (PLC)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Entradas y salidas distribuidas (I/O)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Arrancadores/variadores de velocidad	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Servo controladores</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Controladores de <u>motion</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dispositivos de seguridad electrónicos (protectores de luz, barreras de luz, etc.)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Entradas y salidas distribuidas remotas (I/O)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Controladores robóticos	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sensores	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Relés de seguridad	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Contactores, Relés de Uso General, Disyuntores	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Apertura</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



Base Instalada Evaluación TM Dimensionamiento



PROBADOR COTIZACIÓN

Usando el servicio

Herramienta de propuesta

Entender los objetivos del cliente

- Mitigación Obsolescencia
- Racionalización de refacciones
- Preparar presupuestos CAPEX
- Colección de datos ya sea parcial o total de la planta

Identificar si icar nivel de coleccion

- Nivel 1, 2, 3, 4

Contenido de paneles de control

- Determinado por el nivel de colección e incremento cuando se adicionan, partes de terceros, CCMs y Si I letas

Niveles de evaluación de la base instalada

Productos
Reparables
Rockwell

Productos
Reparables
Rockwell / Terceros

Productos
Reparables y
Consumibles
Rockwell

Productos
Reparables y
Consumibles
Rockwell / Terceros



SIEMENS

ABB



Schneider
Electric

OMRON



RA Rockwell
Automation

SIEMENS

ABB

Schneider
Electric



OMRON

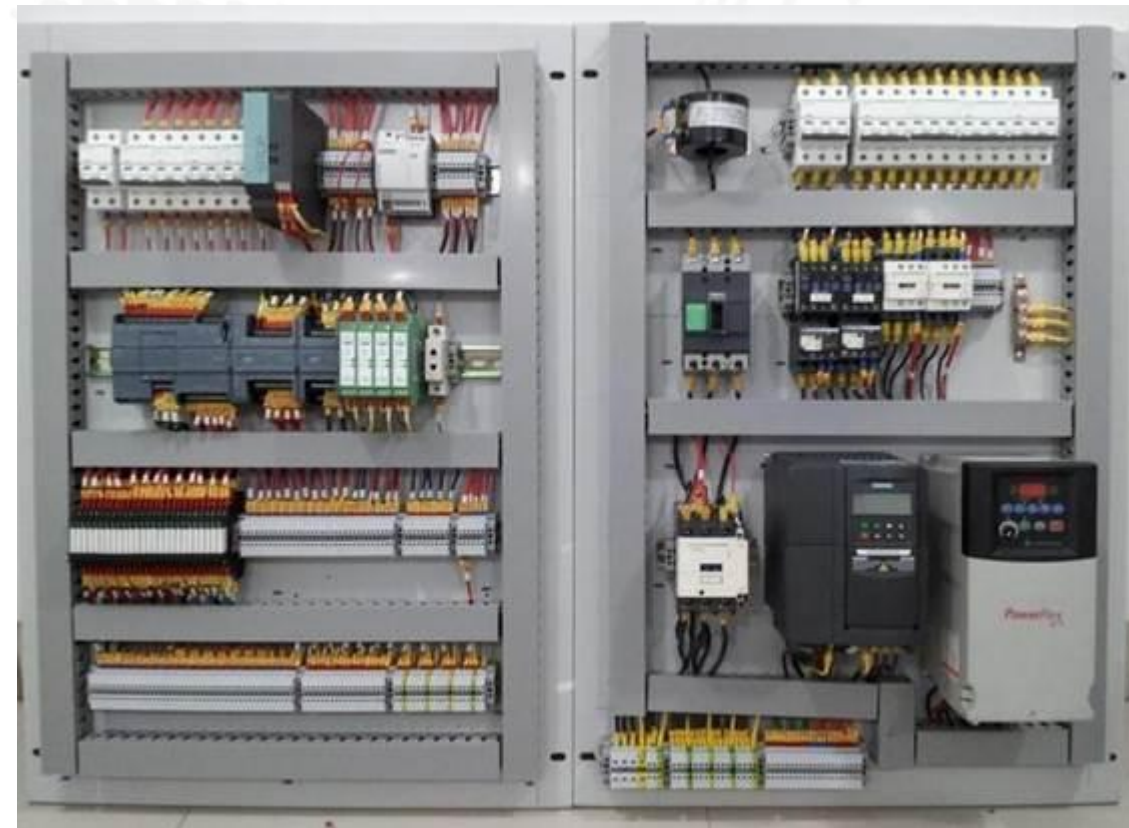
Tamaño: 1/4 Tableros

Tableros/paneles de PanelView o HMI (o tableros de dimensiones similares) se contabilizan como 0.25 de tablero



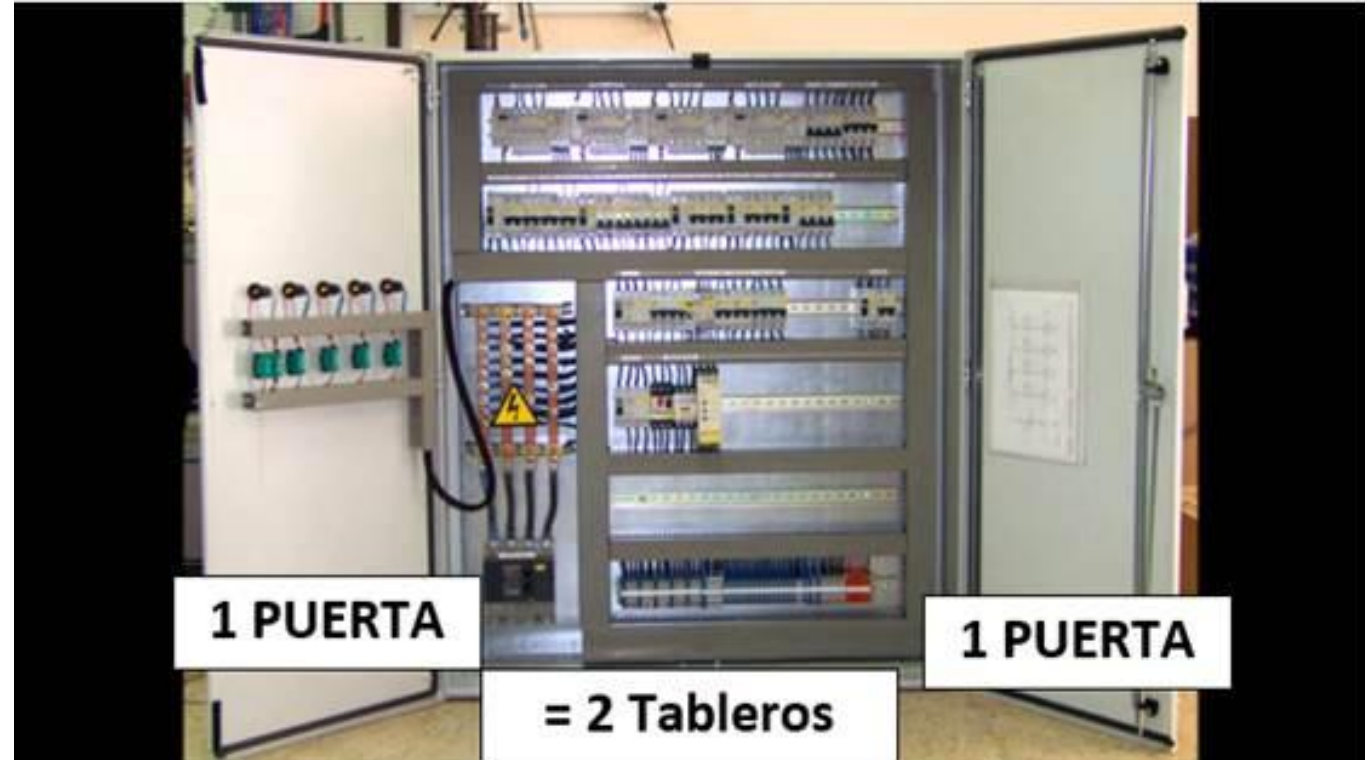
Tamaño: 1/2 Tableros

Tableros de 1m x 1m aprox se contabilizan como 0.5 de tablero



Tamaño: 1 Tablero

Tableros mayores a 1m x 1m se contabilizan por cantidad de puertas que tenga el conjunto

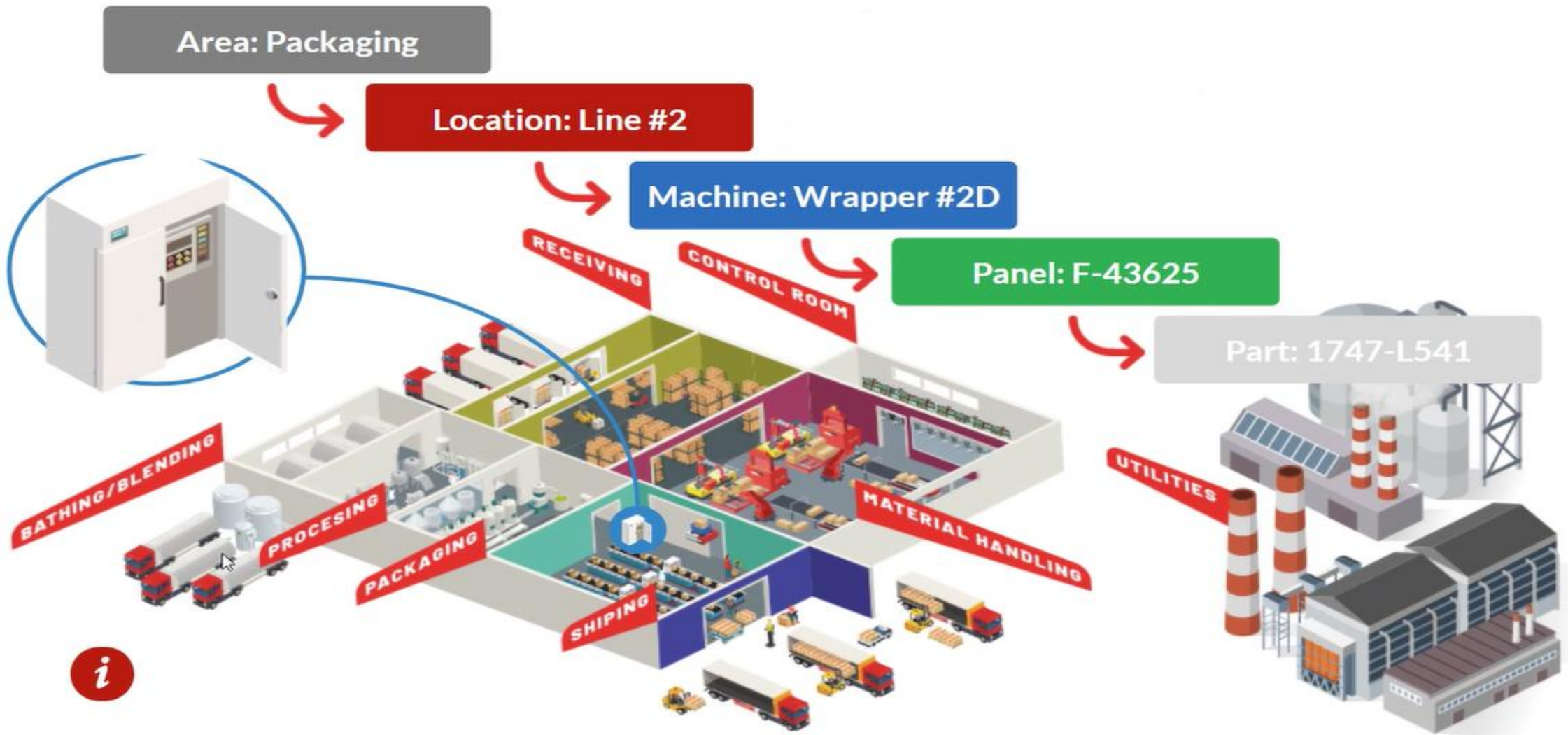


Tamaño: Columnas CCM

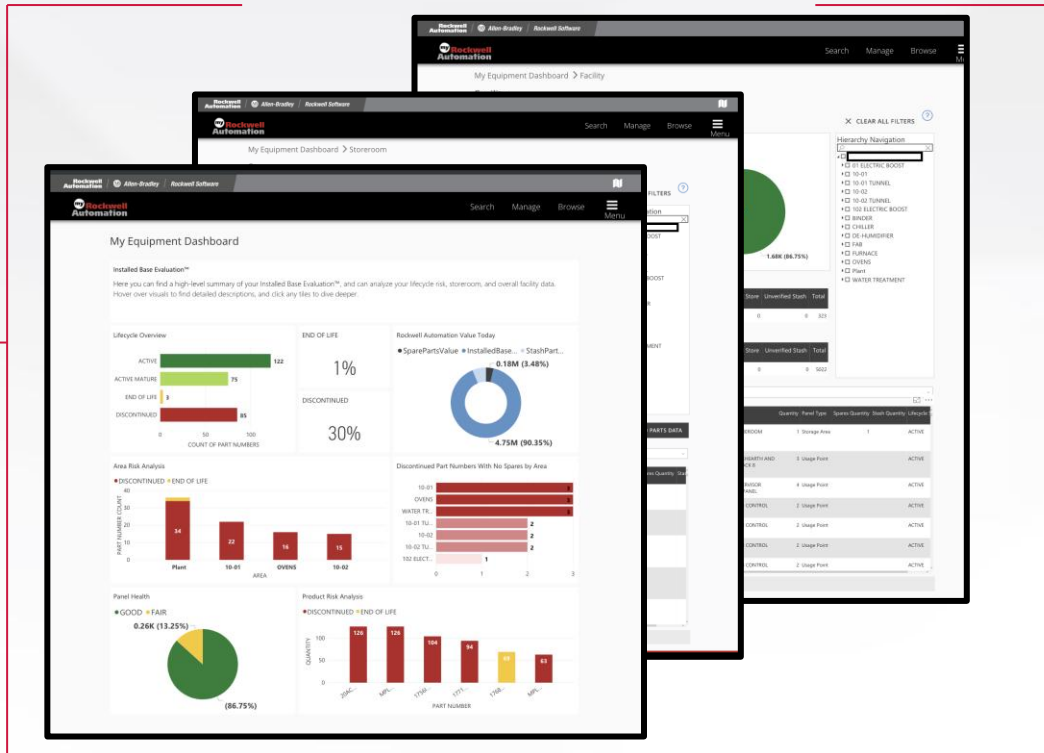
Para CCM: 1 columna se contabiliza como un tablero



¿Cómo funciona?

