



Engineered Composites

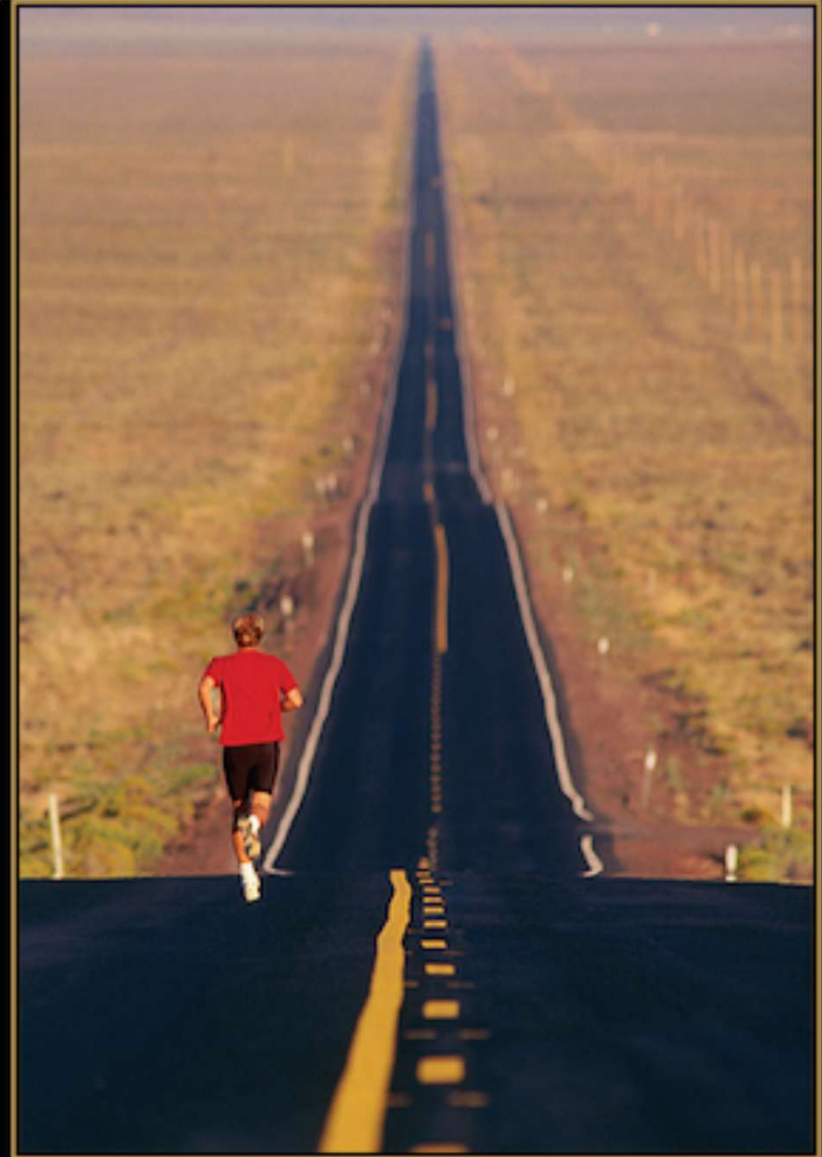
Royal Engineered Composites

Demand Driven World 2026

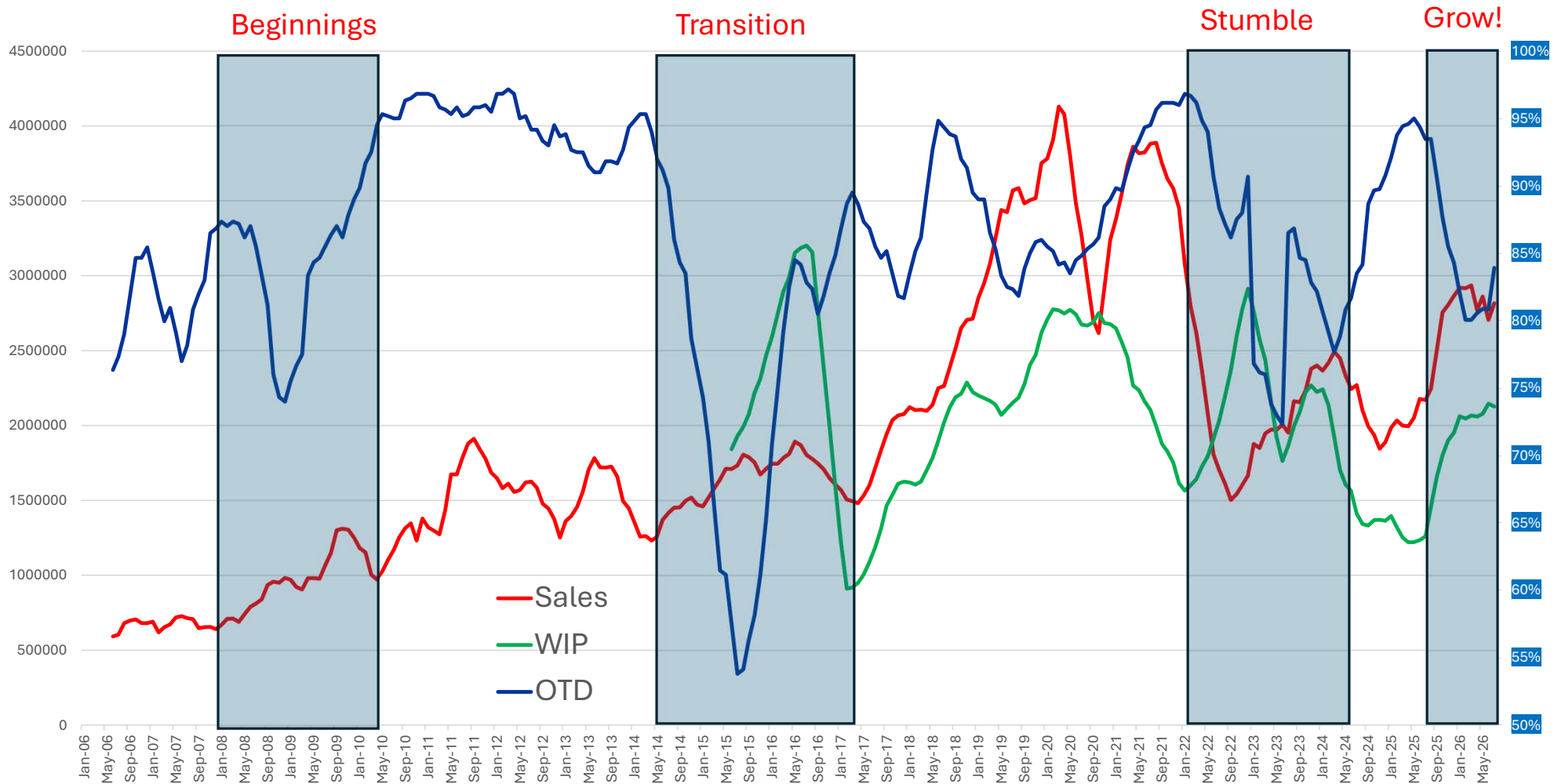


A Journey, 20+ Years in the Making

- A journey to increase customer satisfaction and return an investment to our shareholders.
- Aerospace is a complex, target rich environment.
- Early success with TOC and Demand Driven reinforced the validity of the solution.
- CMUC & DDW Presentations
2008, 2009, 2010, 2011, 2012,
2014, 2016, 2018, 2026



