

Average Cost in Project Actual Environment with GPD and PACE Amanda Cummings / Angela Kang, General Atomics Session ID #8W5ZG578VX

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About the Speakers

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- Samsung Electronics, Goodrich Corp, United Technologies and General Atomics

Key Outcomes/Objectives

- 1. Understand GA's requirement for Average Part cost
- 2. Explain foundational framework of the calculation by leveraging PACE (Product Actual Costing and Estimating)
- 3. Explain configuration rationale for average cost calculation solution.



Agenda

- Business need for Average Part Cost
- Scope of Calculation
- Configuration
- Calculation Selection
- New Reports
- Future Enhancement Opportunities



Background

- GPD (Grouping, Pegging, Distribution) is an Aerospace & Defense solution - Strategy for collecting actual direct costs where assignment of stock and orders is to a Group WBS
- GPD keeps track of the incremental cost of each replenishment element (Prod. Order & Purch. Order) and the actual rolled up cost is supplied by Dassian PACE cost rollup functionality
- An averaged cost per material is often required to report in various circumstances



Background

- Property System Inductions (Acquisition Cost)
- Contractual Reporting Requirement
- MRP related PRs
- Manufacturing ETC
- Valuation Declaration (Common Carrier Freight & Import/Export)
- Threshold for serialization determination (\$5K UID)
- Threshold for scrap disposition procedure (QN required)

Scope of Calculation

Included

- GPD relevant parts
- Completed Replenishments
- Can include items scrapped from stock
- True Subcontracting POs
- Provide components to vendor to build assembly

Excluded

- Plant Stock
- Reads current material master, items previously GPD are excluded
- WIP Replenishments
- Rework Orders
- Zero Cost Replenishments
- Return to Vendor POs

Configuration

- Pre-requisite: PACE (Product Actual Costing and Estimating) installed
- BADis available for company specific customization
- 🕆 📹 Configuration
 - Ø /DSN/GPD_MACCFG General Settings
 - (DSN/GPD_MACRWT Rework Order Type
)
 - OSN/GPD_MACEPO Exclude PACE Object Types
 - OSN/GPD_MACEOT Exclude Production Order Types
 - Ø /DSN/GPD_MACERP Exclude Replenishment
 - Ø /DSN/GPD_MACESS Exclude System Statuses
 - Ø /DSN/GPD_MACEUS Exclude User Statuses
 - OSN/GPD_MACEMAT Exclude Materials
 - Ø /DSN/GPD_MACISS Include System Statuses
 - Ø /DSN/GPD_MACIUS Include User Statuses
- Y 📹 Process
 - ·
 @ /DSN/GPD_MACCALC Calculate MAC
 - Ø /DSN/GPD_MACUPD Update MAC from Date
 - Ø /DSN/GPD_MACUPDFL Update MAC from Log
 - · 🚳 /DSN/GPD_MACMLH Maintain Log Header
- 🕆 📒 Reports
 - Ø /DSN/GPD_MACDISP Dispaly MAC Value
 - ·
 ③ /DSN/GPD_MACCHGH Display MAC Change History
 - Ø /DSN/GPD_MACDISPL Display MAC Log

GA utilizes a BADi to differentiate Subcontract / Return to Vendor from data selection

Subcontracting	
Subcontracting type	Refurbishment with unchanged mater.
Components	Subcontracting Refurbishment with unchanged material number Refurbishment with changed material number Replacement

Configuration examples

Include by System Status "DLV"

Char	nge View "GP	D MAC S	ystem S	tatuses	s Included
69	New Entries	B 5	S		
GPD N Sys IO(MAC Syst St				

Exclude by System Status (PCNF)

Char	nge View "GPI	D MAP S	ystem Si	tatus	es Excluded"
60	New Entries	🗈 🖥	S		
GPD M ■ Syst TOC	MAP Syst St III D10 다 ^				

Exclude by Production Order Type : Rework / Gain w/o prior loss

Change View "GPD MAP Exclusion of Production Order Types"

63	New Entries	🗈 🖪	S	
GPD F Ty Y0 Y0	MAP Ex pe 02 03 08			

Exclude by Materials

Display View "GPD MAC Exclusion by Materials": Overview

GPD MAC Exclusion by Materials

Material

PInt

A



Calculation Selection

GPD MAC Calculate			
[] [
Source			
History	00000252	01/15/2019 - We	ekly Copy
Description			
Layout	Weekly Calculat	ion 01152018_0115	2019
Selection			
Plant		*	
Material			
Period			
Date from	01/15/2018	to	01/15/2019
Processing Mode			
Test Run			
✓ Update Cost History			
Wait for Undate			