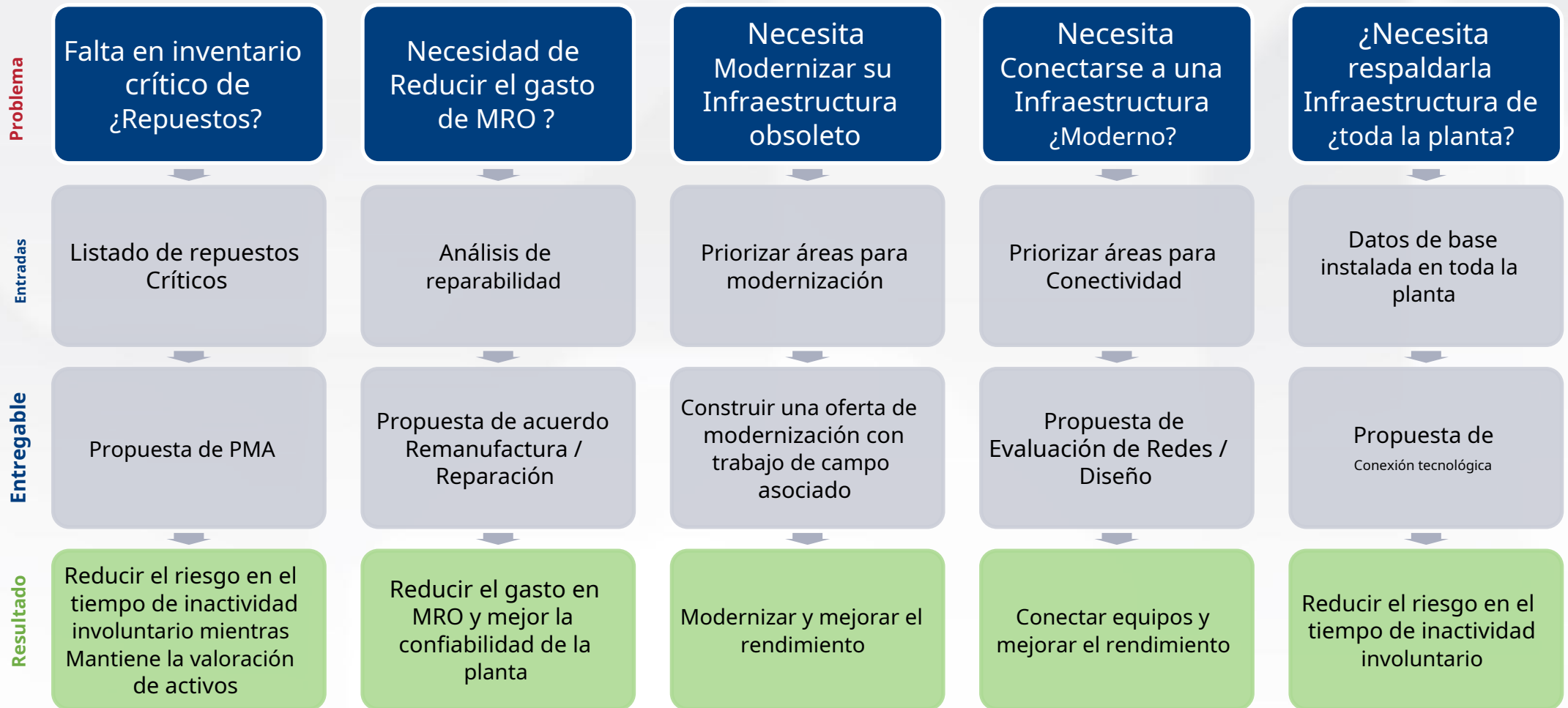


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¿Por qué conviene promover la OIE?

Beneficios para RA & Distribuidores

- Ayuda a mejorar la relación con el cliente
- Mejor comprensión de la base instalada del cliente
- Incremento de la tasa de fijación
- Incremento de negocio (\$), llegando a ser hasta 10 veces el valor del IBE
- Ayuda a tener una mejor administración de los recursos

Ganar-ganar

Beneficios para el cliente

- Reducción de riesgo de tiempos de inactividad
- Reducción de Gastos de MRO
- Aumento de confiabilidad de Planta
- Reducción de riesgo de paro no programado
- Definición de estrategia de capacitación
- Modernización de equipos y mejora de desempeño.



Mi equipo

Inventory Analysis Terminology

Active Inventory - Electronic equipment identified as usable for support of existing operations as suggested by the manufacturer based on internal Mean-Time-Between-Failure statistics.

Excess-Active - Electronic equipment identified as usable for support of existing operations, but your present levels are higher than suggested by manufacturer based on internal Mean-Time-Between-Failure statistics.

Inactive - Electronic equipment identified in stores with no apparent active use in the installed base of current operations.

Installed Base - All electronic automation devices identified as in use during data collection.

Insufficient Inventory - Current stocking level is below the recommended quantity of spares.

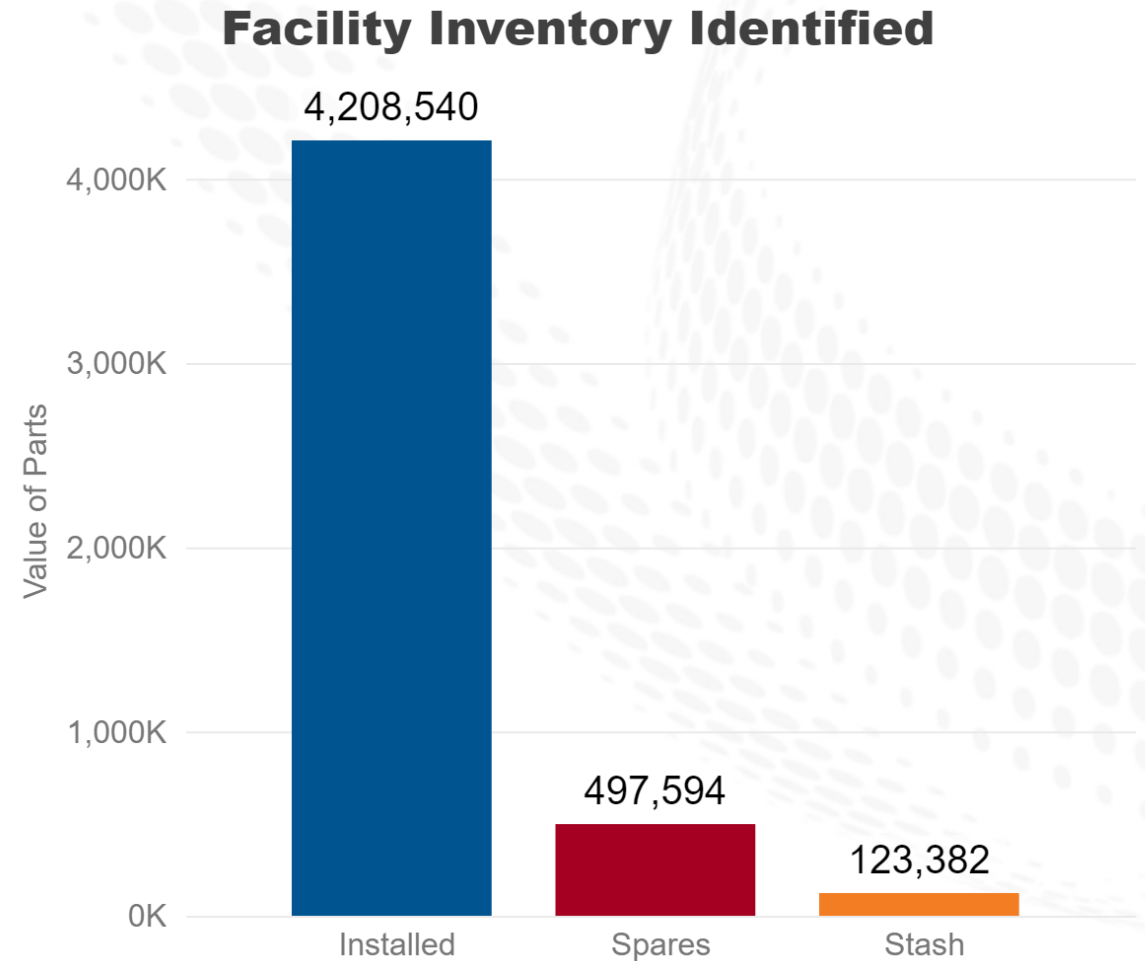
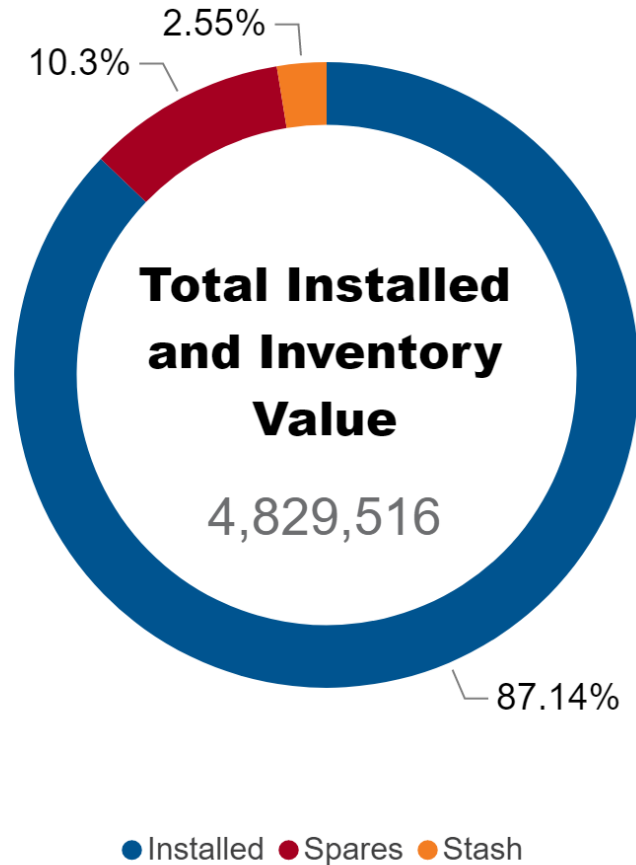
Spare Inventory - All electronic spares identified within a controlled location, such a monitored storeroom.

Stash - All electronic spares identified in an uncontrolled location, such a desk or open/unmonitored storage.



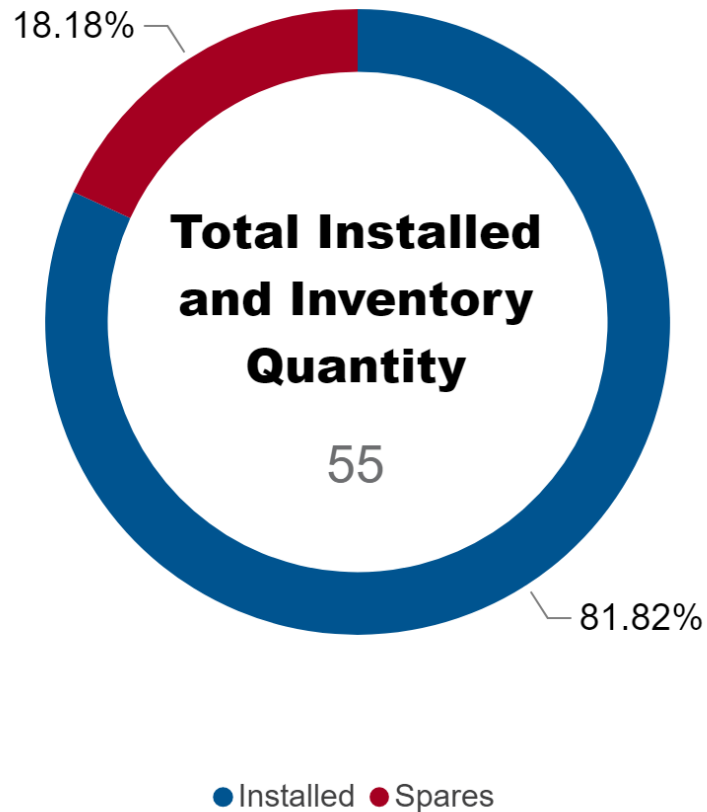
Rockwell Automation Installed Base & Storeroom Inventory

Rockwell Automation electronic parts found throughout Rockwell Automation IBE Sales Sample 2020