20 Years of Demand Driven



Brief Bio



- 29+ years at Royal
- Project Engineer (5 yrs)
- Engineering Manager (3 years)
- Operations Manager (9 yrs)
- President (12+ yrs)
- BS Chem Engr, MBA
- Married 25+yrs, Three daughters



About Royal



- Founded in 1949 in Minden, Nebraska
- Single Location, 104,000 SF
- 100% Aerospace
- Composite fabrication and light assembly
- High mix, low rate (10-200 parts per year)
 - ~4,500 manufactured parts
 - ~3,000 purchased parts
 - Part size from 4" cube to 8' x 16' x 3'
- ETO at startup (Aerospace First Part Qualification)
- Aircraft and customer specific requirements (X ≠ X)
- Employee Owned (ESOP)



NORTHROP GRUMMAN

BOEING

ST Engineering Aerospace

ULA

Gulfstream

SIKORSKY
A LOCKHEED MARTIN COMPANY



SUBARU

GE Aviation

HondaJet

SPIRIT AEROSYSTEMS

LOCKHEED MARTIN

Raytheon

BLUE ORIGIN

IAI
Israel Aerospace Industries

GN *Fokker*



nt Constitutes Confidential and

es

Fully Integrated Manufacturer with Custom Tailored, Value-Added Processes



Core competencies comprised of engineered solutions that leverage the Company's end-to-end engineering expertise in manufacturing and processes for complex and detailed composite parts

- Royal is involved throughout the production lifecycle from prototype and tooling, fabrication, assembly, to inspection/testing.
- Royal's focus on manufacturing process improvement paired with complex manufacturing expertise enables us to provide efficient and customized solutions for customers with a broad range of composite materials and end products.
- Royal's dedicated team of engineers continually automate manufacturing processes to increase capacity and efficiency.
 - Royal currently has patent right protection for 6 new technology applications developed in-house for composites layup and automation.

Cut Out
Fabric



Lay Up Pre
Preg



Cure



Trim Excess



Inspection



Assembly &
Finish





Aerospace Environment - Materials



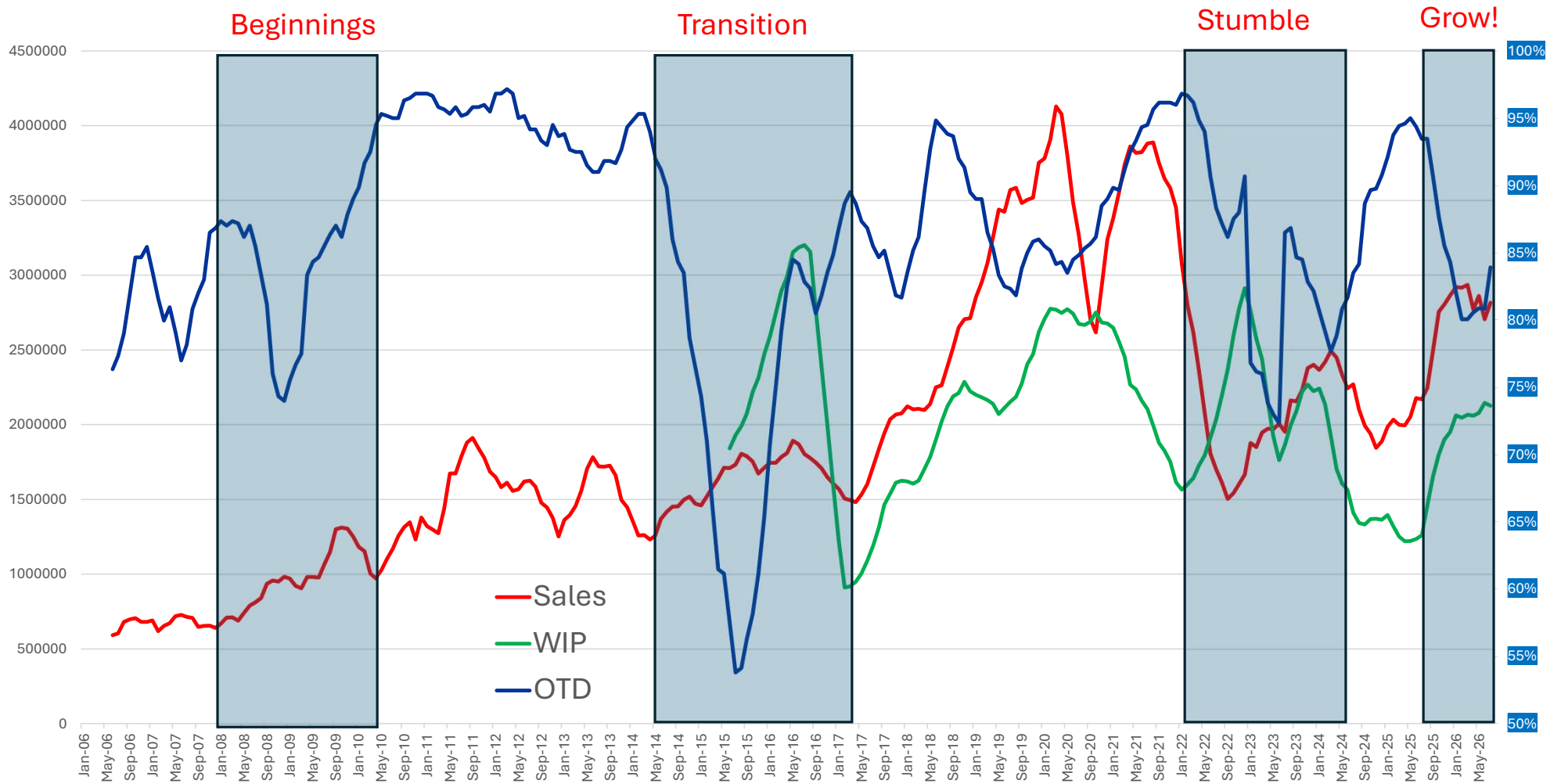
- Airframers control the supply chain with strict contracts, tight specifications and extreme quality control
- High Value Raw Materials
 - Long lead times (100 to 270 days)
 - Sole source - months, even years to qualify vendors
 - Materials are normally dedicated to single customer program
 - High minimum buy quantity (a year or more) & value
 - Requires extensive trace and outlife (freezer in/out) tracking
- Royal is small buyer between a big vendor and a big customer

Aerospace Environment – Manufacturing



- Long term contracts (IDIQ)
- Becoming a qualified supplier is a long and expensive process
- Stringent lot control requirements
- Few common BOM items to buffer
- Molds are our true constraint
- Autoclave loading complexities (batch process)
- Expensive, Perishable Raw Materials (~10 days outside a freezer)

