

LISTEN.
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US Department of Energy Materials Management Summit



Oakridge, TN
Tuesday, May 15, 2007

Agenda Sample

1. RA Asset Management Business

2. Application of Parts Management Agreements

3. Delivery Options for PMA's

4. Understanding PMA Financials

5. Questions & Comments

Rockwell Automation's MRO Management Structure

Plant Repairable Assets

*Managing
multiple asset
classifications*

*RA Asset Management
Services*

Rockwell Automation Repairable Assets

- *Published Catalog*
- *Fixed Price*
- *Immediate Quote*
- *Remanufactured Quality*

Motors and Gearboxes

- *Fixed/Variable Pricing*
- *Reliance Authorized Service Center*

Non-RA Electrical Assets Repair Shield

- *85,000 published catalog prices*
- *6500 manufacturers*
- *Process control*
- *Drives*
- *PLC's*

Mechanical Assets

- *Pumps*
- *Valves*
- *Hoists*
- *Ball Screws*
- *Pneumatics*
- *Bearings*
- *Blowers*

OEM Proprietary Repairs

- *Ensure integrity*
- *Ethical Standards*

Rockwell Automation's Plant Service Group

- **Focus on maximizing the ROI of our customers MRO assets**
 - Over 1000 worldwide customer contracts
 - Experience in a multi-vendor environment
- **Significant infrastructure**
 - 17 Remanufacturing/Repair Centers
 - 4 Global Part's HUB's
 - Multiple procurement centers
- **Established Capability**
 - Remanufacturing and Exchange Services, RepairPlus (3rd party repair)
 - Installed Base Evaluation
 - Parts Management Services
 - Rockwell Automation Asset Management Program (RAAMP)
 - Track repairable assets/product warranties/product repair
 - Optimize inventory levels/maintenance resources

Solutions that satisfy customer needs

Strategic Outsourcing Center

- Sourcing and Repair expertise across multiple commodities within electrical and mechanical
 - Specialty repairs, national contracts (eg Ball Screws)
 - Regional suppliers (eg. pumps, etc)
 - Local Capabilities (eg. motors)
 - Leverage Rockwell and Facility Contracts
 - Single source for all repairs
 - Continue to develop suppliers
- Procurement staff of 28 professionals in 3 primary procurement centers
- Total repair spend across 150+ current RAAMP customers
 - \$50 M / year
 - 3000+ suppliers



The Impact of Asset Management

Rockwell Automation Asset Management provides **on-site Personnel** focused on increasing the overall productivity of a customer's core business while reducing their overall MRO assets.

- We help align key "MRO" assets to impact critical areas inside our customer's facilities.

MRO Assets

Plant Impact Areas

People

- Storeroom
- Maintenance
- Engineering
- Production
- Purchasing

**RA Asset
Management
Professional**

Production Maintenance Engineering

- Productivity Improvement
- Standardized designs
- Actionable reporting
- Reliability Based Information

- **Improve equipment availability**
- **Target Critical Improvement Areas**

Process

- Repair Process
- MRO Optimization
- Purchase Order flow
- Inventory Fulfillment
- Streamlined Decision Making

**RAAMP
Methodology**

Inventory

- Eliminate non-productive assets
 - 63% of all inventory is excess (IMA Study)
 - Statistically based recommended inventory levels
 - Identify opportunities for standardization
- Minimize Downtime (MTTR), maximize uptime (MTBF)
- *Right part, right place, right time*

Products

- MRO Assets
- Equipment Utilization
 - Electrical
 - Mechanical
- Reliability Data

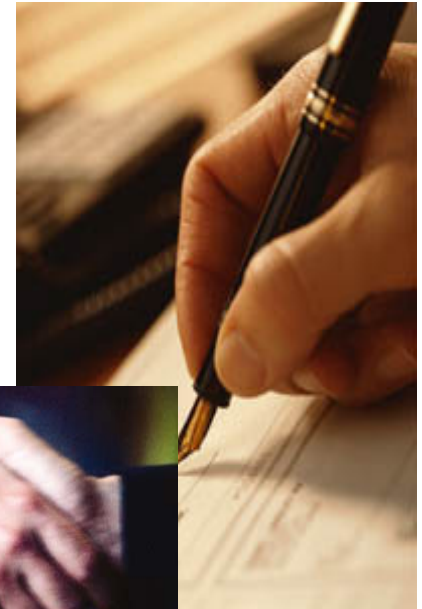
**RA
Tools/Repair
Mgmt
& Distributor
Network**