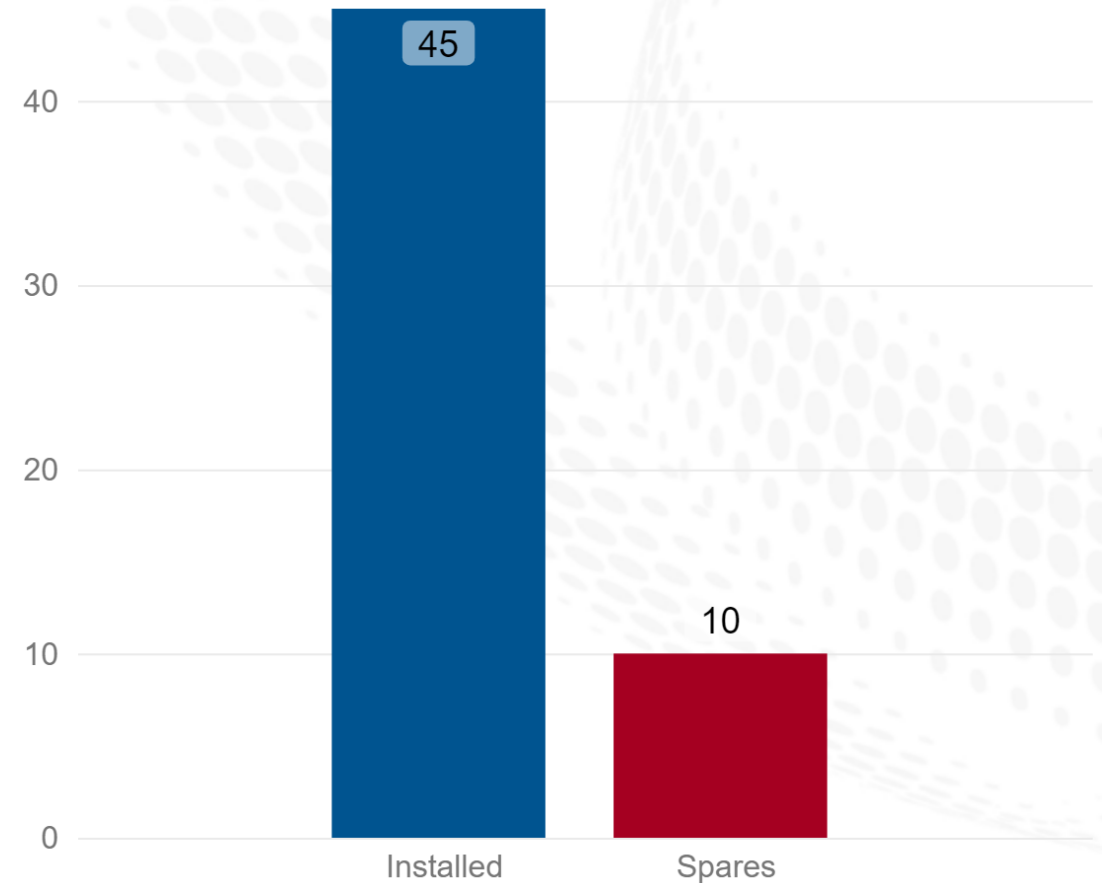


Non-Rockwell Automation Installed Base & Storeroom Inventory

Non-Rockwell Automation electronic parts found throughout Rockwell Automation IBE Sales Sample 2020

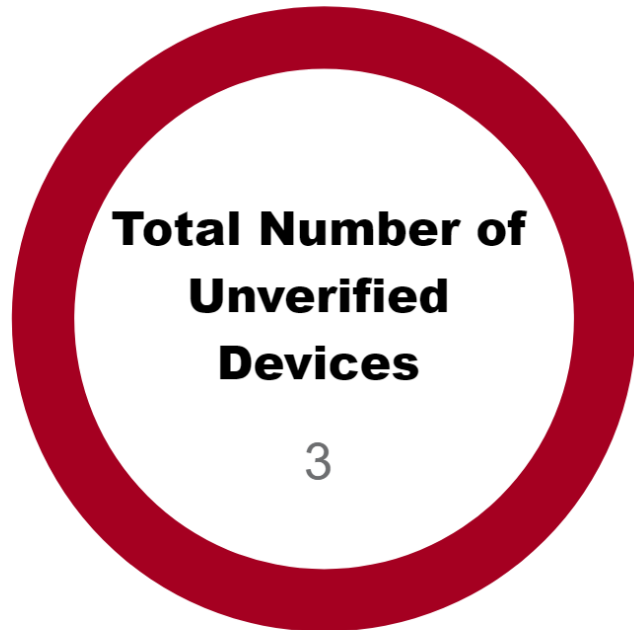


Facility Inventory Identified



Unverified Installed Base & Storeroom Inventory

Unverified electronic parts found in the Installed Base throughout Rockwell Automation IBE Sales Sample 2020



└ 3

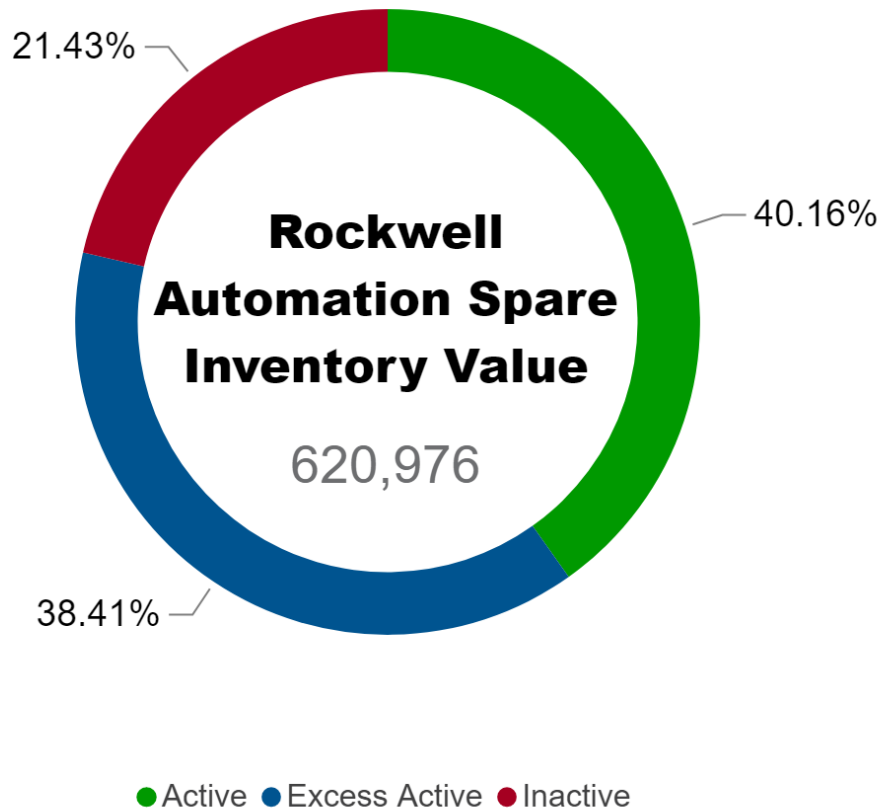
● Spares

Top 10 Unverified Parts by Manufacturer

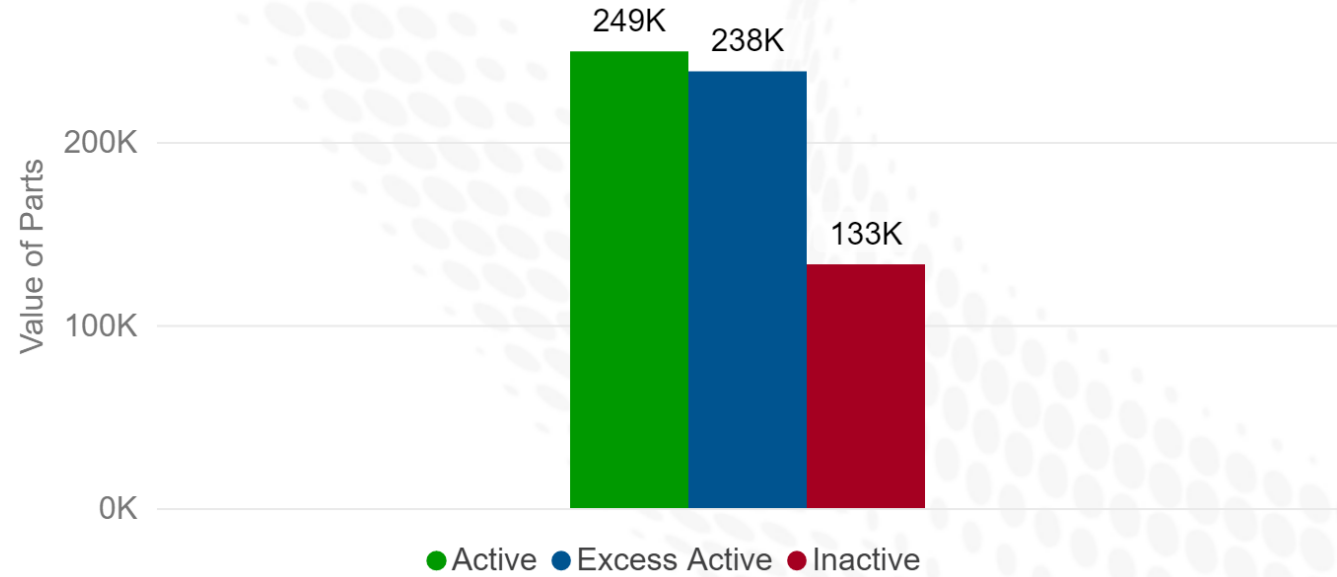
Manufacturer	Unverified Count	Total Count	Percent Unverified
ROCKWELL	3	1770	0.2%

Current Inventory Status of Spares

Rockwell Automation spare part inventory consists of 208 items found in the Storeroom and Stash



Facility Inventory Identified



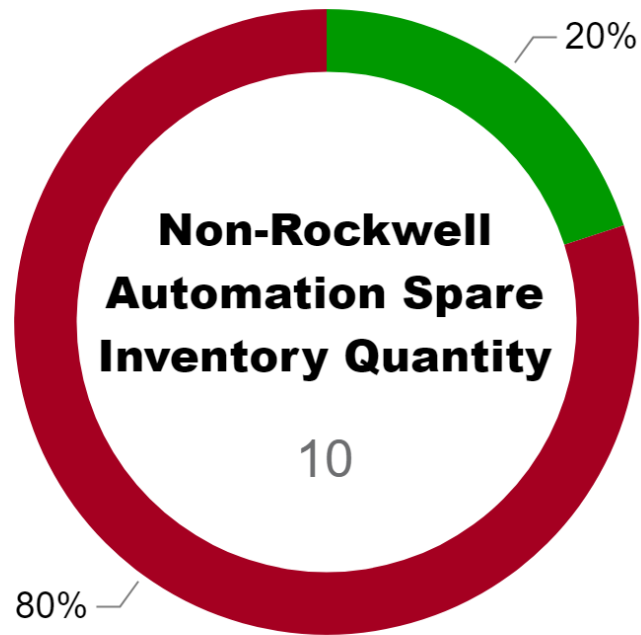
Active Inventory is 75 spares

Excess Active Inventory is 75 spares

Inactive Inventory is 58 spares

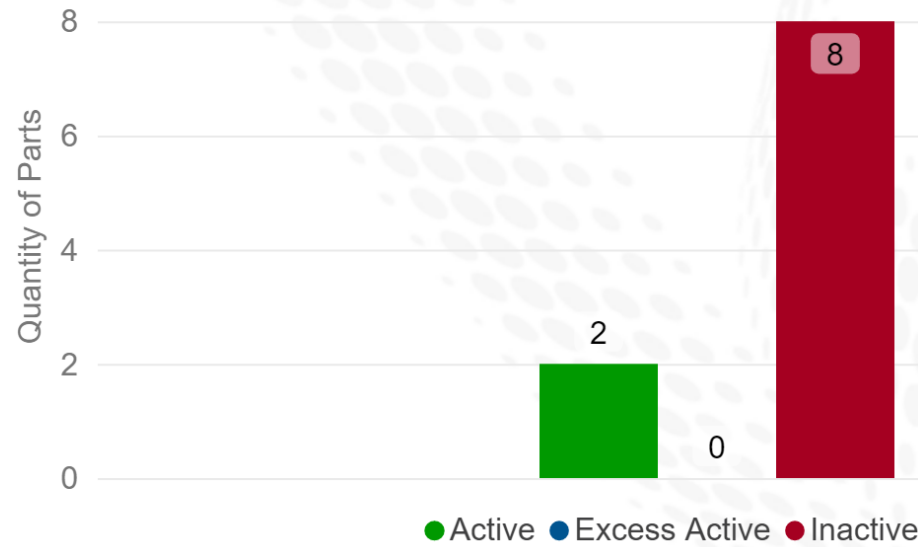
Current Inventory Status of Spares

Non-Rockwell Automation spare part inventory consists of 10 items found in the Storeroom