20 Years of Demand Driven

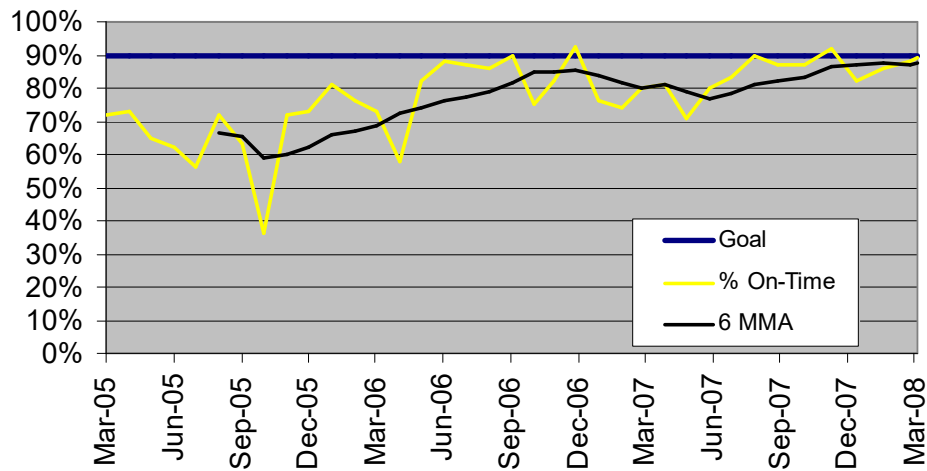


Beginnings

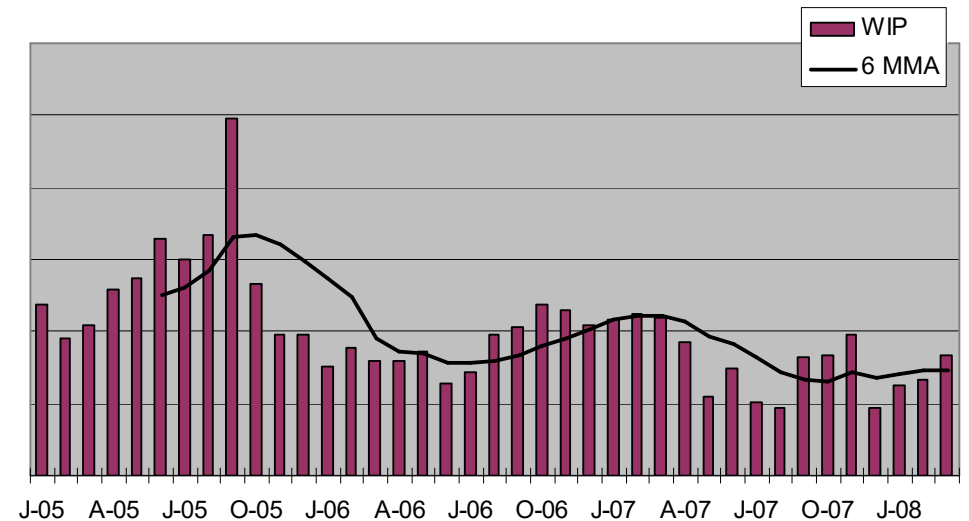


2008 TOC implementation of Drum Buffer Rope (DBR+© software) with Constraints Management Group

On Time Delivery



WIP



Success With The Theory Of Constraints (TOC) Led To Demand Driven Culture

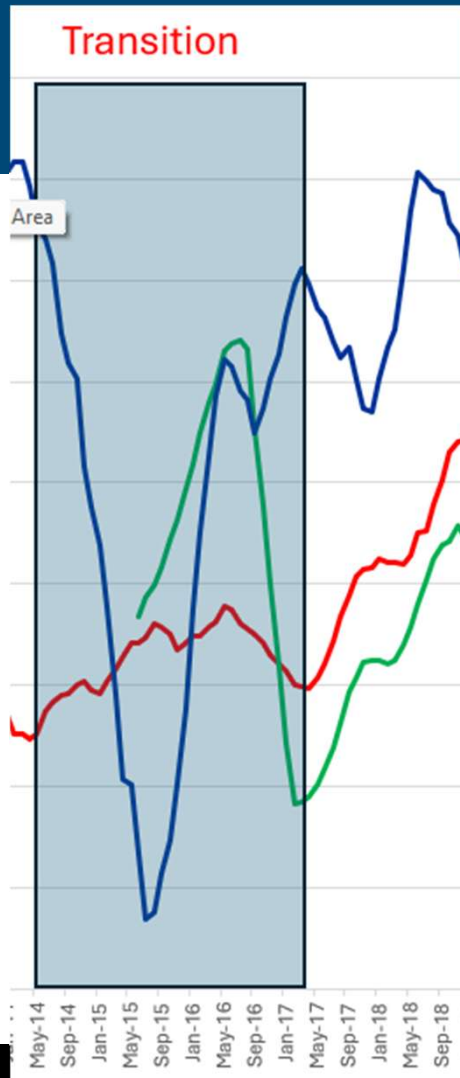


But Change happens:

- Product
- Customer
- Technology
- Pandemic
- Employee turnover
- Workarounds evolve

We cycled through – 4 iterations of TOC Change Management with CMG over 18 years

Transition



- Leadership changes at multiple levels and in Operations S&E
- Lack of sustaining training and knowledge
- Growth in new programs/customers
- Challenged the status quo
- Return to our fundamentals and integrated DDMRP Replenishment (R+®)
- Results
 - Stabilized business
 - WIP down
 - OTD up
 - Healthy growth

Stumble



- 6 Year Gap Lots of Change, Including a Pandemic
- 2023 we implemented a new ERP and Upgraded from R+® DBR+©, (DDMRP and Drum Buffer Rope Software), to INTUIFLOW® Materials Planning (DDMRP) & Scheduling & Execution (Drum Buffer Rope).
- Our implementation was Solution Set and Model deficient.
NO Thoughtware, NO Adaptive Flow Model – “*just software*”
AND IT BROKE US

We called CMG, identified issues, and followed the *Demand Driven Rules*

DDOM Basics – Match The Right Rules to The Right Tools

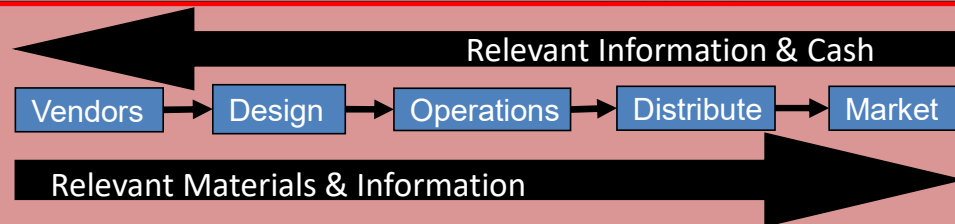
Demand Driven Model Attributes

Δ Visibility $\rightarrow$ Δ Variability $\rightarrow$

Operating the Demand Driven Model (Tactical Time Frame)

Δ Flow $\rightarrow$ Δ Cash Velocity $\rightarrow$ Δ $\left(\frac{\text{Net Profit}}{\text{Investment}} \right) \rightarrow \Delta$ ROI

Demand Driven Flow map of connections and interconnections of material, capacity and information.