Financial

- Value Stream savings – measurable/documented
- Improve Financial Ratios ex. RONA
- Improved throughput / reliability
- Reduced MRO expenses – inventory and repair costs

Managing the Total Cost of Ownership

- The Creation or Improvement of Standard Operating Procedures (SOP)
- Reducing Demand
- Accurate ROI based Reporting
- Identifying Cost Savings
- Leveraging Strategic Partners and OEM Relationships
- Driving Customer Value vs. Repair Volume
- Ability Execute Locally, Regionally, & Globally



Asset Management Deliverables

- Fixed monthly billing for Electrical / Mechanical Remanufacturing and Repair
- Asset & Warranty Tracking ~ 15-30% savings on repair costs
- 1 Year In-Service Repair Warranty (RA and 3rd party)
- Reliability Based Reporting (Customized Metrics)
- Help drive standardization of Operating Procedures
- Manage Obsolescence to ZERO on RA hardware
- Achieve goal of 100% Inventory Reduction in RA hardware

Decrease Costs

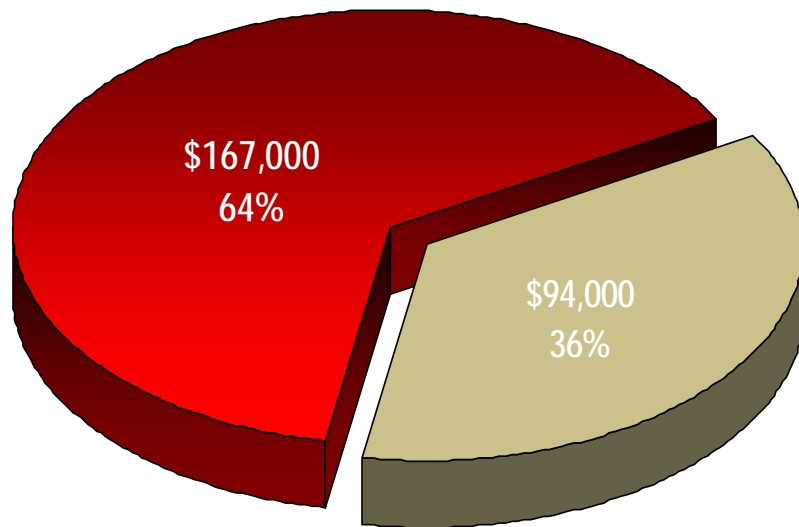
Optimize Assets

Improve Productivity

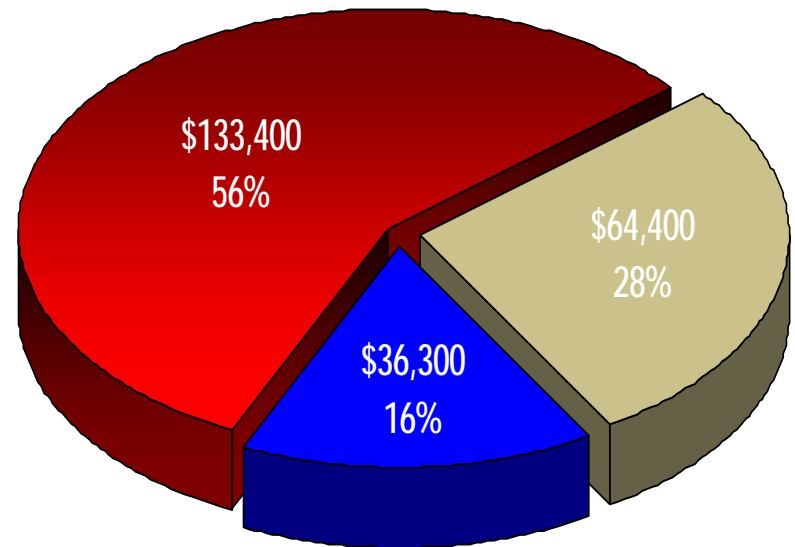
10-15% Savings on Repairable assets

2. Application of Parts Management Agreements

Example of Recommended Rockwell Automaton Spare Inventory



■ Active Inventory ■ Insufficient Inventory



■ Active Inventory ■ Excess Active
■ Excess Inactive

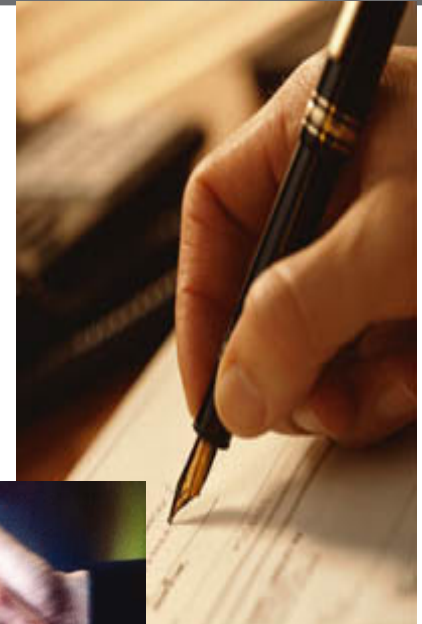
If Insufficient Inventory was added to current inventory, the Estimated Annual Carrying Cost @ 20% is \$67,340

