

## The expensive problem of MRO part availability

Ensuring a ready-supply of critical MRO parts is fundamental for Airlines and MROs. When managing the risk of delaying or grounding aircraft, planners are inclined to be cautious, which inevitably leads to surplus spares and high levels of obsolescence. Industry analysis has shown that global MRO inventory investment often equates to more than two years usage. But even with over-investment, planners find they don't always have the right part available when needed, so flights still get delayed or grounded.

### Why doesn't overspending solve the problem?

The inventory planning component within inventory management systems is central to the problem. These are based upon a **"Purchase to Consume"** paradigm within a manufacturing approach, where parts are consumed during production. Planners recognise that this component of their ERP/MRO IT system is **not fit for purpose for MRO inventory planning** and develop workarounds and separate manual processes external to the system to manage the problem. But this approach lacks the analytical sophistication required to handle the scale, complexity and uncertainty of demand that characterises MRO inventory.

The failure of workarounds and unsuitable inventory planning solutions to address the problem result in reduced profitability and cashflow for the Airlines and MROs, as well as obsolescence of spare parts, and unhappy customers, both internal and external.

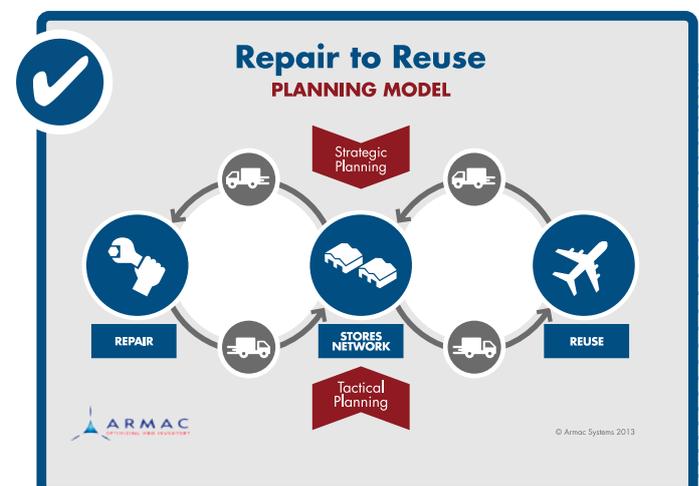
### "Repair to Reuse"

What is needed to address the challenges of MRO inventory planning is an approach designed around a **"Repair to Reuse" (RTR) model**. This supports MRO specific inventory planning activities and decisions such as:

- Repair/Don't-Repair at unserviceable removal
- Network Allocations
- Post Repair Allocation
- Part Liquidations
- Consignment Holdings
- Exchanges

These go far beyond the purchase and distribute decisions within the manufacturing "Purchase to Consume" model. While purchasing might be a consequence of the decision making process, it should be the last action considered.

The "Repair to Reuse" inventory planning model contains the analytical sophistication required to address the uncertainty of demand, scale and complexity surrounding MRO inventory, enabling the Airlines and MROs to target optimal inventory levels to deliver service level and investment KPIs.



Armac customers report up to 40% decrease in inventory investment and simultaneous increase in service levels

## An inventory planning solution designed for Airlines and MRO's

Armac's MRO inventory planning and optimization solution has been designed specifically to support the requirements of rotatable, repairable and consumable inventory within the **Repair to Reuse - model for MRO inventory planning**. It enhances the organisations' existing ERP/MRO IT inventory management systems.

There are four key elements to the solution:

- **ARMAC DSS:** Armac's solution provides critical decision support to determine optimal asset management strategy and inventory policy, identification of inventory surplus and shortages and "What If" scenario planning.
- **ARMAC MRO INVENTORY PLANNER'S WORKBENCH:** Armac's Workbench becomes the planner's core desktop interface for inventory planning, converting policy to practice. The strategically aligned policy is delivered to operations on-screen, through the prioritisation of tactical actions for surplus/shortage management and network balancing actions as described within the RTR model. The setting of operational controls ensure that policy is enforced within the planning process.
- **KNOWLEDGE BASE:** Expert planner knowledge, exceptions and rules are captured and formalised through the Knowledge Base. These are applied automatically to arrive at surplus and shortage management recommendations. The Knowledge Base allows for policy enforcement and tighter management control as exceptions are captured in real time within the Workbench as decisions are made.
- **ARMAC'S ADVANCED ANALYTICS ENGINE:** Our advanced MRO analytics software enables optimization of stock levels in line with financial and operational controls and also prioritises actions with the highest impact in terms of investment and service level.

## BENEFITS AT A GLANCE

- Improved cashflow
- Increased profitability
- Improved service availability
- Enhanced Inventory Asset Management
- Management control delivered

## Discover the benefits of balancing service level and spend

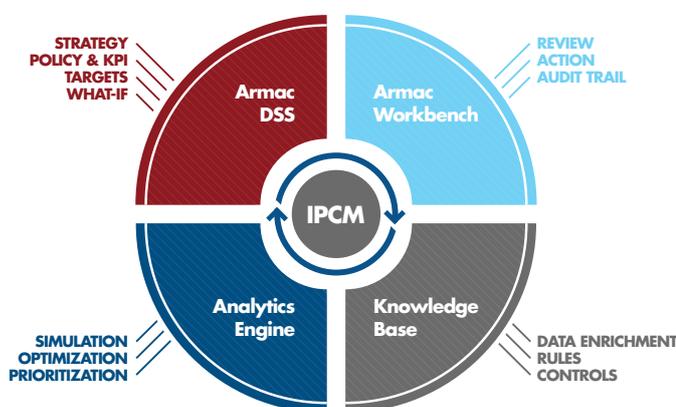
Armac's solution, incorporating the "Repair to Re-use" model, provides a world-class MRO inventory planning solution that delivers superior asset management capability, greatly improved cashflow and increased profitability, plus excellent management control for both Airlines and MRO organisations.

Our results are proven within aviation: customers have seen up to 40% decrease in inventory investment and increased service levels, with annual inventory savings of up to 25%. Organisations gain unprecedented management control, and because stock levels are kept at precisely the right levels, inventory turn is faster and overall profitability improved.

“We are delighted to work with Armac who we consider to be a thought leader in MRO Inventory Analytics and Planning. They have helped us significantly improve our inventory turn by over 40% in two years.”

*Dominik Hoesli, SR Technics Vice President Asset Management & Supply Chain Solution*

### ARMAC SOLUTION



Armac's solution is delivered using our MRO Inventory Planning Capability Model (IPCM), which supports the engagement of all the key stakeholders in the inventory planning process.

### About Armac Systems



Armac Systems is at the forefront of new-generation, intelligent MRO inventory planning solutions. With more than two decades experience in aviation and a strong focus on the aircraft MRO sector, the company has saved millions of dollars for organisations to date. Its solution has been developed in collaboration with industry leaders and academic institutions.

For further information please visit :



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