Create Short, independent planning horizons - **DDMRP**

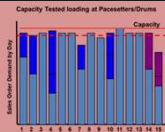
Strategically places **decoupling points** for lead time compression and variability (bullwhip) mitigation.



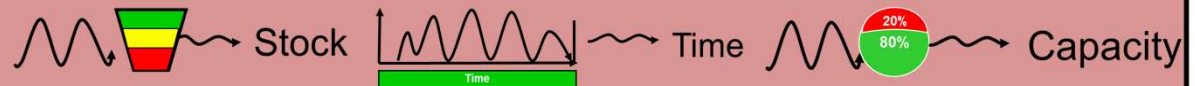
Strategic control points govern and leverage the system output – Protect them protects FLOW.



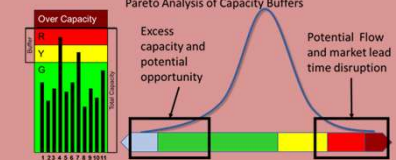
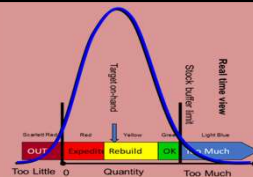
Strategically places **control points** for schedule synchronization to pacesetter/drums with finite capacity schedules



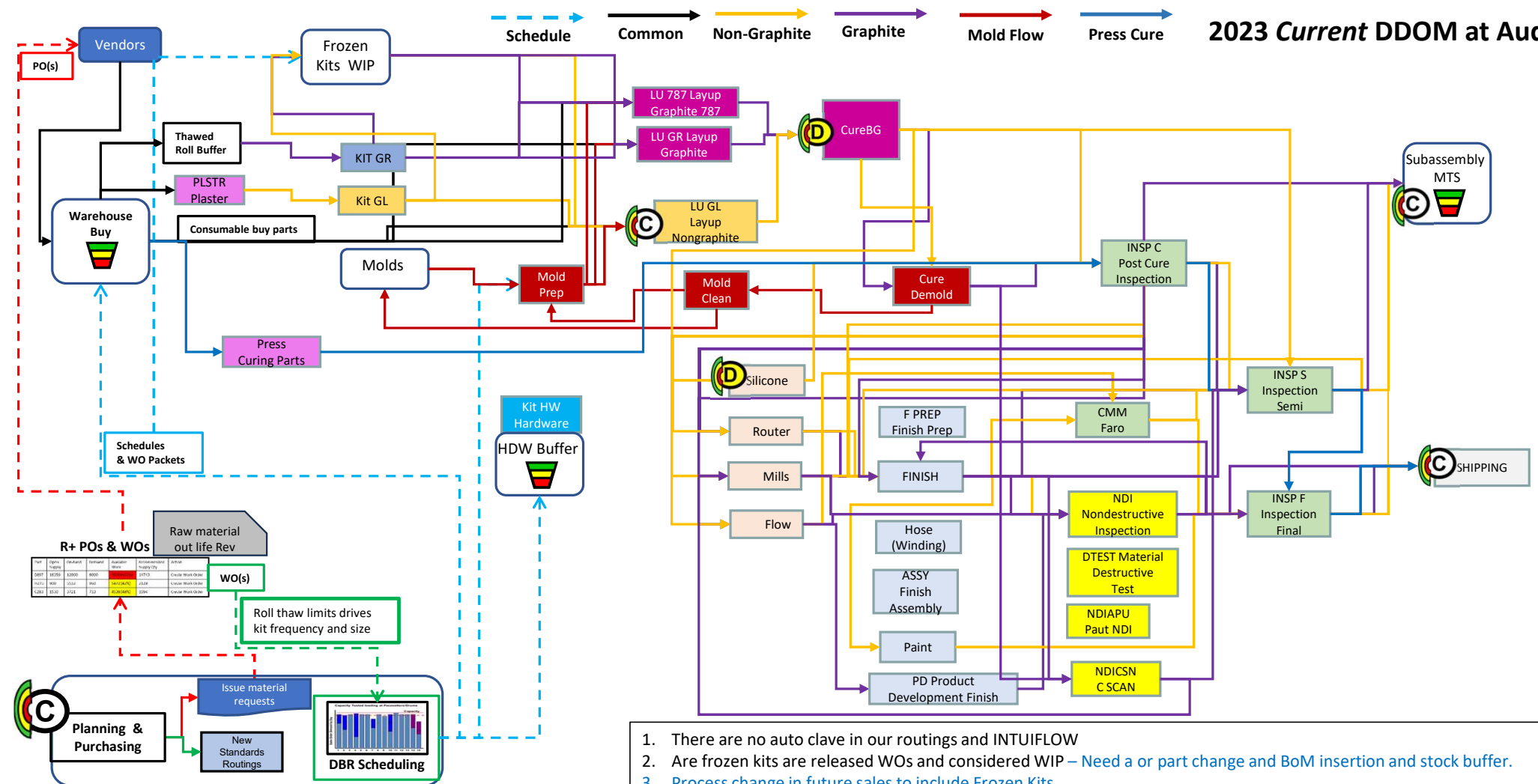
All buffers use Paretian models to protect identified **Leverages Points**, with visible signals to take action on priorities and opportunity.



Visible buffer and control point status use a Paretian view to create a learning feedback loop to drive improvement.
“too much & too early” “too little and too late”



2023 Current DDOM at Audit



1. There are no auto clave in our routings and INTUIFLOW
2. Are frozen kits are released WOs and considered WIP – Need a or part change and BoM insertion and stock buffer.
3. Process change in future sales to include Frozen Kits.
4. No Kit hardware WOs in INTUIFLOW, not in the routings.
5. Press Curing routings have no kit or warehouse pick operation – are they from semi-fins or buy parts?
6. No routings for destructive test.
7. Minimal routings for autoclaves and grouped as one resource – but very different sizes and # of Ports

Demand Driven Flow
map of connections and
interconnections

Create Short,
independent planning
horizons



Connect the Challenges to DD Operating Model Gaps

Routing and BoMs are not granular enough to plan, schedule and manage Flow

- **The BoMs have been flattened** – *BoMs are missing strategic child part decoupling.*
- **Critical resources (auto claves, molds) are missing in our routings:**
 - We have no valid Drums or System Load Graphs for scheduling or execution status.
 - Make part lead times and start dates in INTUIFLOW MP are understated.
- **No strategic resource time buffers to protect critical resource start dates** – All the buffer time is aggregated in the shipping/completion buffered.
- **No Child part Make To Stock Buffers** for Frozen Kit and Cured part to protect layup and Assembly.
- **No visibility to child part priority for scheduling.**
- **No visibility to Frozen Kit, Mold, Cure on time status to the Parent start dates in execution.**

Demand Driven Flow
map of connections and
interconnections

Create Short,
independent planning
horizons



Connect the Challenges to DD Operating Model Gaps

INTUIFLOW MP(R+®) signals and Alerts cannot be trusted:

- **Duplicate demands then cancellation** – MRP netting run in the ERP rather than INTUIFLOW MP.
- **Promise dates in IF MP are under and overstated** – INTUIFLOW S&E Promise dates were not updated to make parts in INTUIFLOW MP from the ERP (*interface issue*).
- Buffer Profiles Average Daily Usage not updated with Demand History – buffers became static not adaptive (*interface issue*).

