

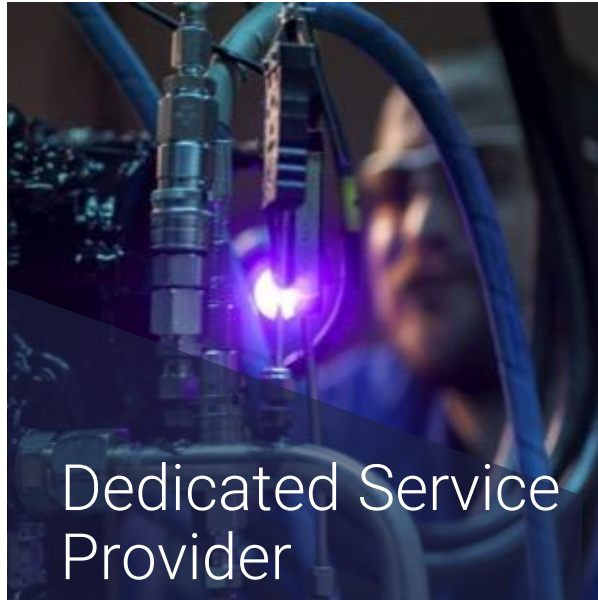


Component & Material Services

Single Source Solutions



We keep aircraft where they belong – in the sky



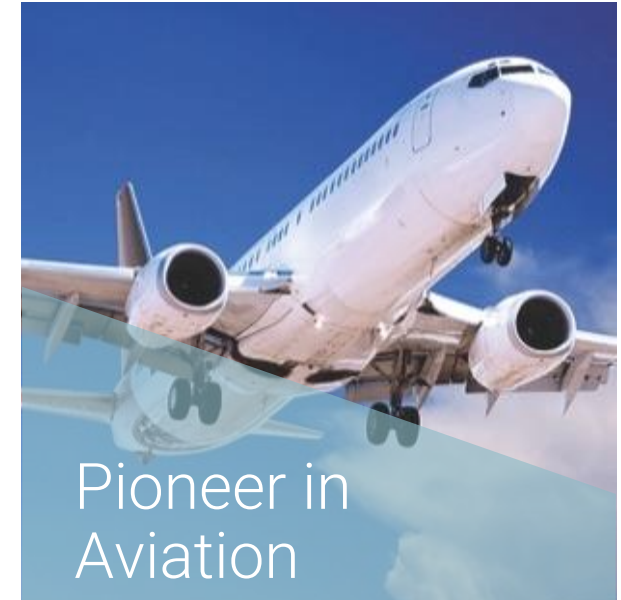
Dedicated Service Provider

With our preferred partnership with several system OEM's, we have access to authentic parts and IP-data to offer the best solution.



Innovative Engineering

We design, develop and maintain aircraft (TCH). Our holistic viewpoint and innovative mindset allows us to take on any challenge.