● Active ● Excess Active ● Inactive

Facility Inventory Identified



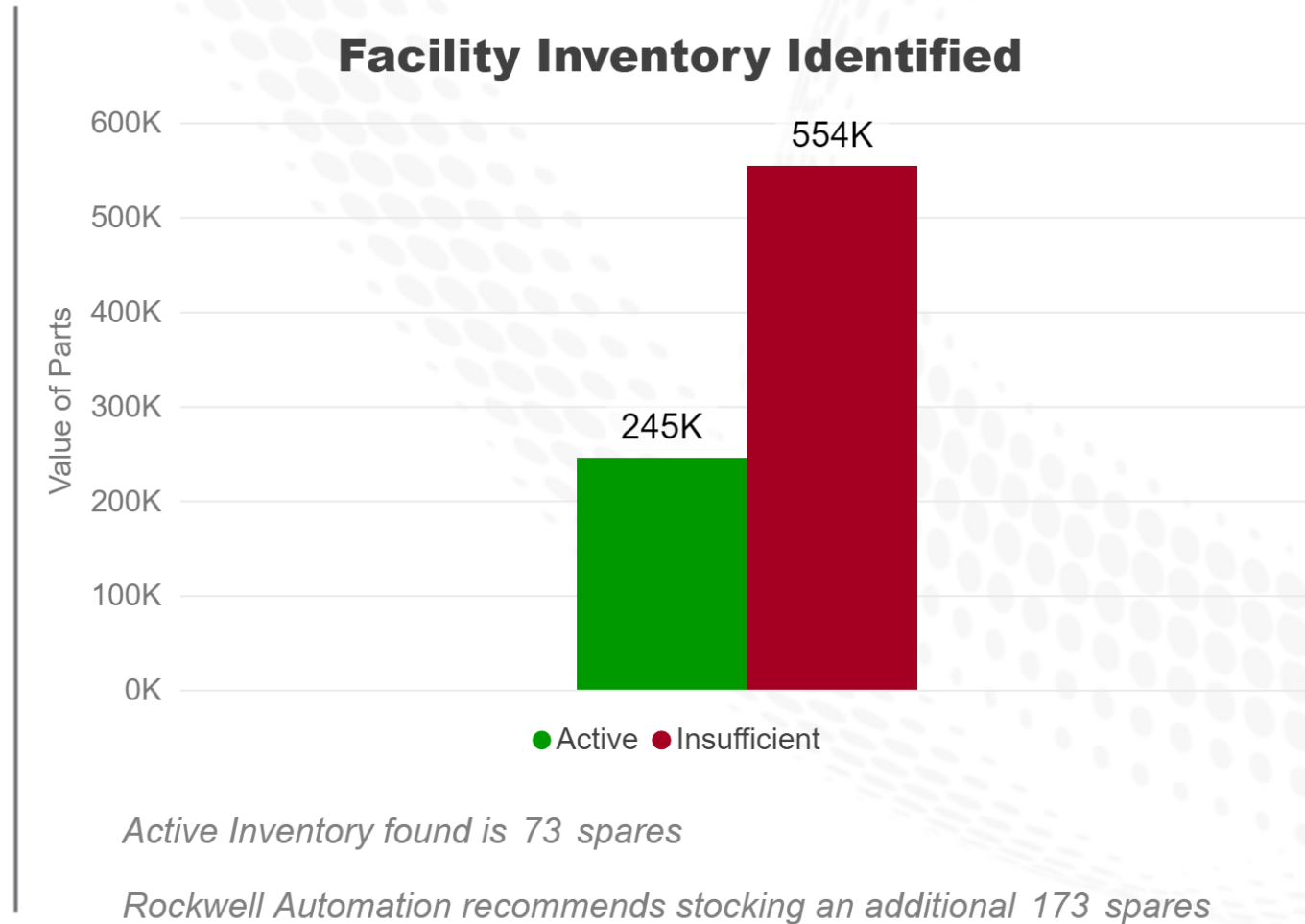
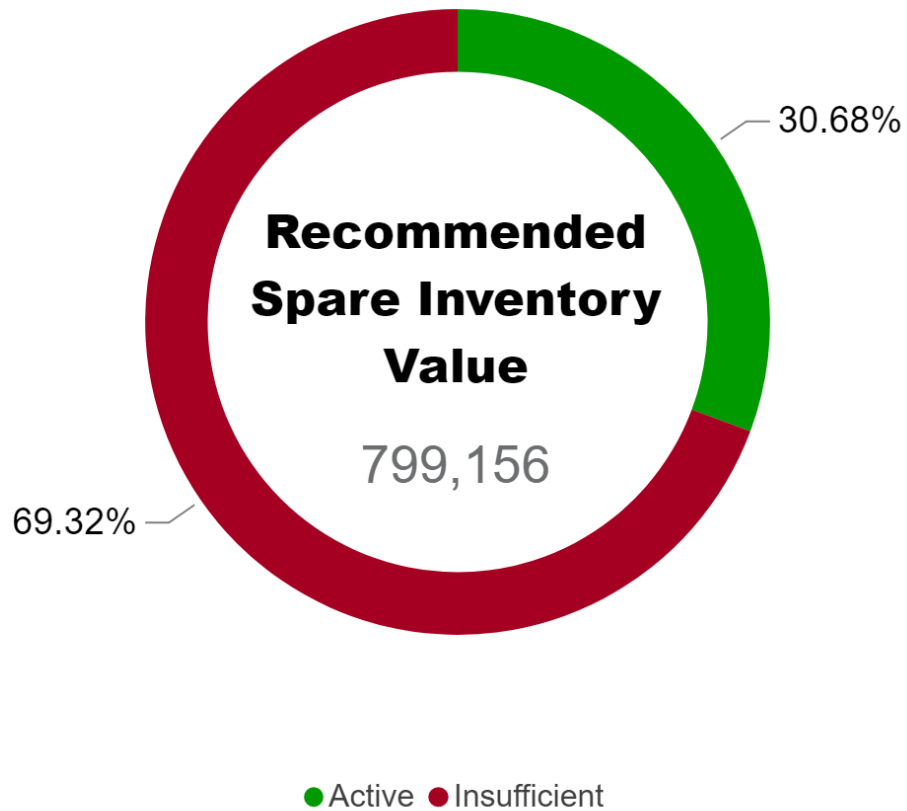
Active Inventory is 2 spares

Excess Active Inventory is 0 spares

Inactive Inventory is 8 spares

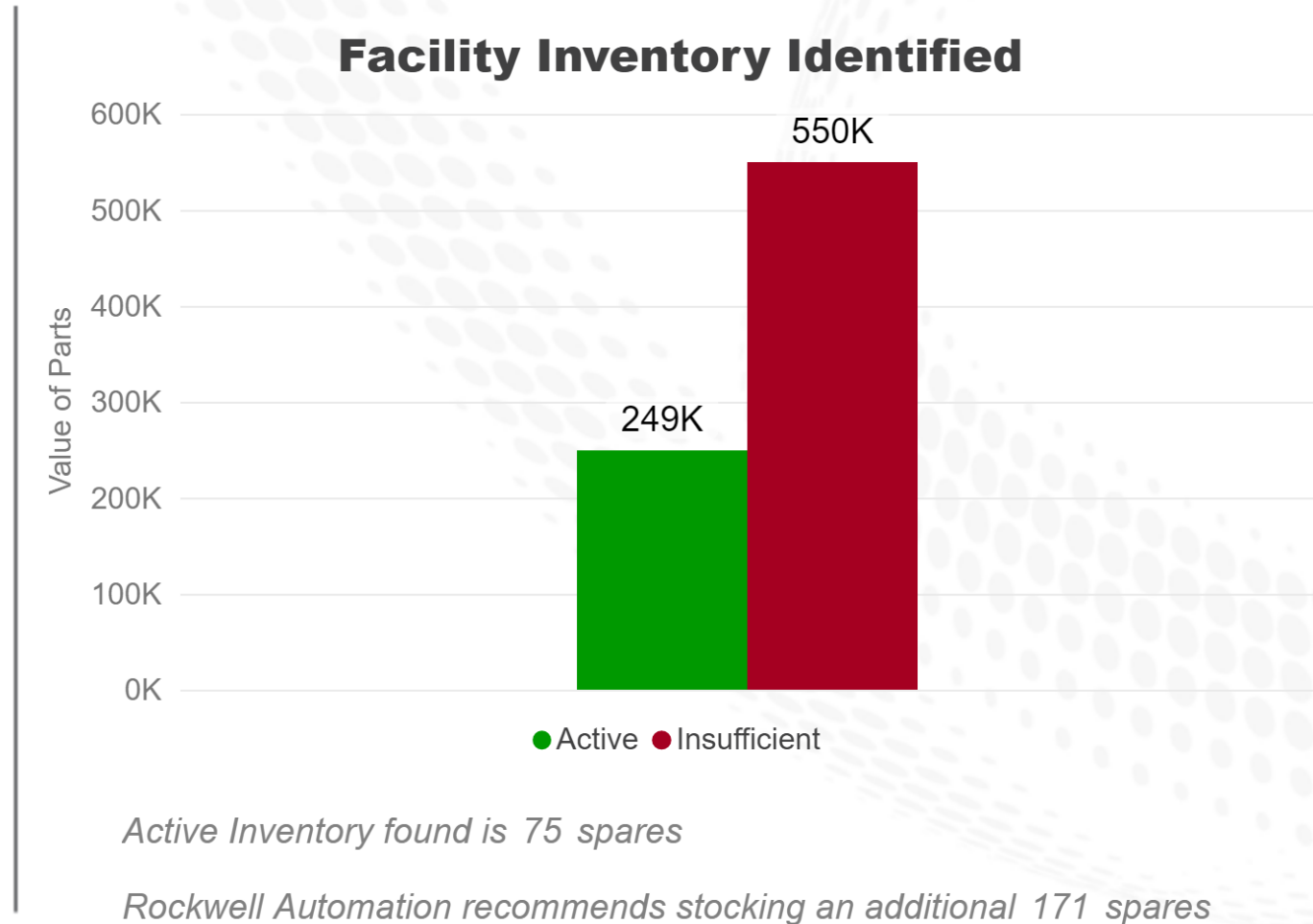
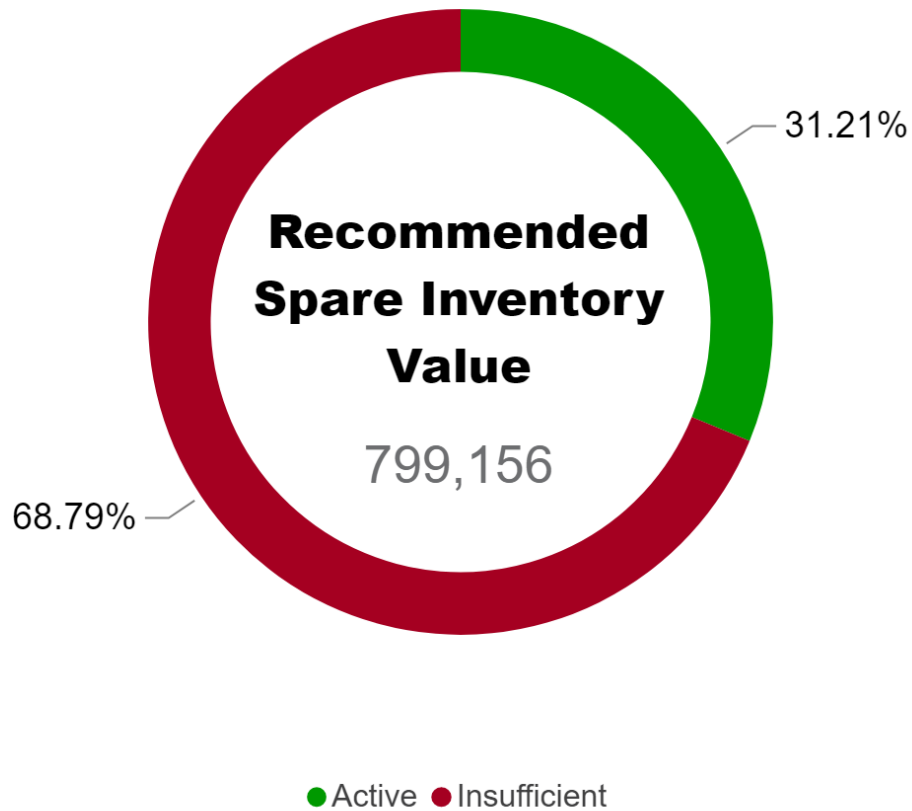
Recommended Rockwell Automation Inventory of Spare Parts

Based on Installed Base, recommended inventory is 246 items



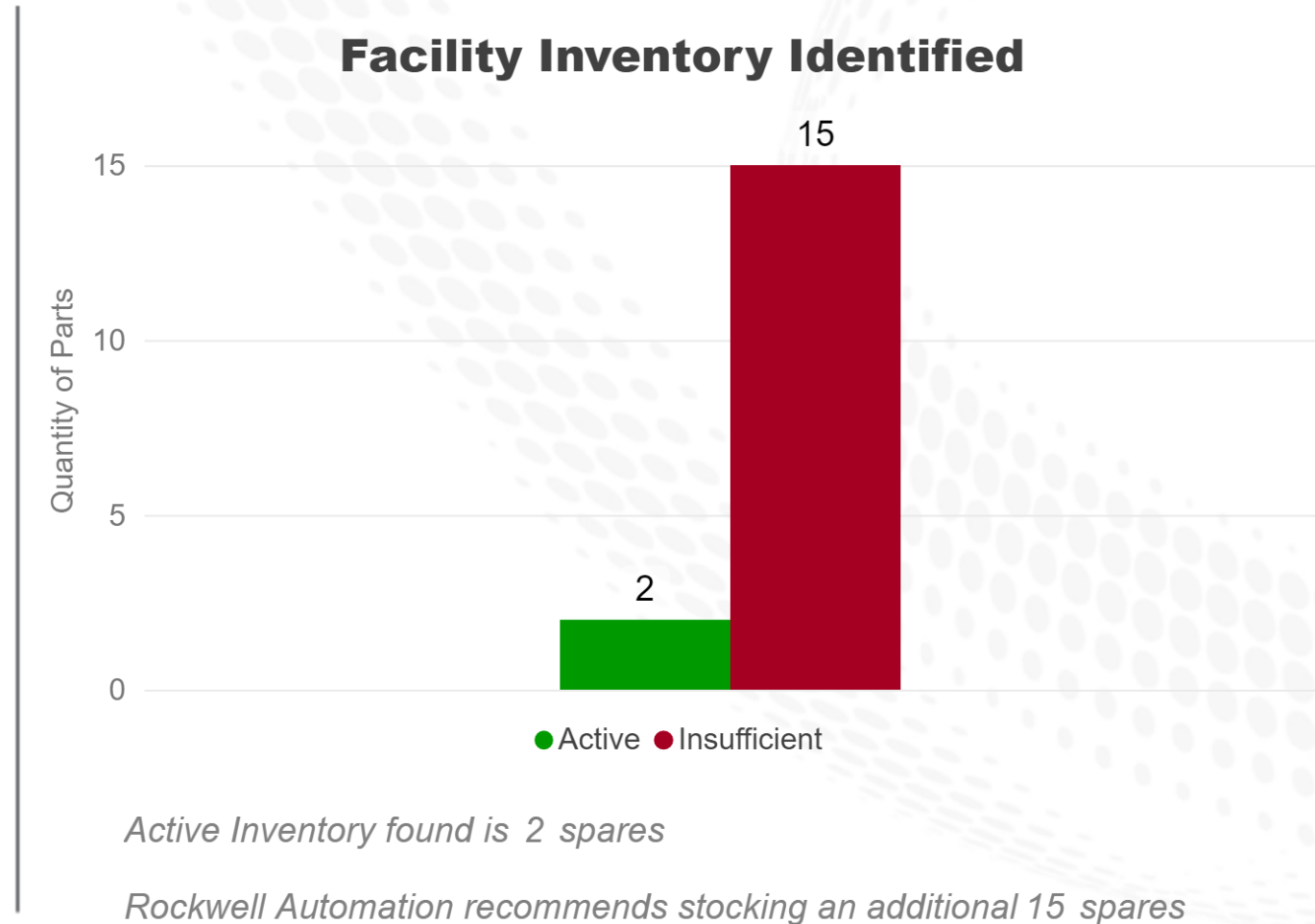
Recommended Rockwell Automation Inventory of Spare Parts

Based on Installed Base, recommended inventory with stash is 246 items



Recommended Non-Rockwell Automation Inventory of Spare Parts

Based on Installed Base, recommended inventory with stash is 17 items



Installed Base Evaluation Lifecycle Terminology

Active Product

(Dark Green)

Most current offering within a product category.