Demand Driven Flow
map of connections and
interconnections

Strategic control points
govern and leverage the
system output



Connect the Challenges to DD Operating Model Gaps

Drum finite schedules pace all resource and stagger release of work to the floor:

- **Intuiflow WO promise dates are unreliable and cannot be trusted.** Request dates were manually manipulated and days late and schedule priorities were unreliable.
- **NO “effective Drum scheduling” in INTUIFLOW to pace all resources to the system constraints** – Molds and Autoclaves are not in the routings.
- **NO User Defined Fields for Group scheduling at scarce/critical resources to batch Frozen material at Kitting** to exploit critical resources - Molds, Material Out Life and Autoclave loading.
- **NO level loaded schedule for non-drums** – NO stagger to create sprint capacity & priority for resource execution decisions.
- **There is no Drum schedule** – Each area creates its own dispatch list daily from the daily released work and WIP on the floor.

Demand Driven Flow
map of connections and
interconnections

Protecting the critical points
protects the System's output -
The system is stable & reliable.



Connect the Challenges to DD Operating Model Gaps

Priority and start date signals not aligned across the Supply Chain

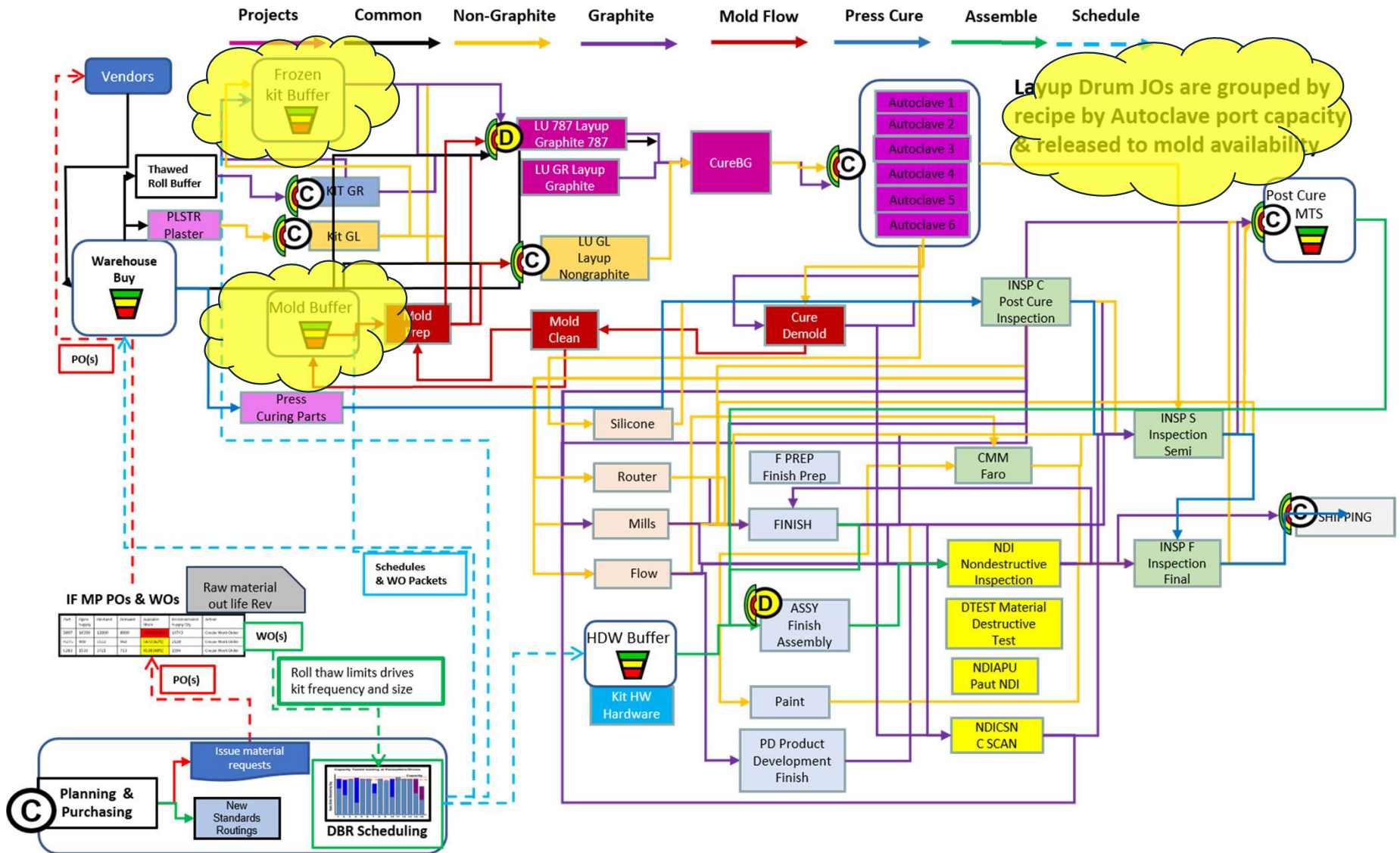
- **NO priority strategy** – First article project due dates, Customer OTD and Monthly Revenue Targets conflict.
- **JO are routinely expedited** and other lower priority work started.
- **WIP/Backlog on the floor grows** - Work pulled ahead for revenue targets desynchronizes flow. Work is routinely started, stopped, restarted – all resource time is wasted.
- **No Capacity Buffers** – Floor flooded with WIP, priorities are conflicting and everyone is “busy on something”.
- **No sprint capacity at non-drum resources** – variation overwhelms the Drum buffers – Drum time is wasted.

Visible buffer and control point status use a Pareto view to create a learning feedback loop to drive improvement.
“too much & too early” “too little and too late”



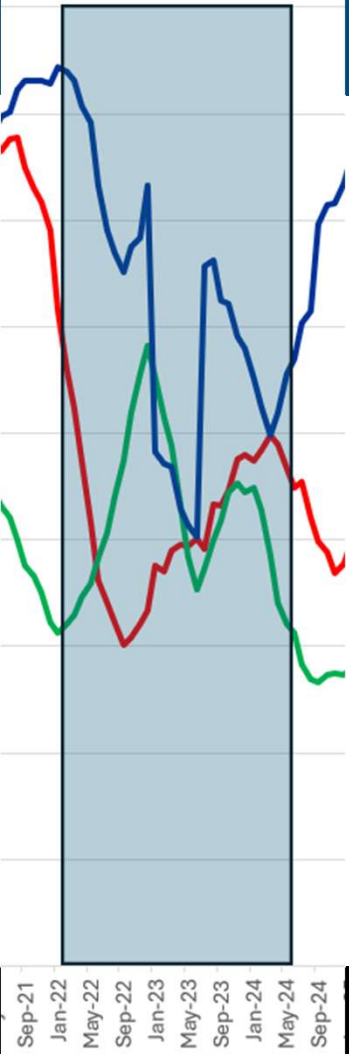
Connect the Challenges to DD Operating Model Gaps

- **No Pareto exceptions to learn and improve** – Stock Buffers are bimodal, everything is “early” and “too much” or “too little” and “too late”.
- Exception and Diagnostic reporting is not valid – 70%+ of the JOs are in a tail of the buffers.