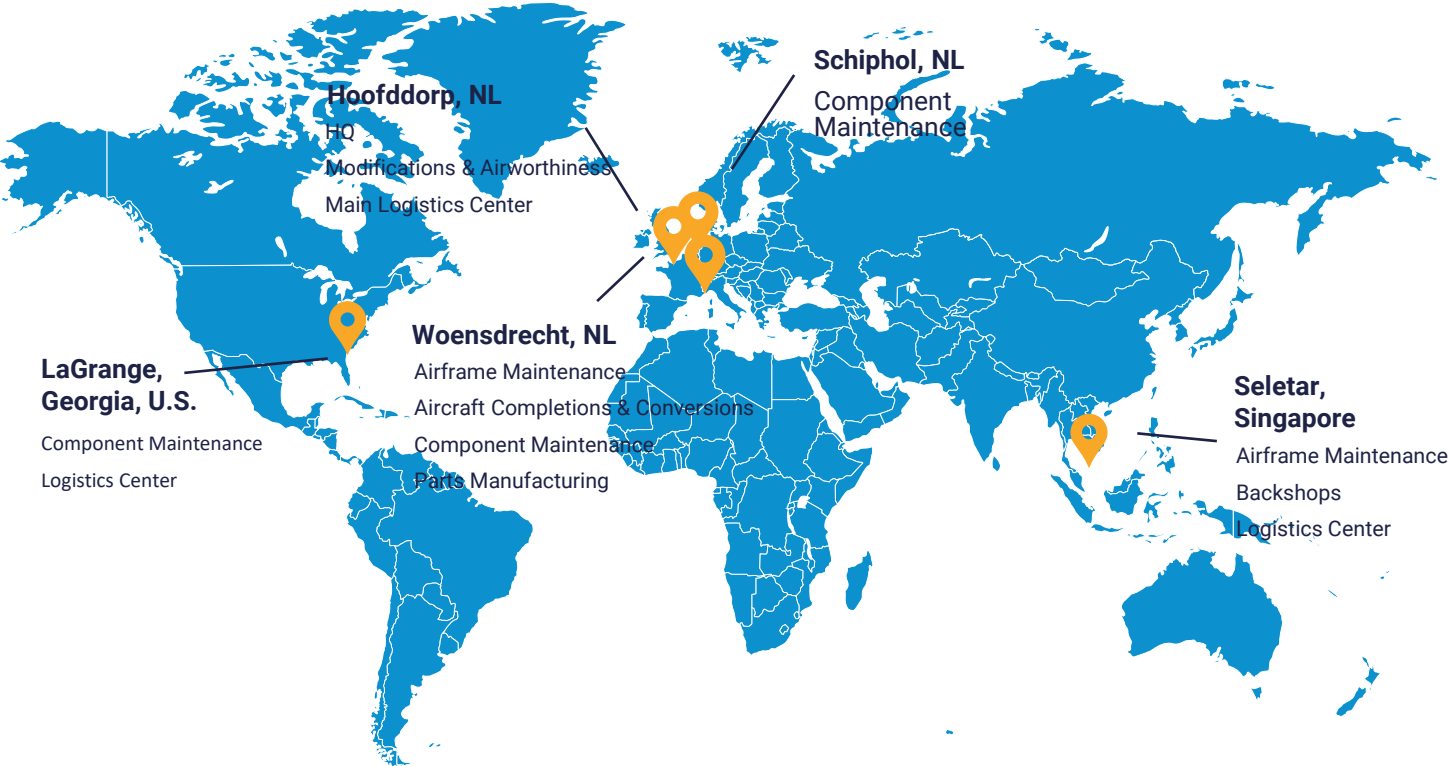
Pioneer in Aviation

We were there when aviation started and have been a reliable partner ever since.



Aftermarket integrator with a complete service offering and global reach

€220m	80% 20%
Business FY2019	Commercial Defense
5	900
Sites	Employees
>25	>1000
Aircraft Programs	Customers





Unique independent competence for comprehensive single source solutions

ATR

DE HAVILLAND AIRCRAFT
OF CANADA LIMITED

Fokker

EMBRAER

MITSUBISHI
AIRCRAFT CORPORATION

AIRBUS

BOEING

NH Industries

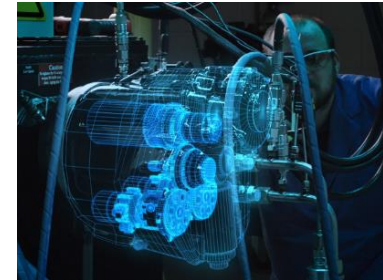
LOCKHEED
MARTIN

Gulfstream

Airframe Services



Modifications & Airworthiness Services



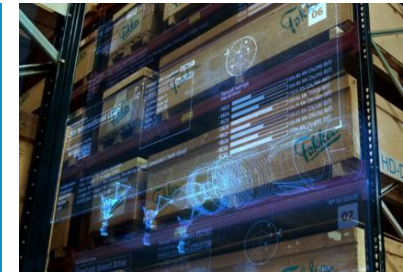
Material Services



Aircraft Completion & Conversion Services



Component Services



cfm



Collins Aerospace

Honeywell

TRANSDIGM
GROUP INC.