Approximately \$337k unbalanced, not including 3rd party electronic repairable assets

Parts Management Agreements

Parts Management Agreements ensure ready access to **critical spares** by providing Rockwell Automation owned inventory at the customer site or a Rockwell Automation location.

- Fixed monthly/quarterly pricing
- Flexible over-time
- In-Service warranty on agreement stock
- Extended warranty option may be purchased



Providing critical spares to maximize machine uptime while reducing overall inventory carrying costs.

PMA - Value Proposition

- Improved Asset control
 - Avoid unnecessary build up of inventory over time
 - Service facility requirements without increased assets
- Improved Cash Management
 - Pay in smaller increments over time
- Minimize inventory-carrying expenses
- Support of equipment with limited life cycle
 - Spares can leave with decommissioned equipment
- Exclusive Inventory Availability
- Optimized Spare Inventory Base

Parts Management Agreements provide a flexible, easy to use, vendor managed inventory program that ensures availability of critical spares to maximize machine uptime and throughput while reducing overall inventory carrying costs

- Improves Return on Net Assets
- Reduces downtime
- Minimizes inventory costs
- Simplifies budgeting



Food and Beverage Customer - PMA

Solutions

- **Five year asset management contract**
 - Signed comprehensive CSM agreement
 - Agreement covers four plants
- **Agreement provides**
 - Comprehensive spare parts located at four sites with back up spares held centrally by Rockwell
 - 24 hour telephone technical support
 - Inclusive emergency call out service
 - Two annual scheduled visits to each site by Rockwell engineer
 - Repair costs included up to agreed limit

Results

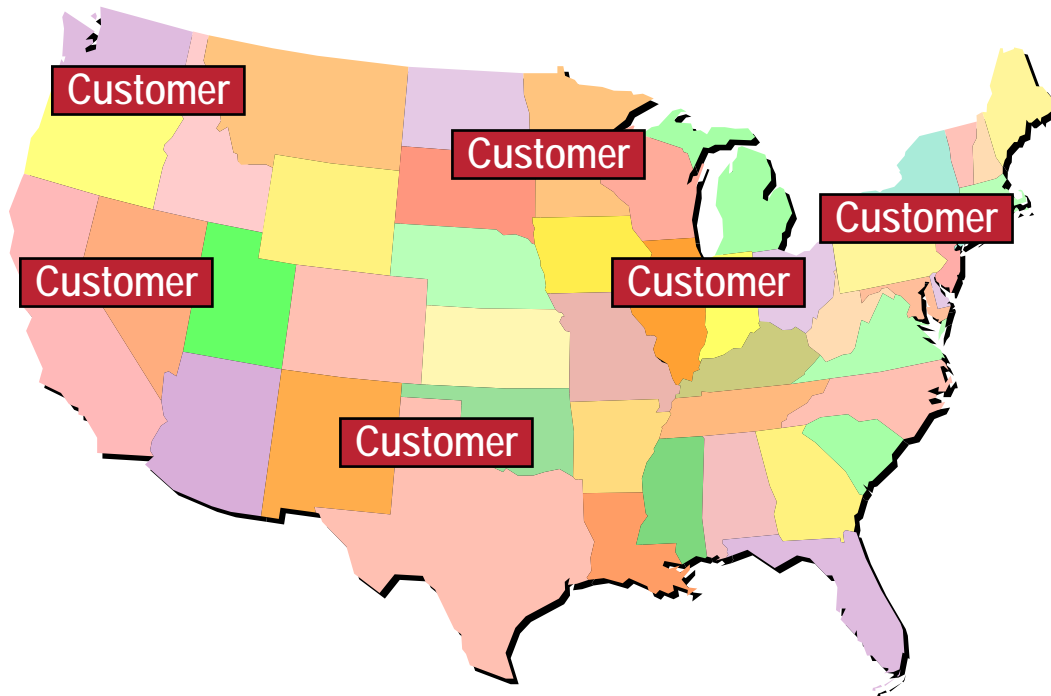
- **Reduced downtime**
 - Rockwell engineer identified and swapped out obsolete drives before failure
 - Technical support ensures breakdowns dealt with promptly
 - Critical spares always available
- **Reduced costs**
 - Spare parts owned by Rockwell Automation
 - Customer pays single monthly fee for all services
 - Annual cost savings includes reduction of carrying and purchase