Active Mature Product

(Light Green)

Product is fully supported, but a newer product exists. Gain value by migrating.

End Of Life Product

(Yellow)

Discontinued date announced; actively execute migrations and last time buys.

Discontinued Product

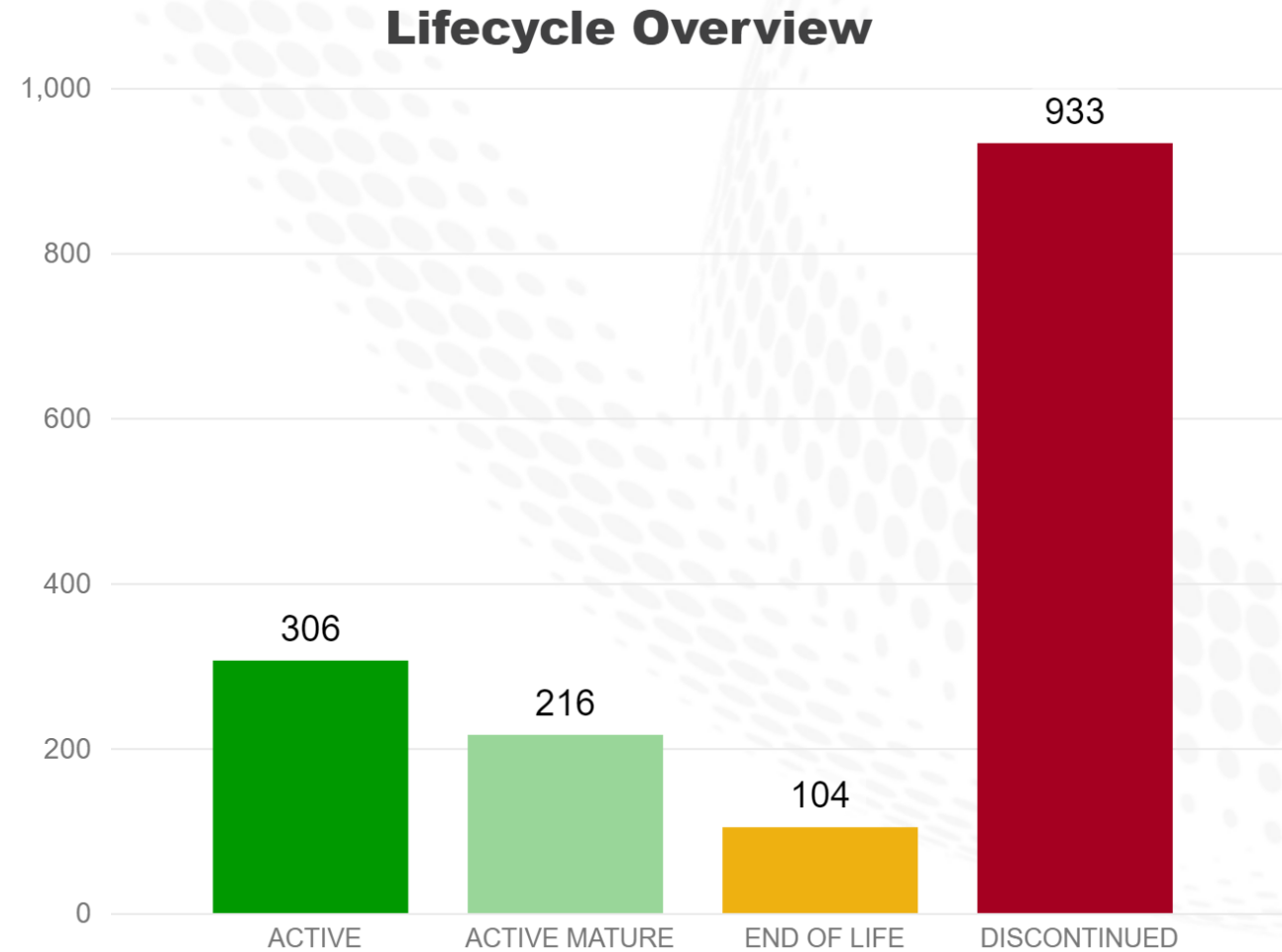
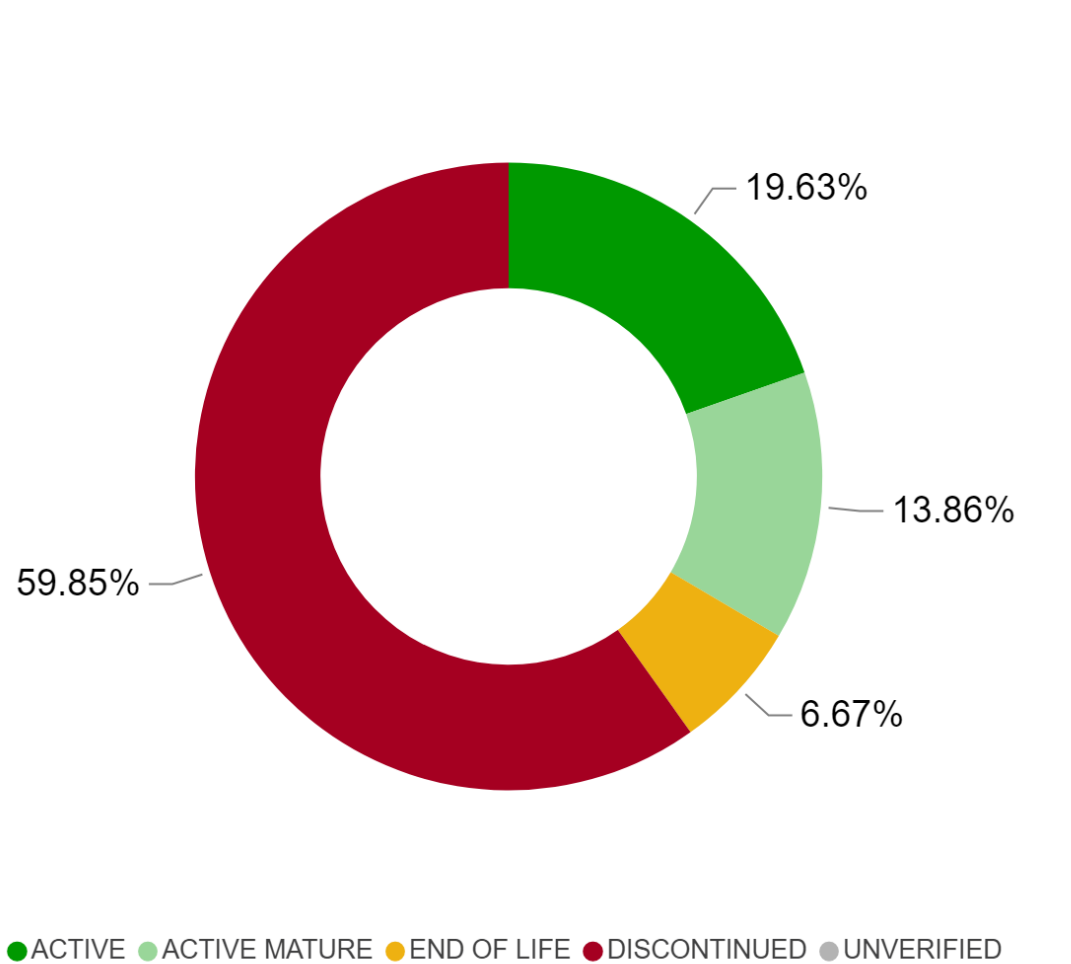
(Red)

Product no longer manufactured repair/exchange services may be available.



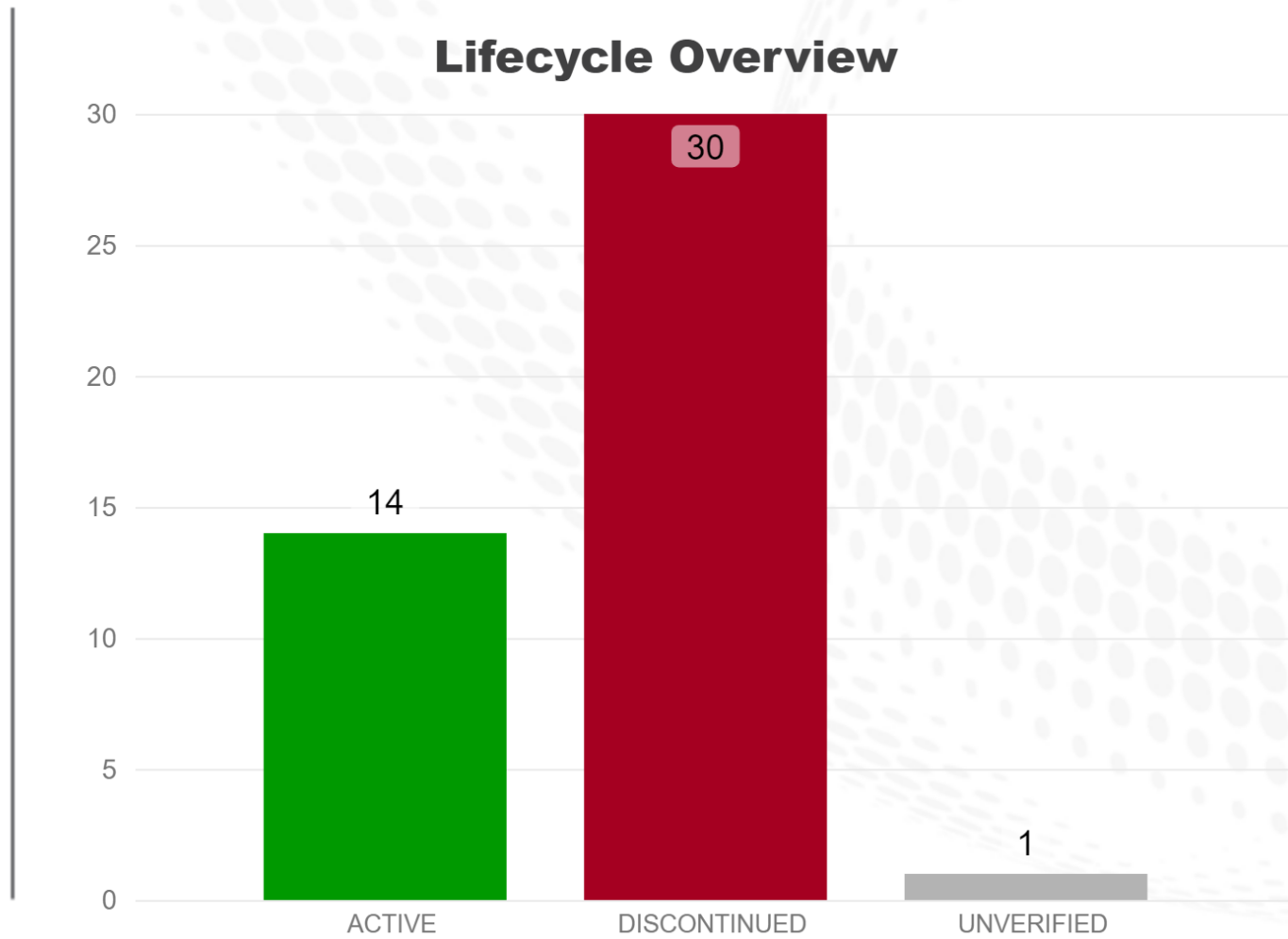
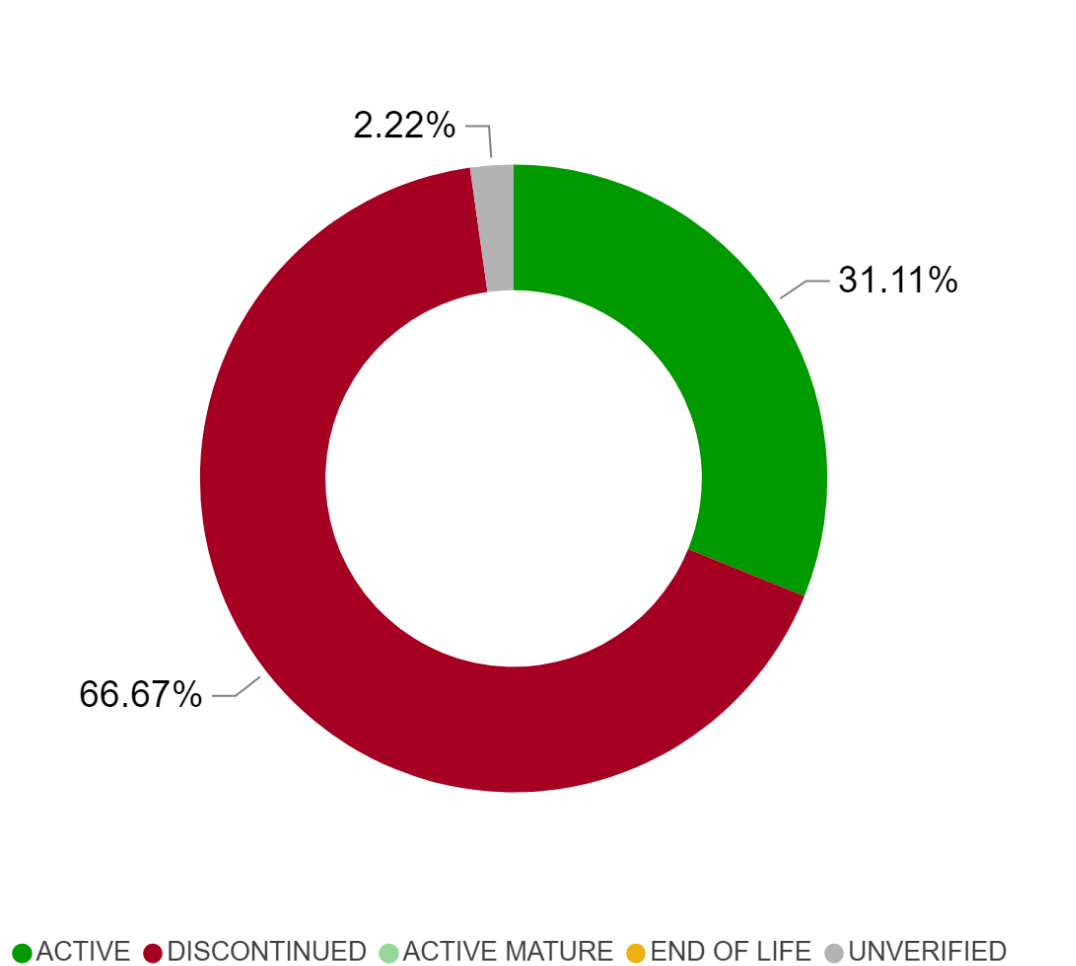
Rockwell Automation Lifecycle Status