GKN AEROSPACE

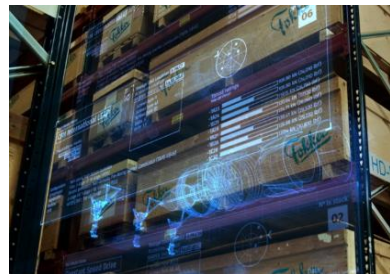
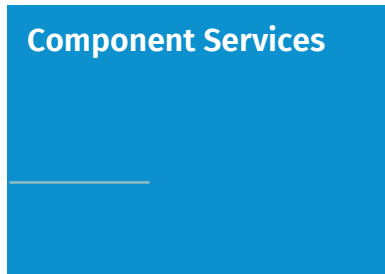
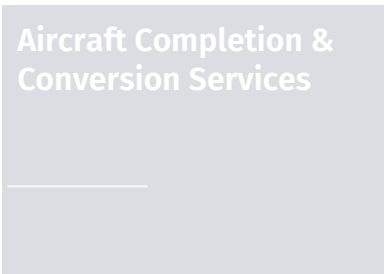
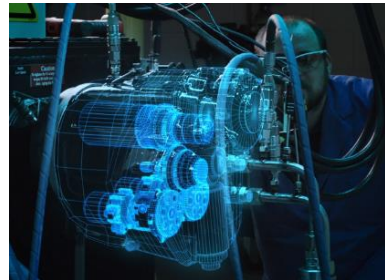
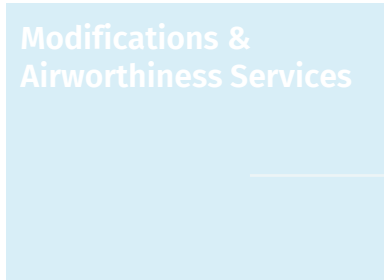
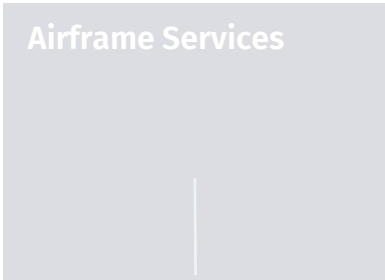
THALES

Parker

LIEBHERR



Unique independent competence for comprehensive single source solutions



Collins Aerospace

Honeywell

TRANSDIGM GROUP INC.



GKN AEROSPACE

THALES



LIEBHERR



Diversified global customer base with long-term relationships

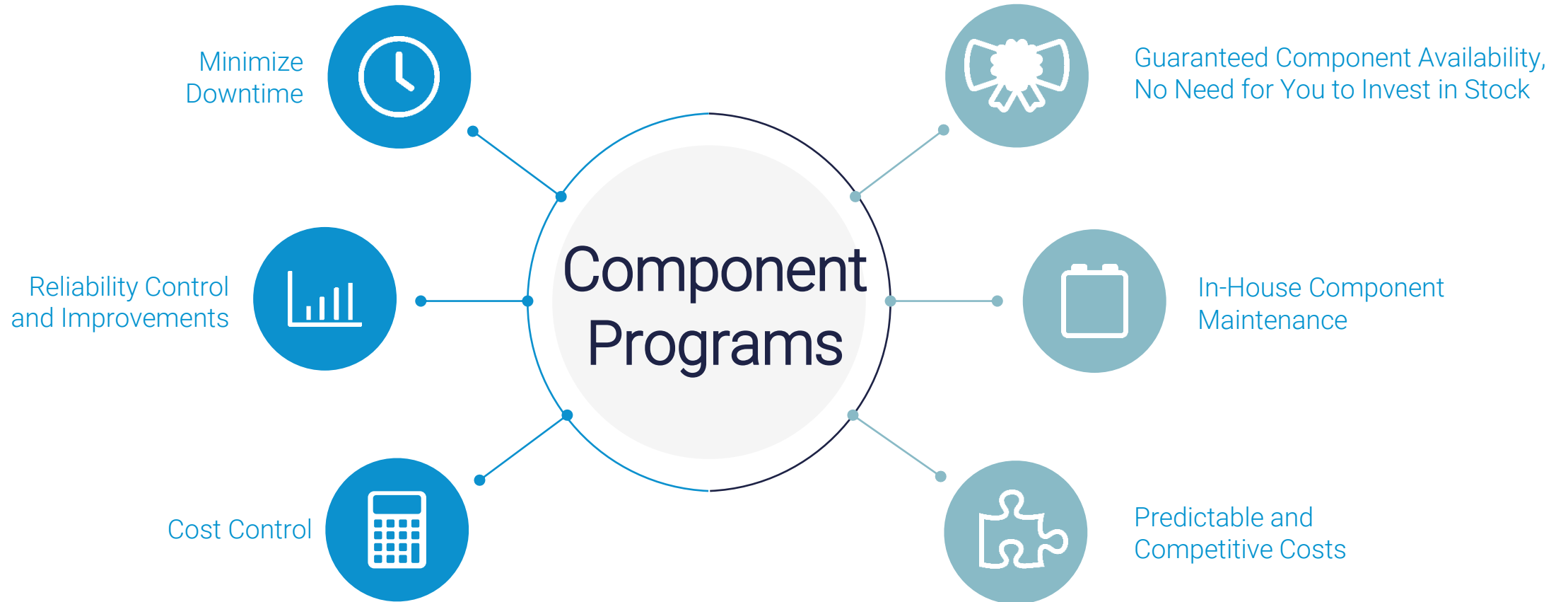
Servicing many customer groups understanding and prioritizing their different customer needs