Saving \$434K per Year

3. Delivery Options for Parts Management Agreements

Option 1

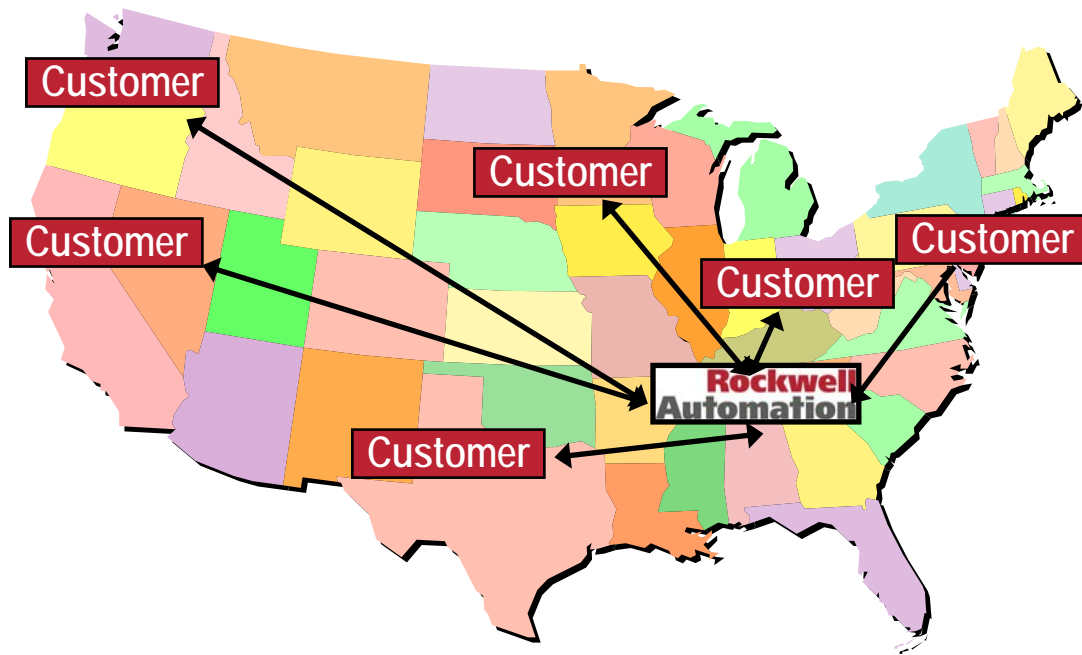
- Provide inventory support independently at each customer location
 - Store critical spares at each location
 - Independent agreements



- Pro's
 - ✓ Each location has own inventory
 - ✓ Immediate availability
- Con's
 - ✓ Higher cost
 - ✓ High level of Inventory

Option 2

- Provide inventory support from a single Rockwell Automation location within the US
 - Store critical spares in one Rockwell Automation site (Memphis Hub)
 - Support multiple locations