60% of the current Rockwell Automation installed base quantity has been identified as discontinued



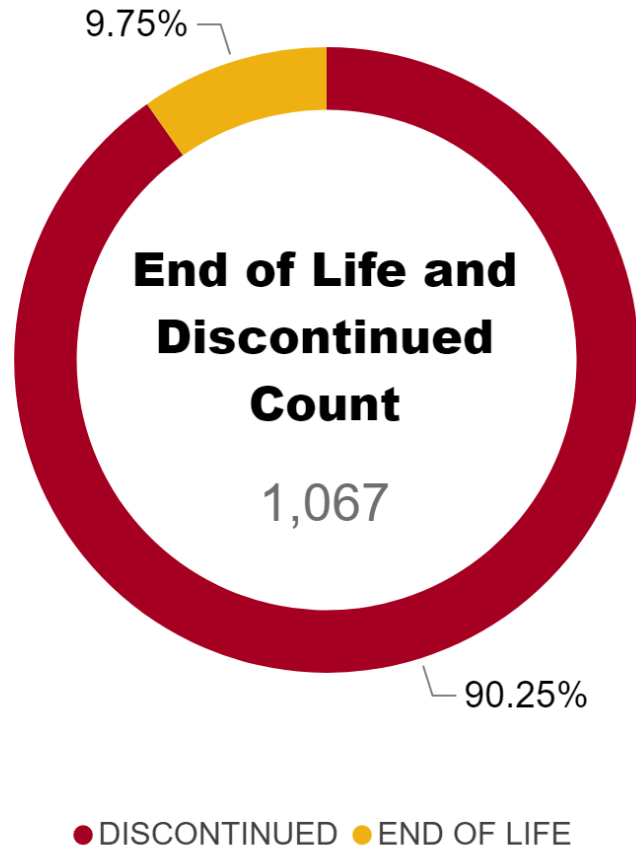
Non-Rockwell Automation Lifecycle Status

67% of the current Non-Rockwell Automation installed base quantity has been identified as discontinued