Commercial Operators	Defense & Government	Lessors	Aircraft & System OEMs	Engine OEMs	ATP & Ind. MROs





Component Services





Rotable Trading

Procuring the right part at the right time for the right price

- » Stock pooling and strategic purchasing: high availability
- » Forward exchanges with repair capabilities: flexibility and cost effectiveness
- » Reliable and traceable: high-quality and longer time on-wing



Single Source Standard Parts

A one-stop shop with excellent OTD performance

- » Tailor-made scope: take-over and management of current stock
- » No MOQ'S, price breaks, or standard packs: order only what you need
- » Advanced forecasting and two bin replenishment: guaranteed availability



Distributor

Providing a broad product range from many OEMs

- » Customer portal: Real-time tracking and availability
- » Global warehousing and 24/7 AOG support: reduced lead times
- » Volume rebate agreements: operating cost reduction

Royal Netherlands Air Force

Integrated Program on Standard Parts

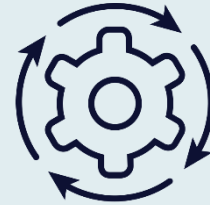




Introduction



Concept



Operation



Integrated Program Standard Parts

Vendor-managed inventory (VMI) is a logistic model in which the buyer of standard parts provides certain information to a supplier (Fokker Services) and the supplier takes full responsibility for maintaining an agreed inventory of the material at the buyer's consumption location.





Why Standard Parts?

- » Standard Parts refer to Bolts, Nuts, Fasteners and Seals
- » Standard Parts are widely available in the market
- » Generally Standard Parts account for **1% of cost**, and **30% of volume**
- » Applying VMI will free-up capacity and unburden the supply chain
- » Fokker Services is specialized in providing a One-Stop-Shop for all Standard Parts