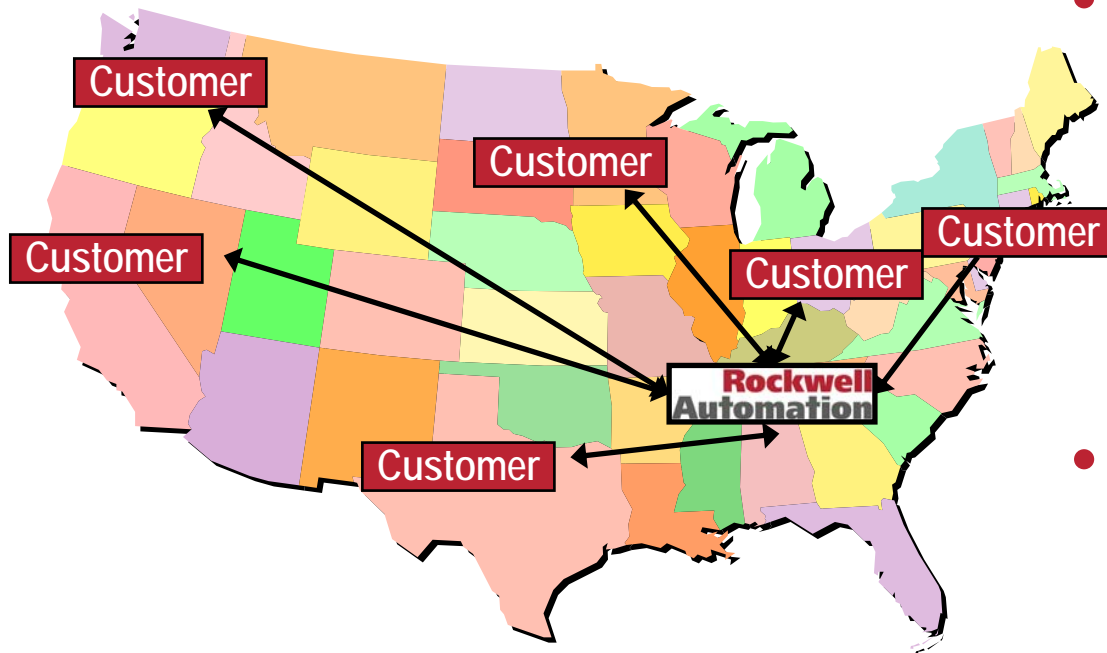


- Pro's
 - ✓ Single stocking location
 - ✓ Lower cost
 - ✓ Multi-site support capabilities
 - ✓ Hub location preference
- Con's
 - ✓ Inventory Availability
 - ✓ Shipping time

*Rockwell Hub located in Memphis, or other location

Option 3

- Provide limited critical inventory at each location with secondary inventory at a single Rockwell Automation location within the US
 - Store critical spares at each location, secondary stock at central location
 - Support multiple locations
 - Critical items available on site as necessary
 - Improved inventory replenishment from central location



- **Pro's**

- ✓ Critical item availability
- ✓ Single stocking location for secondary inventory
- ✓ Multi-site support capabilities
- ✓ Hub location preference
- ✓ Less inventory required

- **Con's**

- ✓ Improved coordination required
- ✓ Shipping time, secondary inventory

*Rockwell Hub located in Memphis, or other location

4. Understanding PMA Financials

Parts Management Agreement Pricing Example

Spares @ List Price

Contract Length (In Years)

Discount Multiplier

Customer's Cost to purchase parts

Financial Item

Annual Cost as % of Inventory*

Annual Cost

Space	0.50	\$850
Utilities	0.75	\$1,275
Property Taxes	1.25	\$2,125
Equipment	2.50	\$4,250
People	3.50	\$5,950
Fringe Benefits	0.50	\$850
Spoilage and Obsolescence	1.50	\$2,550
Accounting Efforts and Systems	1.50	\$2,550
Insurance	1.50	\$2,550
Opportunity Cost of Money	8.00	\$13,600
Total Yearly Charge	21.50	\$36,550
Total Monthly Charge		\$3,046

Parts Management Agreement Pricing Example

<u>Present Value of Contract Payments</u>		<u>Present Value of Owned Spares</u>	
Contract Amount	\$138,400	Spares @ List Price	\$200,000
		Customer Multiplier	0.85
		Customer Cost of Spares	\$170,000
		Annual Cost of Maintaining	\$36,550
Year 1	\$27,680	Year 1	\$206,550
Year 2	\$27,680	Year 2	\$36,550
Year 3	\$27,680	Year 3	\$36,550
Year 4	\$27,680	Year 4	\$36,550
Year 5	\$27,680	Year 5	\$36,550
Net Present Value (NPV)	\$119,360	Net Present Value (NPV)	\$327,608
Total Contract Amount	\$138,400	Total Investment Amount	\$352,750
Monthly Contract Amount	\$2,307	Monthly Investment Amount	\$5,879
NPV Difference (Savings)	\$208,249		
Contract vs Investment Savings	\$214,350	Monthly Savings	\$3,573

Parts Management Agreement Pricing Rationalization

Equipment Buyout at 35% of Customer Net
(Net Price of Parts x Residual Multiplier)

$$\$170,000 \times .35 = \$59,500$$

Amount Paid Towards Purchase of Spare Parts
(Net Price of Parts – Residual Value)

$$\$170,000 - \$59,500 = \$110,500$$

Rockwell Automation Management Fees $\$138,400 - \$110,500 = \$27,500$
(PMA Contract Value – Amt. Paid Towards Spares)

Cost of Fees Per Year
(5 Year Part Management Agreement)

$$\$27,500 \div 5 = \$5,500$$

Management Fees as a % of Net Price of Parts
(Cost of Fees per Year ÷ Net Price of Parts)

$$\$5,500 \div \$170,000 = 3.24\%$$

PMA's Management Fees vs. Avg. Annual Carrying Cost gives a savings of \$214k or 18.3%

5. Questions

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