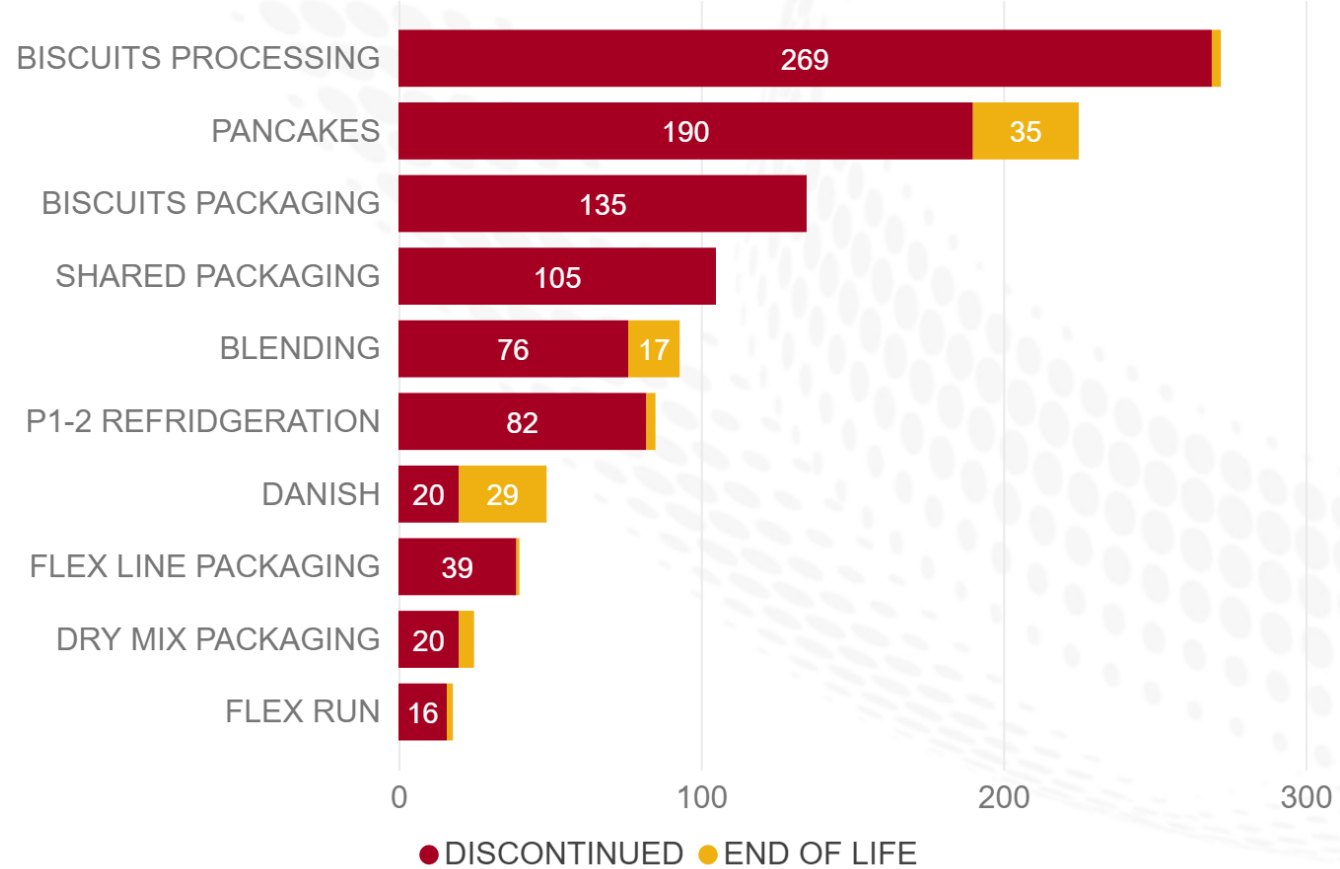


Legacy Products Risk by Locations

Evaluation includes Rockwell Automation and Non-Rockwell Automation items

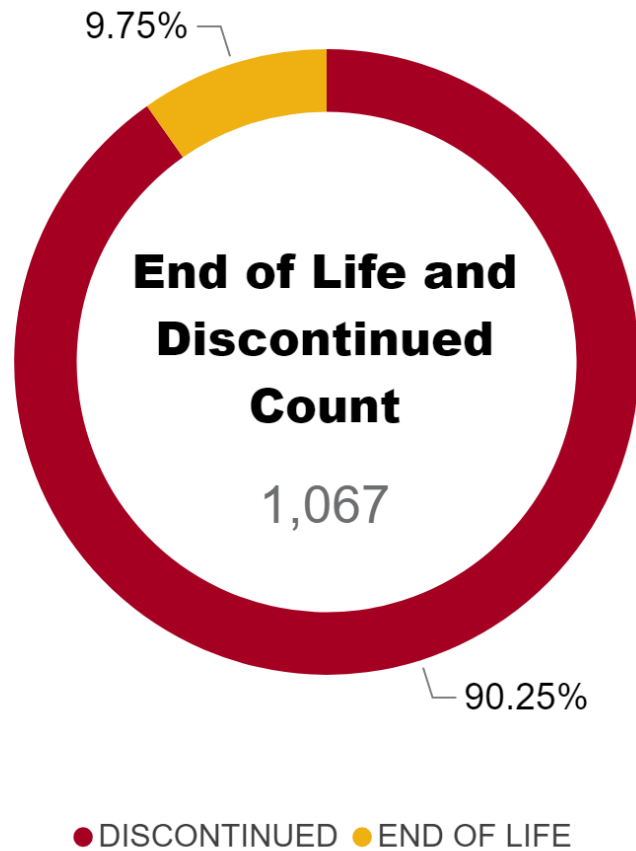


Obsolescence by Location

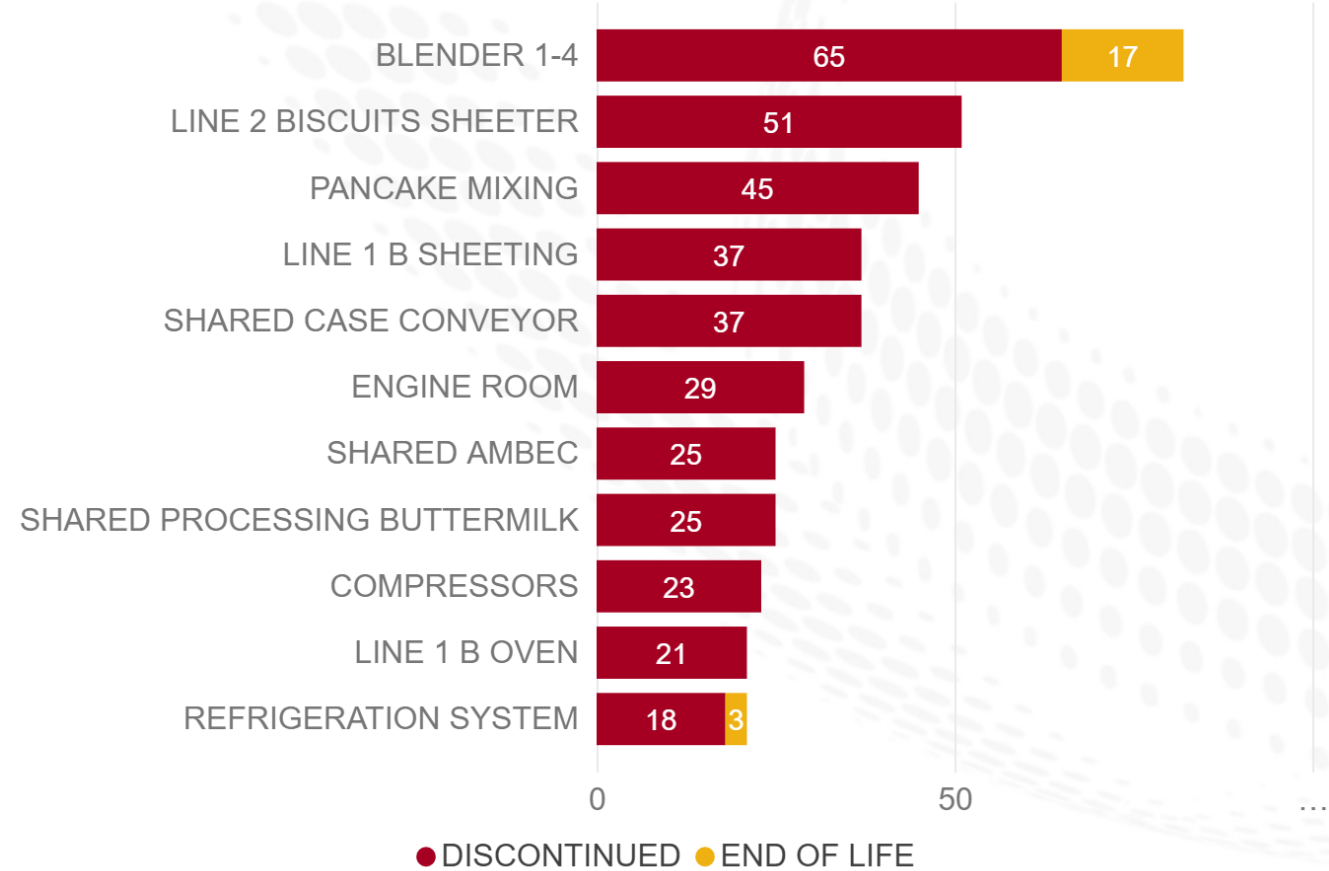


Legacy Products Risk by Machines

Evaluation includes Rockwell Automation and Non-Rockwell Automation items



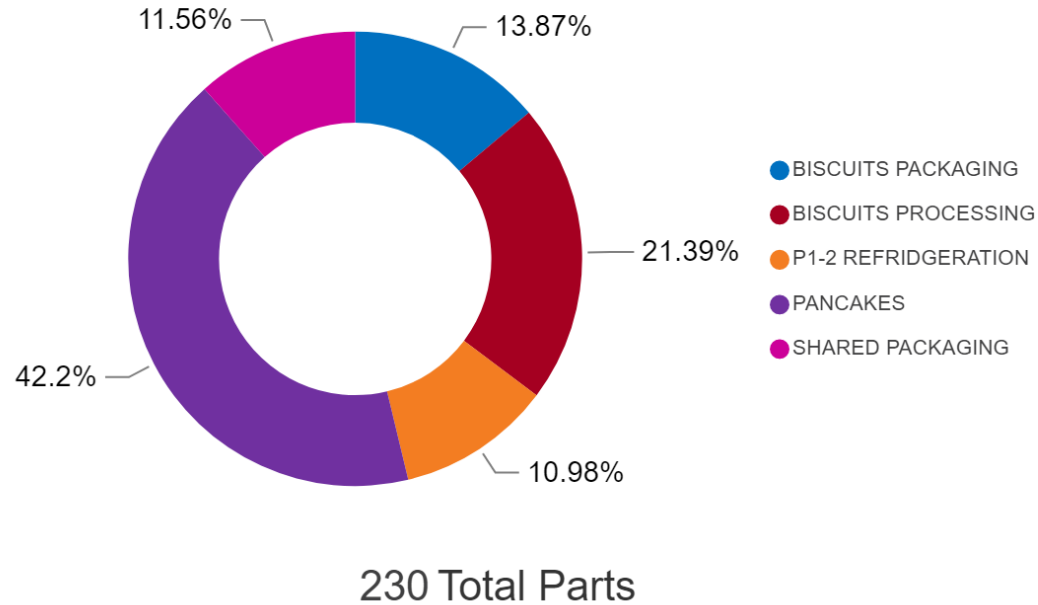
Obsolescence by Machine



Installed Base Lifecycle - High Risk Parts

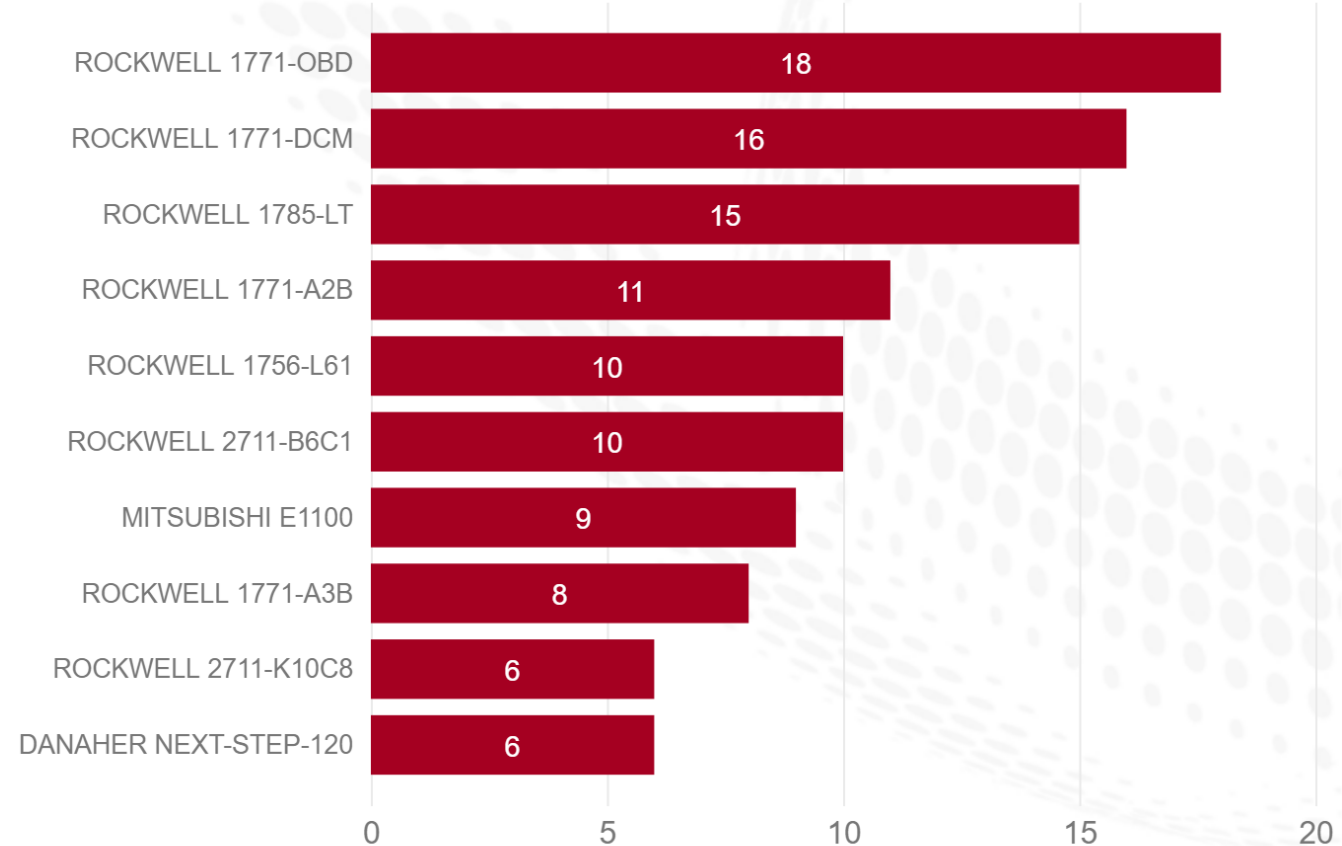
Top Discontinued Parts with No Onsite Spares (excludes stash)

Locations Containing Discontinued Parts With No Spares (Top Locations Shown)



Evaluation includes Rockwell Automation and Non-Rockwell Automation items

Top Discontinued Parts with No Spares



Panel Condition Terminology

Each panel is rated based on visual observations of the following:

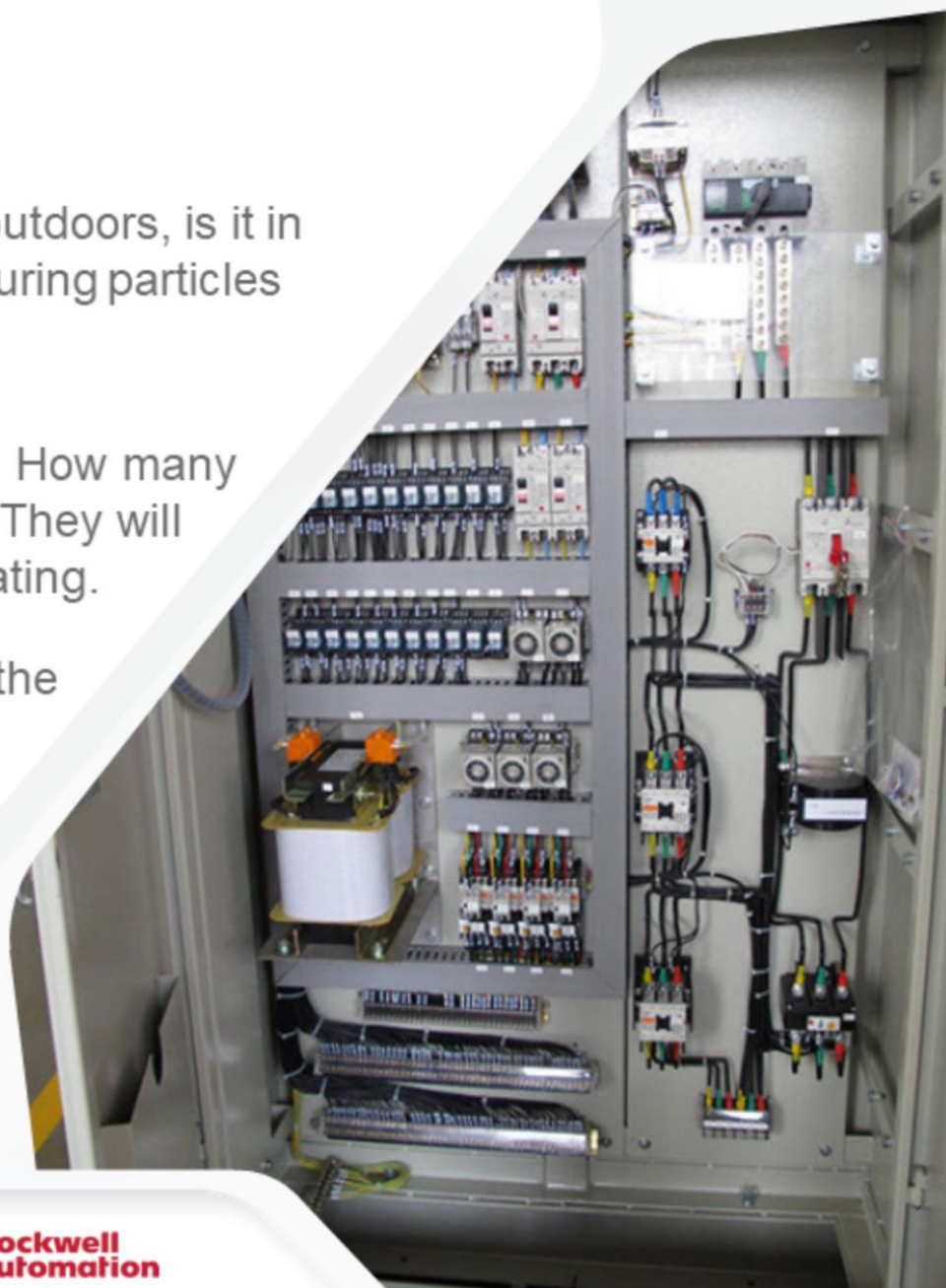
Environment – Data Collector will consider panel surrounding; if it is outdoors, is it in harsh weather conditions? Is the panel properly sealed? Are manufacturing particles present? Are they getting drawn into the panel?

Heating/Cooling – Data Collector will take note of fans in each panel. How many fans? Do the fans appear to be running. How is the ventilation setup? They will also look at the panel itself to see if it is dusty or appears to be overheating.

Networking – Data Collector will take note of the Ethernet nodes and the structuring of the cables.

Voltage and Arc Flash – Data Collector will take note of the labeling and if the labels are outdated or non-compliant.

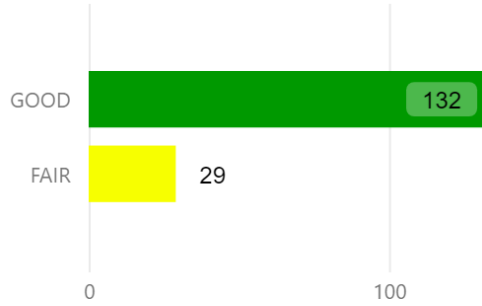
Wiring – Data Collector will visually inspect wires in clear view to see if they appear to be grounded or are loose/bundled/not maintained. Do the wires impede visibility?



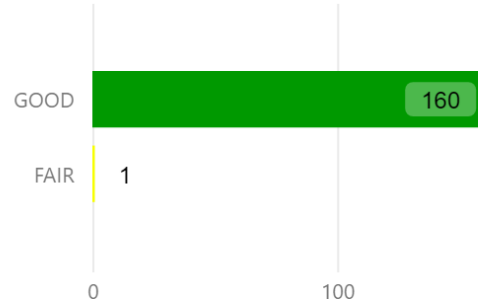
Overall Panel Condition

Conditions can be referenced on the section 6A report for Detailed Panel Conditions

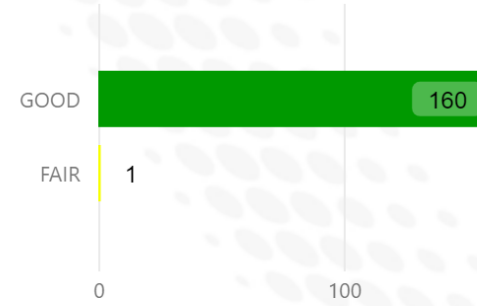
Environmental



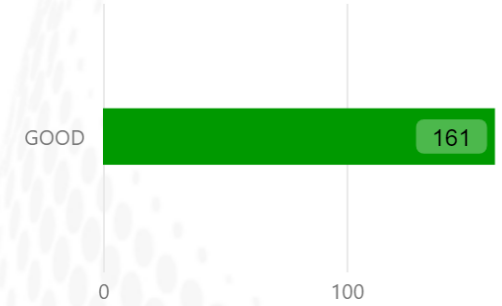
Grounding



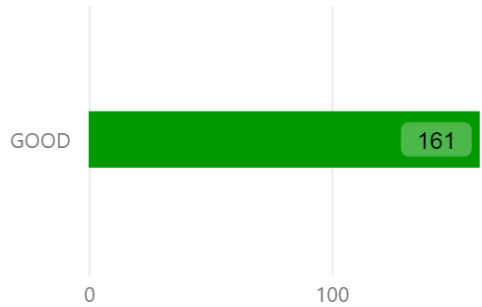
Heating / Cooling



Networking



Voltage / Arc Flash



Panels Needing Attention

1



Wiring



Storeroom Condition Terminology

Each spare part is identified based on five conditions

Good – Parts in sealed box, never been opened.

Open Package – Part is in open box, in static bag. Appears to be in good condition.

Questionable – Part may be missing components or is extremely dusty. Appears in poor condition.

Used – Part is usually out of box or has a repair tag on it.

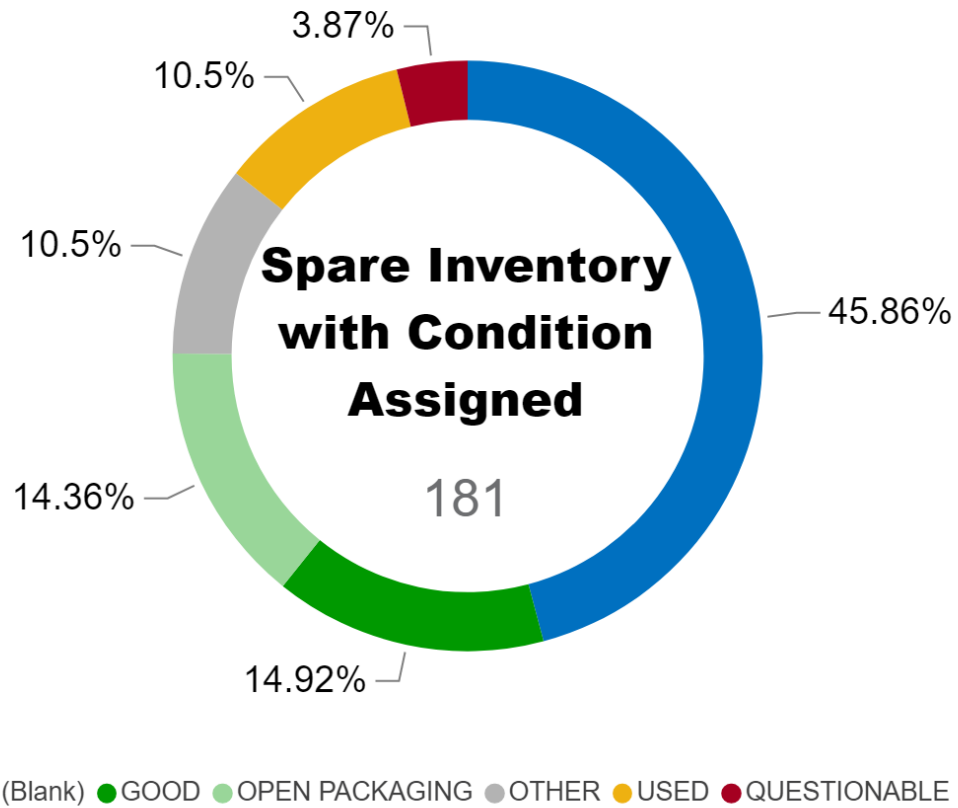
Other – Part condition does not fit into the other four condition options.