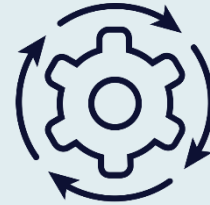




Introduction

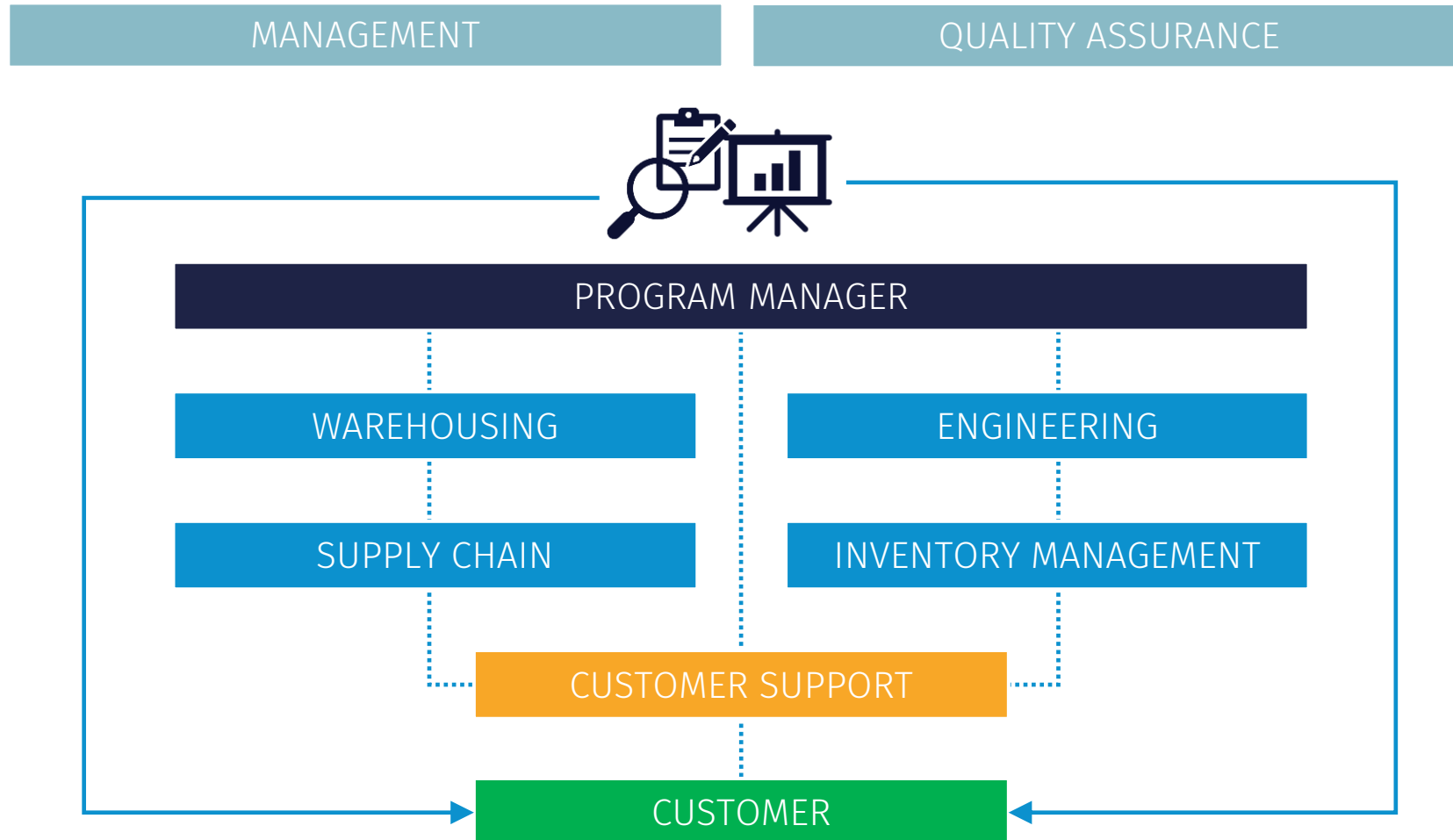


Concept

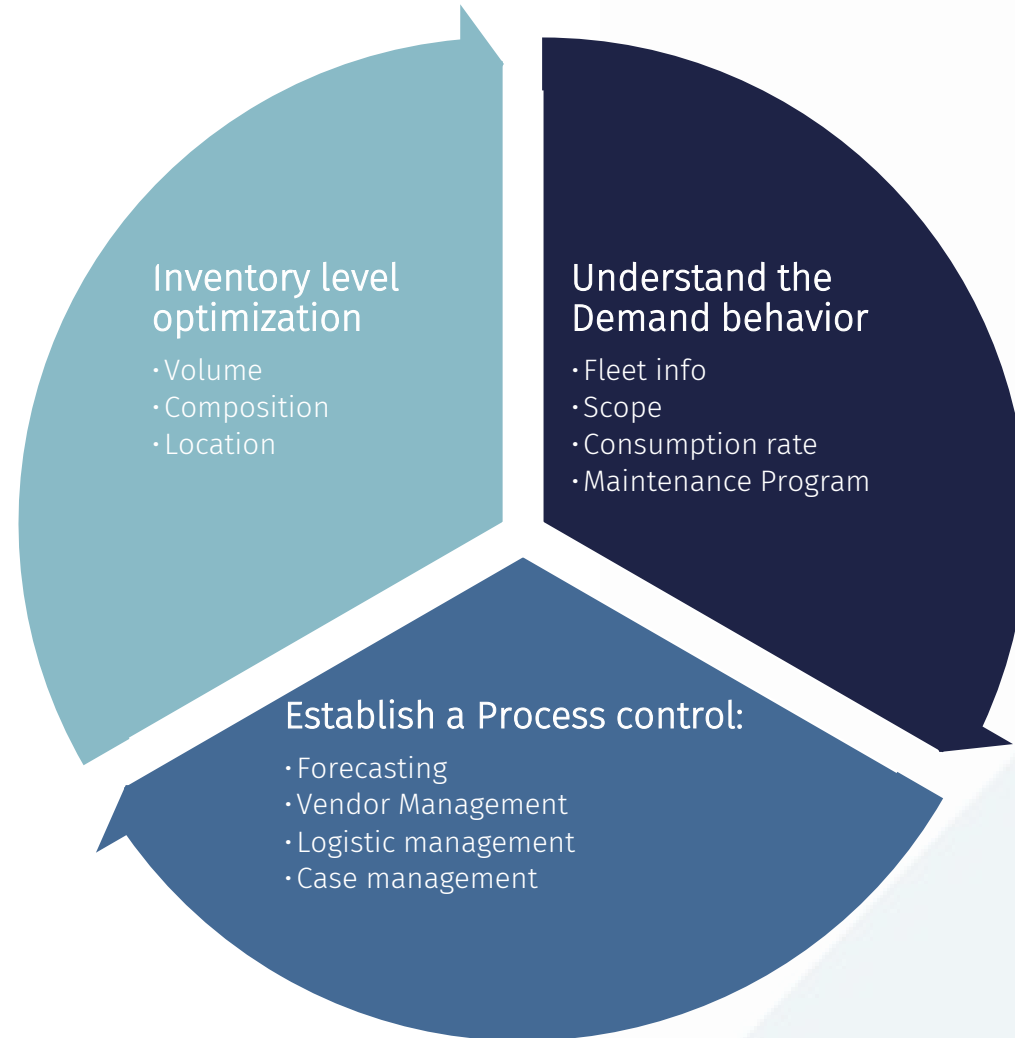


Operation

Holistic approach towards operational control of spare parts



Understand and control business dynamics to optimize inventory





“The goal of forecasting is not to predict the future but to tell you what you need to know to take meaningful action in the present”

