

The formula for **Success**

connecting people

The ICC, Birmingham

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**UK & IRELAND SAP
USER GROUP CONFERENCE**

SAP Manufacturing Accounting

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www.sapusers.org/conference



@sapuserconf

Session Objectives



- This session is aimed at giving an overview of how JLR applied and implemented SAP Manufacturing Accounting and share some lessons learned



SAP at JLR

- SAP tactical solution covering;
 - Core functions (Acctg, Purch, Sales)
 - Manufacturing
 - CRM
 - Global Trade & Distribution



Contents

- Introduction
- Overview of Solution
- What are the Key Master Data Objects
- Product Cost Planning
- Discrete Manufacturing vs Repetitive Manufacturing
- Wrap-up



Business Challenges



I want ...

I want

I want ...

Business Requirements



- In summary;
 - Capture the Cost of Manufacturing individual products and sub-assemblies
 - Match costs to the activities that incur them
 - Provide Profitability indicators
 - Aid decision making from shop floor to the board room
 - Provide a Cost Recovery mechanism, with flexibility without losing power
 - Provide detailed variance analysis to support decision making
 - Ensure dataset is “Fit for Purpose”

Modules

Financial Accounting

GL

AP

AR

AA

Controlling

CCA

PCA

IO

PS

PA

PC

GL

CCA

IO

PC

PP

IM

SAP Orders

- An Order in SAP can be setup as a Cost Collector for many different reasons;