- The history source is from PACE
- Calculation frequency can be same as PACE snapshot or Monthly/Yearly
- Date range can be used to limit which replenishments are in the calculation

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Material Master MAP update

GPD MAC Update from Date Ð Selection Ð Cost Date Material đ 1 Plant Target Material Master PACE Object Master History ID Update Test ✓ Wait for Update Options Display

- Optional MAP update from the calculation
- BADi available to update a custom field in MM



Reports Overview

Display Average of Actual

- Run by Material and As of Date
- Provides dollar and hour average by material and plant

Display Change History of the Calculation

- Run by Material
- Provides history of dollar and hour average by material and plant

Display Calculation Log

- Shows the details of the average calculation for a particular PACE history ID or MAC Log ID
- Incremental material dollars, labor dollars, and labor hours
- Rolled up material dollars, labor dollars, and labor hours
- Cost Quantity
- Whether the value for that plant was calculated, copied from another plant, carried forward from previous calculation, or not processed (no relevant data)



Reports - Display Average of Actual log

GPD MAC Display Log

Source		
MAC Log ID	00000019 2	to
PACE History ID		to
Date Selection		
Run Date		to
Costing date		to
Filter		
Plant		
Material		đ
Plant Type		
Procurement Plant		
Non-Procurement Plant		
Calculation Type		
Calculated		
Copied		
Carried Forward		
No Cost Data Available		

- Run date from the calculation processing date
- Costing date from the PACE snapshot
- Calculation type
 - Calculated: main plant with cost activity
 - Copied: value copied from calculated plant
 - Carried Forward: no change, value copied
 from previous MAC ID log
 - No Cost Data Available: no activity, no value copied, calculated, or carried forward

MAC Log ID	Creation date	History ID	Cost Date	Material I	Plant	P_Method	Src P_ M	TotMatCost	TotLabCost	TotLabHour	TCostQTY	AveMatCost	AveLabCost	TotAveHrs	Total Cost	TotalAveCt
00000019	01/22/2019	00000253	01/22/2019			X Calculated		348.06	2,847.31	98.71	15	23.20	189.82	6.581	213.02	213.02
00000019	01/22/2019	00000253	01/22/2019			Copied	1					23.20	189.82	6.581	213.02	213.02
00000019	01/22/2019	00000253	01/22/2019			Copied						23.20	189.82	6.581	213.02	213.02
00000019	01/22/2019	00000253	01/22/2019			Copied	1					23.20	189.82	6.581	213.02	213.02



More Reports

Display Average of Actual

GPD MAC Display Moving Average Cost

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Selection Date 04/09/2019

Material	Plant	Costing Date	MAC Log ID	History ID	MM.MAP	TotalAveCt	TotalAveLH	Curren
	a 5000	01/22/2019	00000019	00000253		213.02	6.581	USD
	5001	01/22/2019	00000019	00000253		213.02	6.581	USD
	5002	01/22/2019	00000019	00000253		213.02	6.581	USD
	5003	01/22/2019	00000019	00000253		213.02	6.581	USD

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Change History of the Calculation

GPD MAC Display Change History

Material	Plant	Costing Date	MAC Log II	D History ID	MM.MAP	TotalAveCt	TotalAveLH
	5000	02/12/2019	00000022	00000256		213.02	6.581
	5000	02/20/2019	00000023	00000257		213.02	6.581
	5000	02/26/2019	00000024	00000258		216.13	6.609
	5000	03/05/2019	00000025	00000259		228.30	7.063
	5000	03/12/2019	00000027	00000260		228.30	7.063
	5000	03/19/2019	00000028	00000261		228.30	7.063
	5000	03/26/2019	00000029	00000262		228.30	7.063
	5000	04/02/2019	00000030	00000263		228.30	7.063
	5000	04/09/2019	00000031	00000264		228.30	7.063

Future Enhancement Opportunities

- Currently only base (M&L) cost included, O/H can be added to have a full part cost
- Have capability to segregate averages by Production vs. Sustainment
- Make vs. Buy same part



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Presentation Materials

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