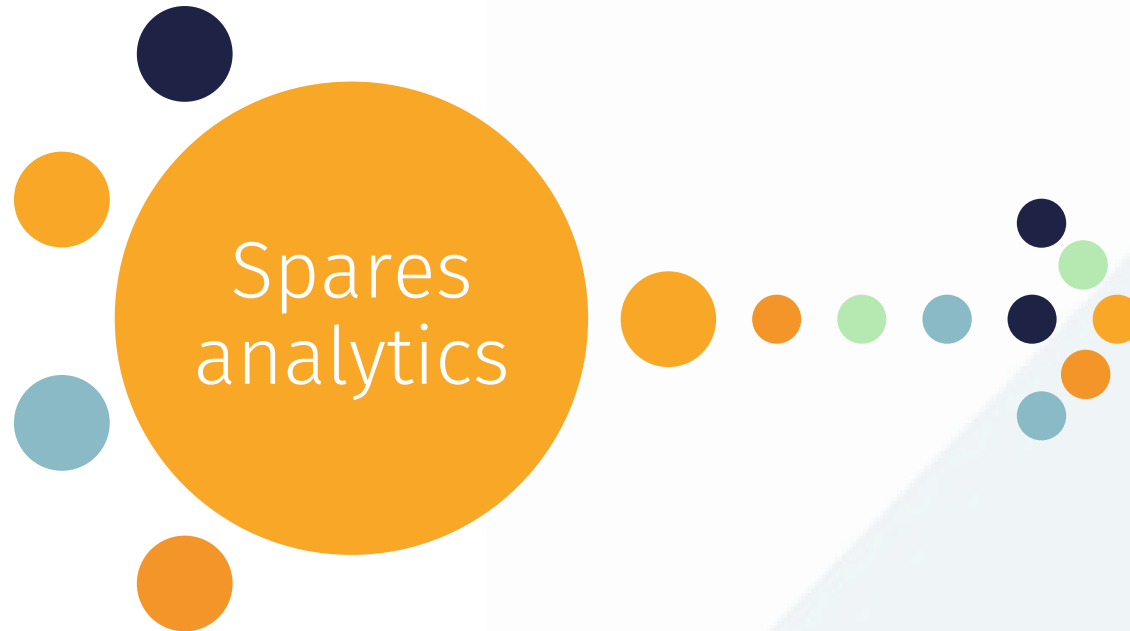
Paul Saffo

Spares analytics as driver for actionable insights

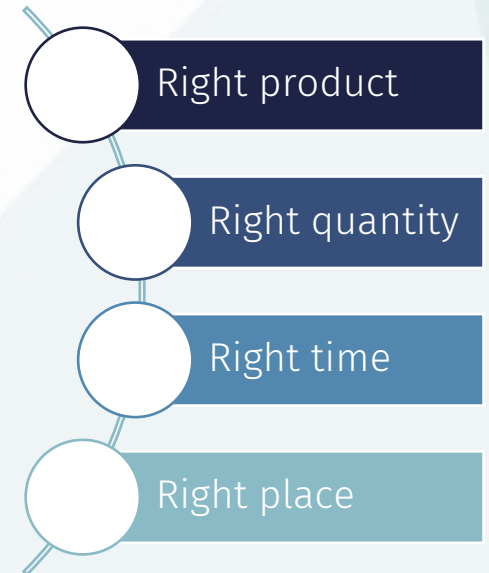




Active cooperation between NL science community and industry






Optimized inventory levels

































Having the right product, right quantity, right time, right place

Total # of Standard Parts

Source/Storage location		 Market	 Depot	 DP
ADI	Smooth (0-6 Months)	# PNR		
		# Orderlines		
Erratic (0-6 Months)	# PNR			
	# Orderlines			
Intermittent (6-12 Months)	# PNR			
	# Orderlines			
Lumpy (12-24 Months)	# PNR			
	# Orderlines			
Service Level →		OTD vs CDD	OTD vs CDD	Availability
Replenishment Cycle →		30 – 180 Days	XX Hrs	XX Hrs
Delivery Performance →		90 – 95 %		≥ 98 %

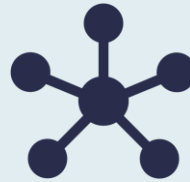
- » Total number of unique parts
- » Total number of Standard Parts
- » Total of order lines
- » Total of Standard Parts order lines
- » Standard Parts volume share %

Impact of stock optimization for RNLAF

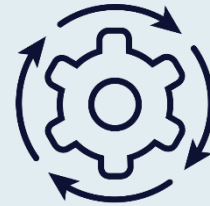
	Depot						Base		Delivery Point			
												
Time / Part	4 min	2 min	2 min	10 min	5 min	10 min	2 min	5 min	2 min	3 min	1 min	Σ46 min
CURRENT	●	●	●	●	●	●	●	●	●	●	●	-
FS: PEB												▼46min
FS: JIT		●*							●	●●	●	▼37min
Key Metrics	#	%	▼Time									
PEB-Orders	4484	26%	3439 hrs.									
JIT-Orders	12865	74%	7400 hrs.									