Results 2023/2024 Model

Stumble



- Stability returned
- Accurately predict execution
- OTD improved
- WIP decreased substantially
- This sucked!but prepared us for the growth to come.
- NEW Capability - Project Management
 - Concerto (CCPM)
 - Critical to new business opportunities
 - Separate, not connected to IF

Growth (2026)



- Volume of new growth basically broke everything we just built
- Product mix moved to >30% ETO (qualification, FAI's)
- Needed integrated Project Management Office. Too many manual handoffs between Concerto and INTUIFLOW
- Needed many of the things we tabled in 2023.
 - Mold turns in model
 - Decoupled BOM's and Routings to take advantage of material challenges and qualification at startup phase.
 - Increased granularity routings in model
 - Address our interface issues preventing us from using MP

Growth (2026)



- Volume of new growth basically broke everything we just built
- Product mix moved to >30% ETO (qualification, FAI's)
- Needed integrated Project Management Office. Too many manual handoffs between Concerto and INTUIFLOW (IF)
- Needed many of the things we tabled in 2023.
 - Decoupled BOM's and Routings to take advantage of material challenges and qualification at startup phase.
 - Increased granularity of routings in model (FAI, etc).
 - Address the interface issues and blocking IF MP use.
 - Add Molds to the part BoM and order interval days to part properties = mold turnaround time, layup through demold.
 - Material Expiry Tracking and Recertification in INTUIFLOW

Use Order Max Interval Days To Stagger WO Qty's = To Mold Turnaround Time

Workbench

APPROVE SELECTED ORDERS

MANAGE

Search...

Drag a column header and drop it here to group by that column

Part Number	Revision	Location	Priority	Buffer	Spike	Availability Shortage	Reorder Qty	Request Date	Custom Order Request Date	On Hand	Supply Orders	Demand Allocations	Net Flow
7-611115332-001:010		MAIN	High	0.000 %			10.000	8/30/2026	8/5/2026	4.000	1.000	15.000	-10.000

Intuiflow Workbench part has high priority, for quantity 10, due by 8/30/2026

Part Order Policies:
Inventory Method: Non-Buffered
Maximum = Number of Molds =1
Order Max Interval Days = Mold Turnaround Time = 2 days

- The maximum order quantity auto-splits the reorder quantity splits into multiple work orders.
- Each work order's request date is auto-staggered by Order Max Interval Days.
- 10 work orders staggered 2 days apart.

Part Number: 7-611115332-001:010

Rev: Empty / None / Location: MAIN

All Activity Availability Review Supply Orders Demand Allocations Analytics Properties Buffer Sizing

Inventory Method: Non-Buffered

Planning Calendar

Order Interval Days

Fixed Reorder Cycle

Unit of Measure

Material Type

Raw Material

Average Selling Price

Planner

Part Type: Make

Vendor

Vendor ID

Forecasted Daily Usage

Effective Daily Usage

Order Cycle Override

Alert Horizon

Minimum Order: 1.000

Maximum Order: 1.000

Order Max Interval Days: 2



Workbench

✓ APPROVE SELECTED ORDERS

MANAGE ORDERS



Workbench

SAVE CURRE

The Sales Order Request Dates is 8/30, quantity of 10.

Drag a column header and drop it here to group by that column

☒	Part Number	Revision	Location	Priority	% of Buffer	Spike	Availability Shortage	Reorder Qty	Request Date	Custom Order Request Date	On Hand	Supply Orders	Demand Allocations	Net Flow
☒	7-611115332-001:010		MAIN	High	0.000 %			10.000	8/30/2026	8/5/2026	4.000	1.000	15.000	-10.000

10 Work Orders qty 1, are backwards scheduled staggered from the Request Date respecting the 2-day mold turnaround, the full quantity is scheduled to ship on 8/31.

Search...

☐	Part Number	Description	Order Number	Quantity	Order Da...	Request Date	Start Date	Order Receipt D...	Promise Date	Custom Order R...
☐	7-611115332-001:010	Aero Fairing, AB3 Fab-RH	517d5a5d-5e55-ad4e-9260-019f43...	1.000	7/23/2026	8/5/2026	7/31/2026	8/5/2026	8/5/2026	8/5/2026
☐	7-611115332-001:010	Aero Fairing, AB3 Fab-RH	02d2f37c-b765-db46-9a6b-019f43...	1.000	7/24/2026	8/7/2026	8/4/2026	8/7/2026	8/7/2026	8/7/2026
☐	7-611115332-001:010	Aero Fairing, AB3 Fab-RH	8fa1c17f-f8d2-de44-ac48-019f435...	1.000	7/29/2026	8/11/2026	8/6/2026	8/11/2026	8/11/2026	8/11/2026
☐	7-611115332-001:010	Aero Fairing, AB3 Fab-RH	8adb6cdf-535c-584e-8fc4-019f435...	1.000	7/31/2026	8/13/2026	8/10/2026	8/13/2026	8/13/2026	8/13/2026
☐	7-611115332-001:010	Aero Fairing, AB3 Fab-RH	c18e3da4-9788-464f-b3d3-019f43...	1.000	7/31/2026	8/17/2026	8/12/2026	8/17/2026	8/17/2026	8/17/2026
☐	7-611115332-001:010	Aero Fairing, AB3 Fab-RH	c7ce12d8-3596-314f-abb-019f43...	1.000	8/6/2026	8/19/2026	8/14/2026	8/19/2026	8/19/2026	8/19/2026
☐	7-611115332-001:010	Aero Fairing, AB3 Fab-RH	bee5bf6f-35db-084b-bd42-019f43...	1.000	8/7/2026	8/21/2026	8/18/2026	8/21/2026	8/21/2026	8/21/2026
☐	7-611115332-001:010	Aero Fairing, AB3 Fab-RH	0546aae1-4e0a-8140-83ef-019f43...	1.000	8/12/2026	8/25/2026	8/20/2026	8/25/2026	8/25/2026	8/25/2026
☐	7-611115332-001:010	Aero Fairing, AB3 Fab-RH	c7d4e88d-baaa-e34f-aef8-019f435...	1.000	8/14/2026	8/27/2026	8/24/2026	8/27/2026	8/27/2026	8/27/2026
☐	7-611115332-001:010	Aero Fairing, AB3 Fab-RH	82cf891b-35dd-ec4c-8c00-019f43...	1.000	8/14/2026	8/31/2026	8/26/2026	8/31/2026	8/31/2026	8/31/2026

Future Expiry Make Part Is A Child to Parent Buy Part Z3-MRS-10001-01



Part Number: Z3-MRS-10001-01

Rev: Empty / None / Location: MAIN

All Activity Supply Orders Demand Allocations Analytics Properties Buffer Sizing **Bill of Material** Notes Auto Pilot Simulations

Z3-MRS-10001-01

Part: Z3-MRS-10001-01 [226/224 day(s)]

Description:

Lead Time: 224

Assigned Location: MAIN

B91M - Buy

Quantity: 1

Decoupled Lead Time: 226

Legend:

 Buffered  Min/Max  Non Buffered  Longest Leg  Decoupled Lead Time  Phantom

Bill of Materials

Default

expand all / collapse all / refresh

▼  Z3-MRS-10001-01 [226/224day(s)]

● Z3-MRS-10001-01-Expiry [16/14day(s)]

Add new Make Child Part for Material Test
Shelf-life extension = Part #-Expiry below the
child material buy part as shown in the
example.