Conditions are based on a visual inspection by the Collection Resource at the time of collection.

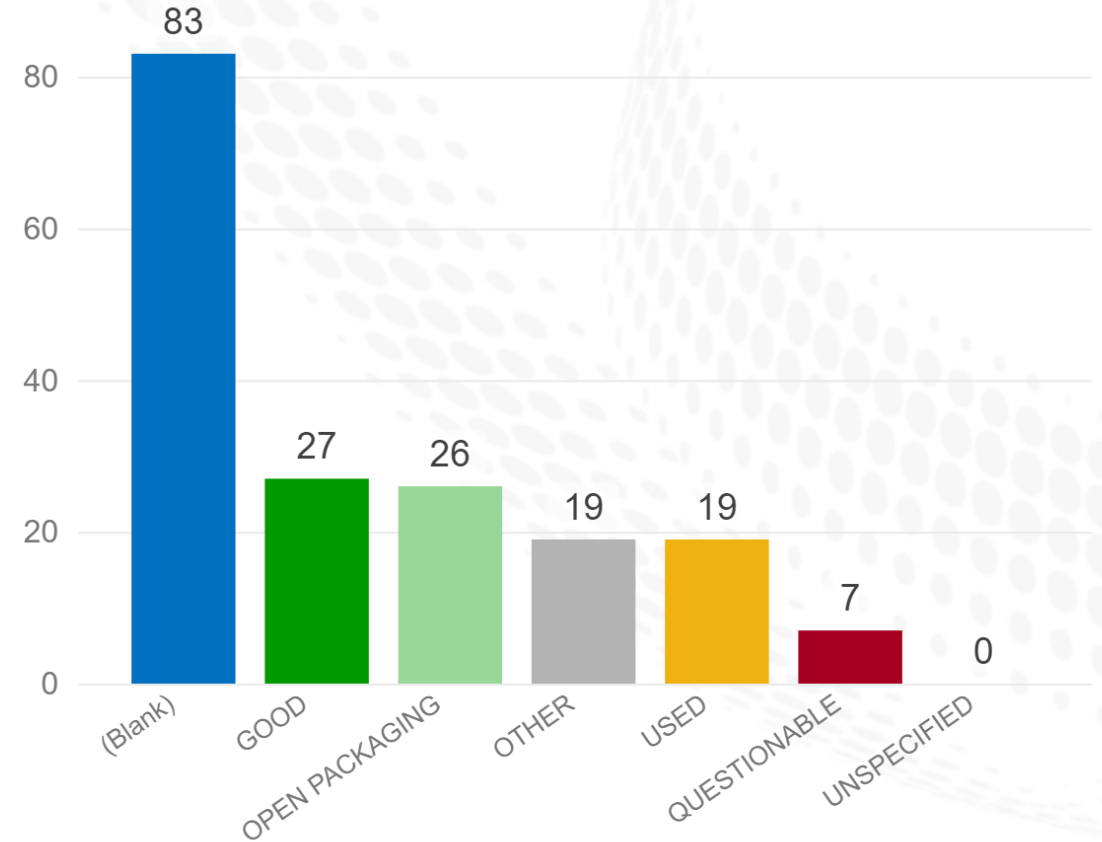


Overall Spare Parts Condition

Controlled Inventory

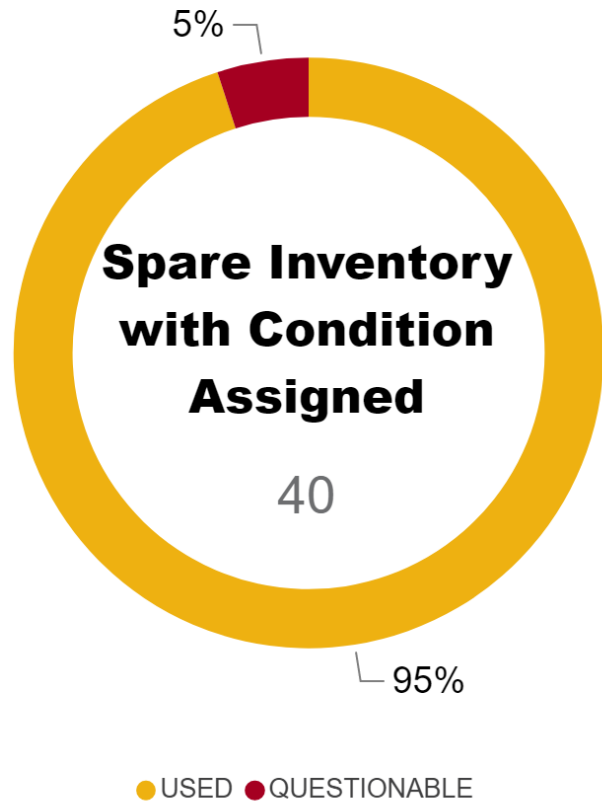


Facility Inventory Identified

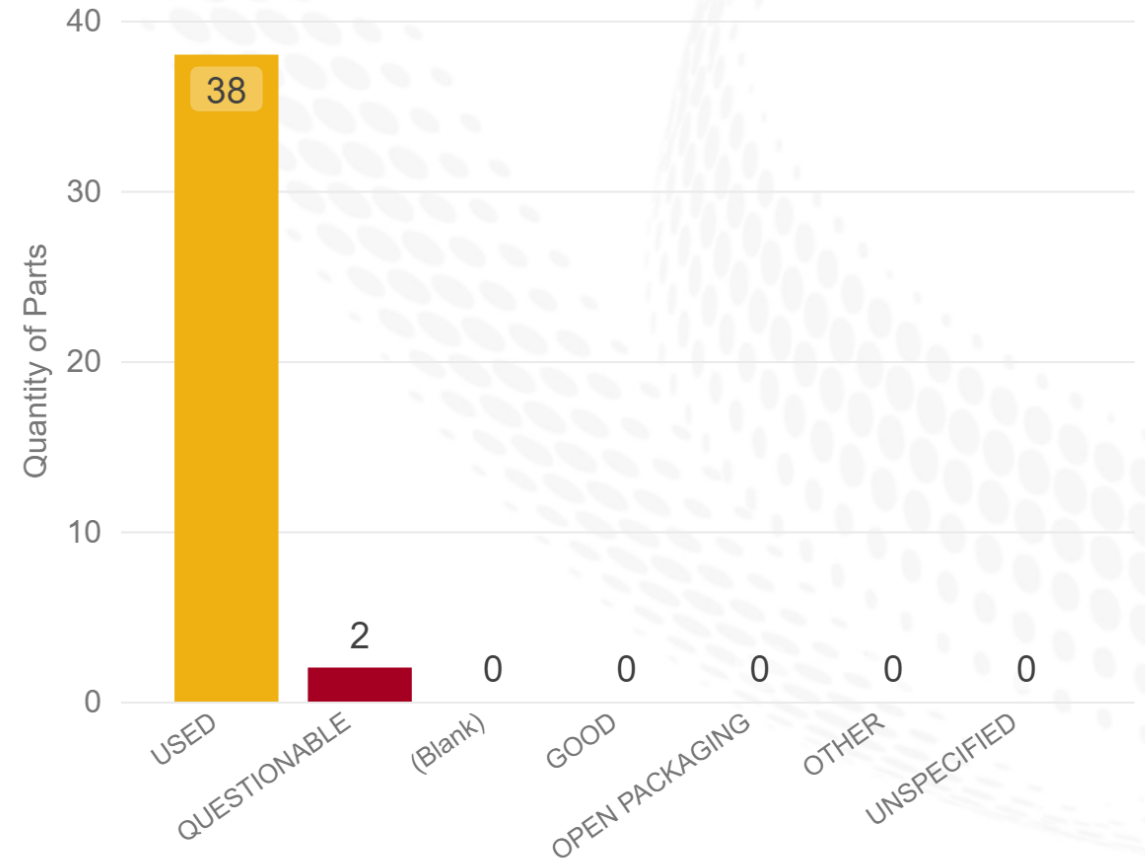


Overall Uncontrolled Inventory Parts Condition

Uncontrolled Inventory



Facility Inventory Identified



Initial IBE Exclusions & Omissions

IBE Exclusions are areas intentionally not assessed due to the following:

- Safety
- Resource availability for scheduled timeframe
- Equipment Integrity (i.e. pulling DCS I/O Cards)
- System Shutdown Requirement
- Inaccessible Areas (i.e. Warehouse High Storage)

Omissions are areas or items unintentionally omitted during IBE

- Ability to obtain complete product part number or description
- Typically, this represents less than 1% of overall Installed Base Evaluation

Ensuring proper escort knowledge of the objectives is the key to a complete assessment.



Lifecycle Planning Application

Next Steps

Using the IBE data, the Lifecycle Planning Application is used to collect information on customer priorities for production equipment and display those decisions in a graphical form

- Production Priority
 - Information pulled from plant floor operations managers or CMMS systems on the systems of equipment operations
 - Using the hierarchy from data collected, the decisions will cascade to individual equipment assets where the customer will be able to describe the levels and efforts of maintenance and support.
- Scenario Reporting
 - Following a review of all decisions entered the scenario can be saved and utilized to evaluate the suggested priorities of the equipment evaluated
- Scenario/s
 - The application will allow for editing existing scenarios as well as creating as many as is needed to arrive at a view consistent with plant capital activities



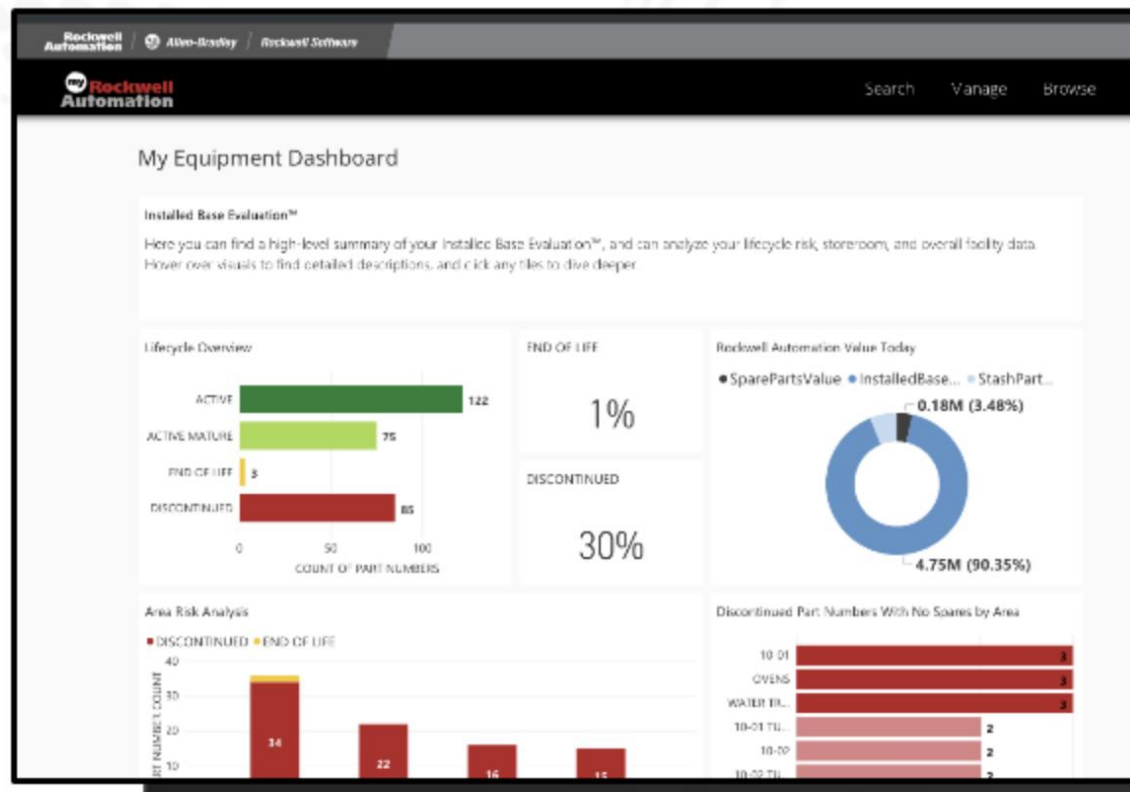
My Equipment

Leveraging your installed base information to provide actionable insights within myRockwellAutomation portal

My Equipment Offers:

- **Interactive, adaptive reports** - Enable ongoing visibility into installed base data with enterprise-level asset inventory reports
- **Dynamic asset inventory information** - Consistent, secured data source from installed based evaluation (IBE)
- **Future-ready to enable digital transformation** - Build foundation for future value-added features and capabilities
- **Obsolescence risk analysis** – Lifecycle status of assets can help determine proper migration paths
- **Critical spares recommendations** – Guidance into your spare parts so you know how to manage them
- **Lifecycle updates & notifications** – Proactive notifications and alerts to know when your installed base changes lifecycle
- **Product Safety Alerts** – Proactive notifications are sent when a PSA impacts a device in your installed base

Sold as a subscription, My Equipment can be added to any Hardware Installed Base Evaluation





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Gracias



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