Introduction



Concept



Operation

What is looks like in day-to-day operation

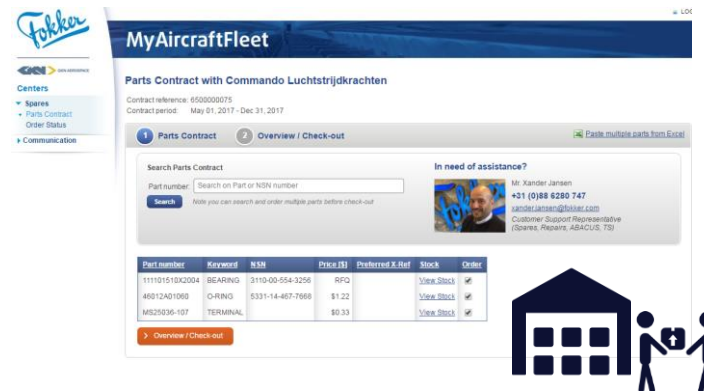
Fast Movers

KanBan Replenishment
Solution for Fast Movers



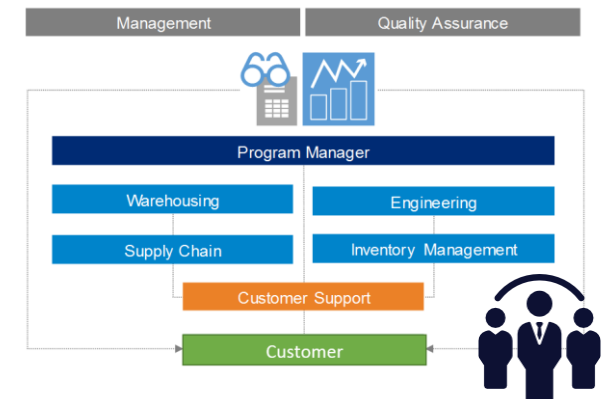
Slow Movers

On demand and
Just-In-Time delivery
Solution for Slow/Non-Movers

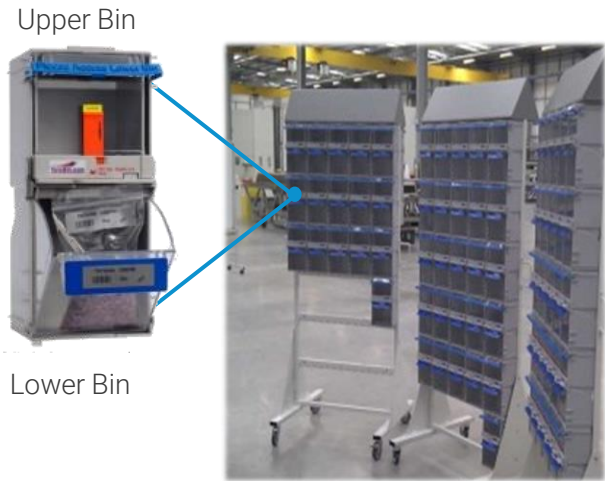


Program Management

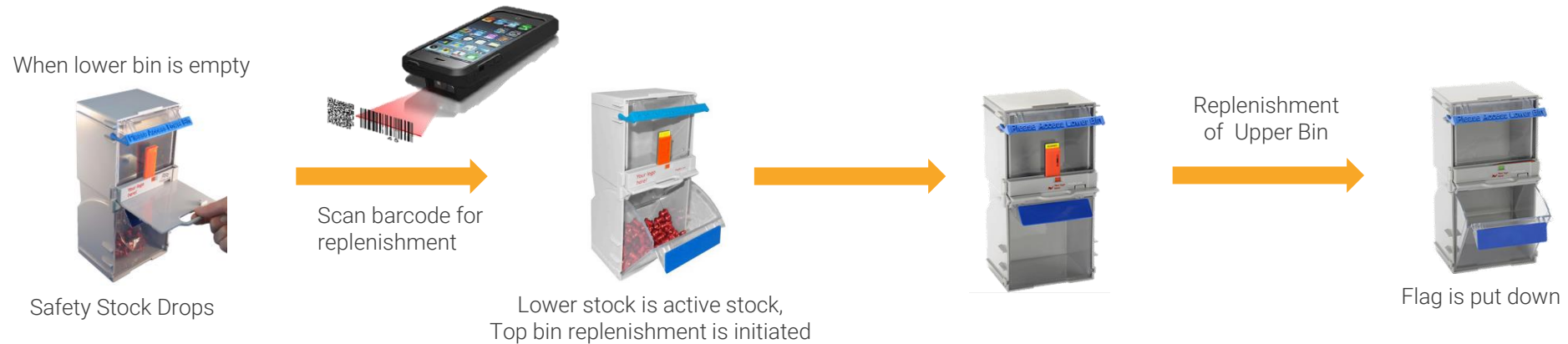
Unburden your supply chain



Management of fast-moving parts at the point of use



- » TwinBins will be placed at the point-of-use
- » The engineer will take the parts he requires from the Lower-bin
- » When Empty, the Engineer will pull the slide and safety stock drops
- » The flagged bins can easily be scanned by means of the dedicated scanner
- » After scanning the App automatically generates an order to Fokker
- » This allows FS to send a replenishment order without interrupting operations
- » Replenishment order will come in pre-packed QTY
- » Staff can top-up the Upper-bin and process will repeat



Thank you!