Make Part children of Buy Parts will NOT Net past the Parent Buy Part, so ...
we changed the interface to *Populate the Issued Inventory Field* in the Parent Buy
Part with the *Running Balance* from Expiry Child Make Part to correct the Net Flow!

Find or Create Recertification Routing For Expiry Part

Choose to Use the old MTSLE # or MTSLE63
Parent Buy Part # Z3-MRS-10001-01-Expiry

If the new Expiry Make Part Child#
is used, mass update the Old
MTSLE # Routing to the new Part #

Order Number	Part	Part Description	Location
MTSLE00228-0	MTSLE63 or Z3-MRS-10001-01-Expiry	Z3-MRS-10001-01 Shelf Life Extension_B	MAIN

Routing & Operations														
Routing & Operations														
Sequence	Done	Resource	Operation Description	Status	Receive Date	Buffer	Start Date	Duration	End Date	Fixed Offset	Receive Quantity	Start Quantity	End Quantity	
10	✓	KIT_GR		Closed	04/28/2025 12:20 ...	32.000 Ho...	05/02/2025 5:44 A...		05/02/202...		1 of 1	0 of 1	0 of 1	
20	✓	DTEST					05/02/2025 5:44 A...		05/02/202...		-	1 of 1	1 of 1	
30	✓	CLAVE			04/29/2025 8:59 A...	24.000 Ho...	04/29/2025 8:59 A...		04/29/202...		1 of 1	1 of 1	1 of 1	
40	✓	DTEST					05/02/2025 5:44 A...		05/02/202...		-	1 of 1	1 of 1	
50	✓	MILLS			04/30/2025 9:29 A...	8.000 Hours	04/30/2025 9:29 A...		04/30/202...		1 of 1	1 of 1	1 of 1	
60	✓	DTEST					05/02/2025 5:44 A...		05/02/202...		-	1 of 1	1 of 1	
70	✓	CLAVE			05/02/2025 5:44 A...	24.000 Ho...	05/02/2025 5:44 A...		05/02/202...		1 of 1	1 of 1	1 of 1	
80	✓	DTEST					05/02/2025 5:44 A...		05/02/202...		-	1 of 1	1 of 1	
90	✓	MILLS			05/02/2025 5:45 A...	8.000 Hours	05/02/2025 7:20 A...		05/02/202...		1 of 1	1 of 1	1 of 1	
100	✓	DTEST					05/02/2025 9:33 A...		05/05/202...		-	1 of 1	1 of 1	
	✓	Shipping			05/05/2025 1:04 P...	16.000 Ho...	05/22/2025 4:30 P...		05/06/202...		1 of 1	0 of 1	1 of 1	

1 - 11 of 11 items

New Work Practice:

When the WO is released a manual inventory issue will be required to the Expiry WO

View IF MP Inventory Shelf-Life Report For Expiring Material Weekly



Last Updated Wed Aug 05 2026 02:00 GMT-07:00 Status: Completed

Page: Home Inventory View Orders View Modeling View BOM View

Current & Target Inv Maps Shelf Life

Platform Low Level RIP Job Order Part User-Defined-4 Part User-Defined-5 Part User-Defined-6

Quantity

Lot write-off risk vs Current Demand 618K

% Lot Inventory Best-By Date 109 %

Best by: Day(s) From: 5/12/2026

Please select Best-by Date range (Best-by date= From selected Date+ selected Time range)

\$ value of Prepreg at risk vs Current Demand Date

"Sort" by Expiration Date

Risk of write-off based on current Demand Request Date

"Check" the Commodity Code(s) to filter your parts

Part with Expiry Risk inside Recert window to plan WO "today" QTY= 6,361

SKU	Commodity	Lot	Lot Qty	Expiration Date	Lot write-off risk vs Current Demand	% Lot write-off risk vs Current Demand
U4-G48-SIU8-MAIN-		I-UI-L-K-I				
Z3-HJMS-6002-1-MAIN-	PREPREG	P000054 931-1-01	97	9/3/2026	45	46 %
Z3-MRS-10001-01-MAIN-	PREPREG	P000054 972-2-01	1,250	9/3/2026	0	0 %
Z3-MRS-10001-01-MAIN-	PREPREG	P000054 972-2-02	1,250	9/3/2026	389	31 %
Z3-MRS-10001-01-MAIN-	PREPREG	P000054 972-2-03	1,250	9/3/2026	1,250	100 %
Z3-MRS-10001-01-MAIN-	PREPREG	P000054 972-2-04	1,250	9/3/2026	1,250	100 %
Z3-MRS-10001-01-MAIN-	PREPREG	P000054 972-2-07	1,250	9/3/2026	1,250	100 %
Z3-MRS-10001-01-MAIN-	PREPREG	P000054 972-2-08	1,122	9/3/2026	1,122	100 %
Z3-MRS-10001-01-MAIN-	PREPREG	P000054 972-2-09	1,100	9/3/2026	1,100	100 %

Write-off risk vs Current Inv (Qty)

Write-off risk vs Target Inv (Qty)

Filters

Search

Filters on this visual

% Lot write-off risk vs ... is (All)

Commodity is PREPREG

Filter type Basic filtering

Search

☐ INSULATION

☐ LAMINATE

☐ METAL STOCK

☐ OS SERVICE

☐ PLASTER

☒ PREPREG

Expiration Date is (All)

Lot is (All)

Lot Qty is (All)

Lot write-off risk vs Cu... is (All)

SKU is (All)

Interface Populates the Issued Inventory Field For Expiry Child Part in Parent Part With Running Balance From Expiry Child Make Part



All Activity											
Supply Orders Demand Allocations Analytics Properties Buffer Sizing Bill of Material Notes Auto Pilot Simulations											
1 2 3 80 Items per page 161 - 231 of 231 items											
Date	Order Number	Type	Order Date	Promise	Request D	Order Re	Late	Status	Qty	Running Bal	
9/1/2026		On Hand Inventory							8,305.797	8,305.797	
9/1/2026		Issued Inventory							6,361.457	14,667.254	
9/1/2026	eafcd420-1762-4448-82fe-10e1e318a78a	WO Demand	7/30/2026						-1.000	12,751.864	Work Order Number WO-4064 for Part Nu
9/1/2026	e65bbb2b-791e-4867-8938-8bbf603e5280	WO Demand	7/30/2026						-1.250	12,750.614	Work Order Number WO-4076 for Part Nu
9/1/2026	3dead226-612e-4ac0-855a-8f6b77ad41b4	WO Demand	7/30/2026						-2.000	12,748.614	Work Order Number WO-4080 for Part Nu
9/1/2026	233f0784-26d4-41a3-ab8e-42446bf7f090	WO Demand	7/30/2026						-2.000	12,746.614	Work Order Number WO-4088 for Part Nu
9/1/2026	845daa0a-2859-4d40-856e-77074939b2ac	WO Demand	7/30/2026						-4.000	12,742.614	Work Order Number WO-4072 for Part Nu
9/1/2026	d0381817-a6eb-4430-9f9b-6207b1a7a1ce	WO Demand	7/30/2026						-4.000	12,738.614	Work Order Number WO-4096 for Part Nu
9/1/2026	bdc95432-8aff-450f-930c-31b5cb23f5c2	WO Demand	7/30/2026						-5.000	12,733.614	Work Order Number WO-4122 for Part Nu
9/1/2026	8e8e6313-57d9-429c-b564-fc2f7f7ac2d5	WO Demand	7/30/2026						-5.000	12,728.614	Work Order Number WO-3803 for Part Nu
9/1/2026	18961bbc-01be-4596-a186-adba7be75bc6	WO Demand	7/30/2026						-5.000	12,723.614	Work Order Number WO-4124 for Part Nu
9/1/2026	adf67604-6767-4940-82c6-17bb91827c02	WO Demand	7/30/2026						-5.000	12,718.614	Work Order Number WO-4123 for Part Nu
9/1/2026	f3cc0e03-440d-4508-8589-a16eaf91ad4e	WO Demand	7/30/2026						-5.800	12,712.814	Work Order Number WO-3862 for Part Nu
9/1/2026	bab4f116-e497-4511-9c33-42ebb0016bfe	WO Demand	7/30/2026						-5.800	12,707.014	Work Order Number WO-4167 for Part Nu
9/1/2026	a351cc73-3357-47b7-a858-91094d8f74ce	WO Demand	7/30/2026						-5.800	12,701.214	Work Order Number WO-4163 for Part Nu
9/1/2026	95a45ca3-d06d-4b58-8214-d227ed41db72	WO Demand	7/30/2026						-5.800	12,695.414	Work Order Number WO-4161 for Part Nu
9/1/2026	dee4d6be-47d9-460c-84da-4abe03224e4d	WO Demand	7/30/2026						-5.800	12,689.614	Work Order Number WO-4162 for Part Nu
9/1/2026	6fd96706-250c-4868-9863-7e5e99f9027d	WO Demand	7/30/2026						-7.000	12,682.614	Work Order Number WO-4104 for Part Nu
9/1/2026	c261b61e-666f-428b-b7c0-4abae79def60	WO Demand	7/30/2026						-7.000	12,675.614	Work Order Number WO-4198 for Part Nu
9/1/2026	f4bfcf50-f64d-43f9-bb8a-040652050030	WO Demand	7/30/2026						-7.000	12,668.614	Work Order Number WO-4183 for Part Nu
9/1/2026	914fe387-57c8-460e-b6ba-30ecf2baea8a	WO Demand	7/30/2026						-9.000	12,659.614	Work Order Number WO-4112 for Part Nu
9/1/2026	e62b4b27-26fb-4d9e-924a-0bfb1bf1bb24	WO Demand	7/30/2026						-17.000	12,642.614	Work Order Number WO-4120 for Part Nu
9/1/2026	ba821e18-e6bb-48d5-b93f-3ecb152f7c1a	WO Demand	7/30/2026						-20.000	12,622.614	Work Order Number WO-4141 for Part Nu
9/1/2026	d0e4e96d-ce77-4269-89dc-54b0c2ee49f5	WO Demand	7/30/2026						-25.000	12,597.614	Work Order Number WO-4149 for Part Nu
9/1/2026	a327e1ae-600e-4352-a726-fabc60307154	WO Demand	7/30/2026						-25.000	12,572.614	Work Order Number WO-4157 for Part Nu
9/1/2026	67fe31e7-c819-4007-8ee2-ab656593e81f	WO Demand	7/30/2026						-26.000	12,546.614	Work Order Number WO-4175 for Part Nu
9/3/2026	EXP - P000054972-2-01	Expiring Inventory-SPI...	9/3/2026						-0.000	12,546.614	Batch: P000054972-2-01 (1250.00000)
9/3/2026	EXP - P000054972-2-02	Expiring Inventory-SPI...	9/3/2026						-379.360	12,167.254	Batch: P000054972-2-02 (1250.00000)
9/3/2026	EXP - P000054972-2-08	Expiring Inventory-SPI...	9/3/2026						-955.800	11,211.454	Batch: P000054972-2-08 (955.80000)
9/3/2026	EXP - P000054972-2-09	Expiring Inventory-SPI...	9/3/2026						-1,099.997	10,111.457	Batch: P000054972-2-09 (1099.99700)
9/3/2026	EXP - P000054972-2-03	Expiring Inventory-SPI...	9/3/2026						-1,250.000	8,861.457	Batch: P000054972-2-03 (1250.00000)
9/3/2026	EXP - P000054972-2-04	Expiring Inventory-SPI...	9/3/2026						-1,250.000	7,611.457	Batch: P000054972-2-04 (1250.00000)
9/3/2026	EXP - P000054972-2-07	Expiring Inventory-SPI...	9/3/2026						-1,250.000	6,361.457	Batch: P000054972-2-07 (1250.00000)
9/4/2026	714da37b-8eaa-4bc3-9527-befebb0c0577	WO Demand	7/30/2026						-2.000	6,359.457	Work Order Number WO-3585 for Part Nu

Workbench Parent Buy Part Now Shows OTOG Status



Workbench

✓ APPROVE ALL ORDERS

MANAGE ORDERS



Expiring Inventory Demo

SAVE CURRENT VIEW

Search...



Drag a column header and drop it here to group by that column

☐	Part Number	Revision	Location	Description	Priority	% of Buffer	Spike	Availability Shortage	Reorder Qty	Packaging Quantity	Packaging Unit	On
☐	Z3-MRS-10001-01		MAIN		OTOG	125.194 %					SF	

Our Current DDOM Adaptation Goes Live Next Week



- Our 2024/2025 lead time and OTD improvements gained us new projects and sales opportunities.
- Our System's Constraint moved to Project Management and Engineering.
- We upgraded our Project Management Model and are moving Project Scheduling and Execution to INTUIFLOW.
- Project Scheduling and Execution dates will be aligned and synchronized with both Materials Planning and Operations JO Scheduling and Execution need dates all in the same software platform and methodology.
- *“Quote to Cash” Real Time Visibility ensures the same Priority, responsibility and metric for Everyone.*

Be on time to the Buffer you feed, and work together in buffer penetration priority.

Lessons Learned & Confirmed (Again)😊



- Change is constant – **Complex Adaptive Enterprise**
- This truly is a journey – downturn, upturn, recession, boom, pandemic, key leadership changes
- Pay attention to the level of granularity you need as you grow and change.
- The Team needs to be trained and encouraged to constantly adapt to the changing environment (that goes against the norm for most in operations).
- We still struggle with replenishment. 😞
- Hindsight...always wish we'd have done it sooner.
- OTD and WIP levels are critical indicators. Don't dismiss!!

We Will Keep You Up Dated On Results



Questions??