**Overhead
Orders**

Real or
Statistical

**Investment
Orders**

Capitalisation

**Profitability
Orders**

Capture
Revenue vs
Expense

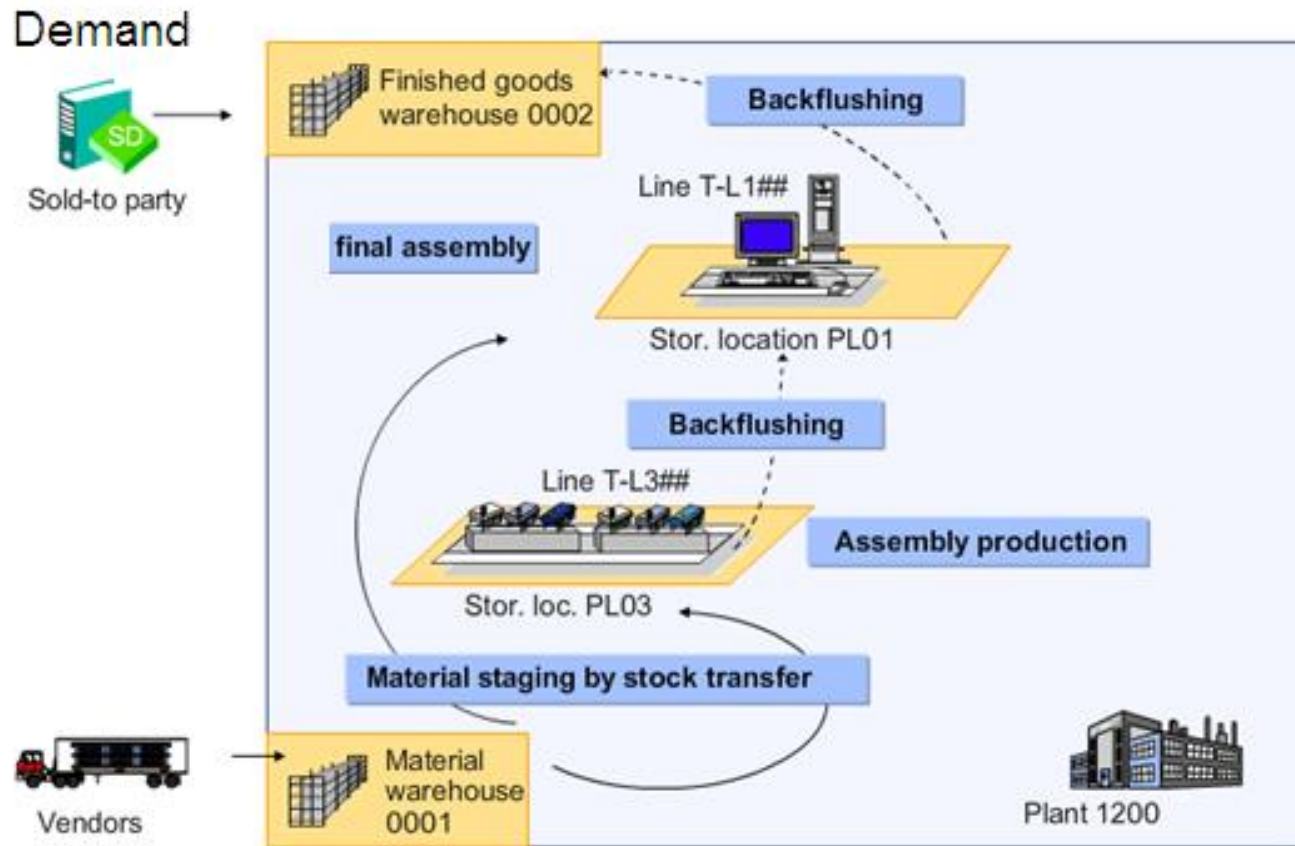
**Production
Orders**

Capture
Production
Costs

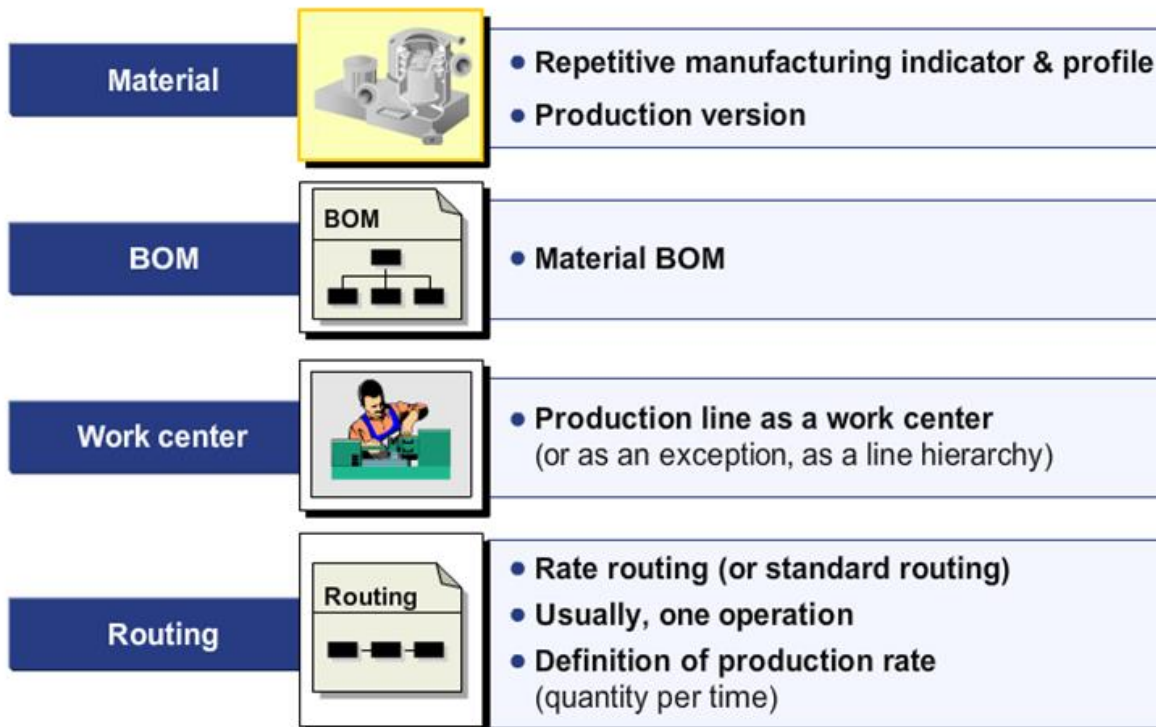
**Works
Orders**

Capture cost
of completing
an activity
(e.g. repair,
service, other
activity)

Manufacturing Terms



Key Master Data Objects



Material Masters

Quality management Accounting 1 Accounting 2 Costing 1

Material ENGINE102 Engine 102 - Super Good Diesel v 2

Plant 1101 EMC UK - Wolverhampton

General data

Base Unit of Measure EA each Valuation Category

Currency GBP Current period 04 2014

Division 01 Price determ. ML

Current valuation

Valuation Class 7900

VC: Sales order stk Proj. stk val. class

Price Control V Price Unit 1

Moving price 0.00 Standard price 119.85

Total Stock 0 Total Value 0.00

Valuated Un

Future price Valid from

Previous period/year Std cost e

Costing 1 Costing 2 Plant stock Stor. loc. stk

Material ENGINE102 Engine 102 - Super Good Diesel v 2

Plant 1101 EMC UK - Wolverhampton

Standard Cost Estimate

Cost Estimate	Future	Current	Previous
Period / Fiscal Year	0	4 2014	0
Planned price		119.85	0.00
Standard price		119.85	

Planned prices

Planned price 1	Planned price date 1	Planned price 2	Planned price date 2	Planned price 3	Planned price date 3

Valuation Data

Valuation Class 7900 Valuation Category

VC: Sales order stk Proj. stk val. class

Price Control V Current period 4 2014

Price Unit 1 Currency GBP

Moving price 0.00 Standard price 119.85



BOM – Bill of Materials

- From a Production Point of view, this is the list of components that will be consumed in order to make the material

Change material BOM: General Item Overview

Material: ENGINE102 Engine 102 - Super Good Diesel v 2
 Plant: 1101 EMC UK - Wolverhampton
 Alternative BOM: 1

Material | Document | General

Item	ICt	Component	Component description	Quantity	Un	Asm	SIs	Valid From	Valid to	Change No.
0010	B	ENG_101_BLK	Block 101	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	20.06.2013	31.12.9999	
0020	B	ENG_101_HEAD	Head 101	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	20.06.2013	31.12.9999	
0030	B	ENG_101_CRK	Crank 101	1	EA	<input type="checkbox"/>	<input type="checkbox"/>	20.06.2013	31.12.9999	
0040	B	ENG_101_PIPE	Piping 101	10	FT	<input type="checkbox"/>	<input type="checkbox"/>	20.06.2013	31.12.9999	
0050	B	ENG_101_BOLI	Bolts	5	BAG	<input type="checkbox"/>	<input type="checkbox"/>	20.06.2013	31.12.9999	
0120						<input type="checkbox"/>	<input type="checkbox"/>			



Work Center

- Work Centers are PP objects for planning Production Activities on

Change Work Center: Cost Center Assignment

Plant: 1101 EMC UK - Wolverhampton
Work center: ASSY 1 EMC Work Centre 1

Basic Data | Default Values | Capacities | Scheduling | Costing

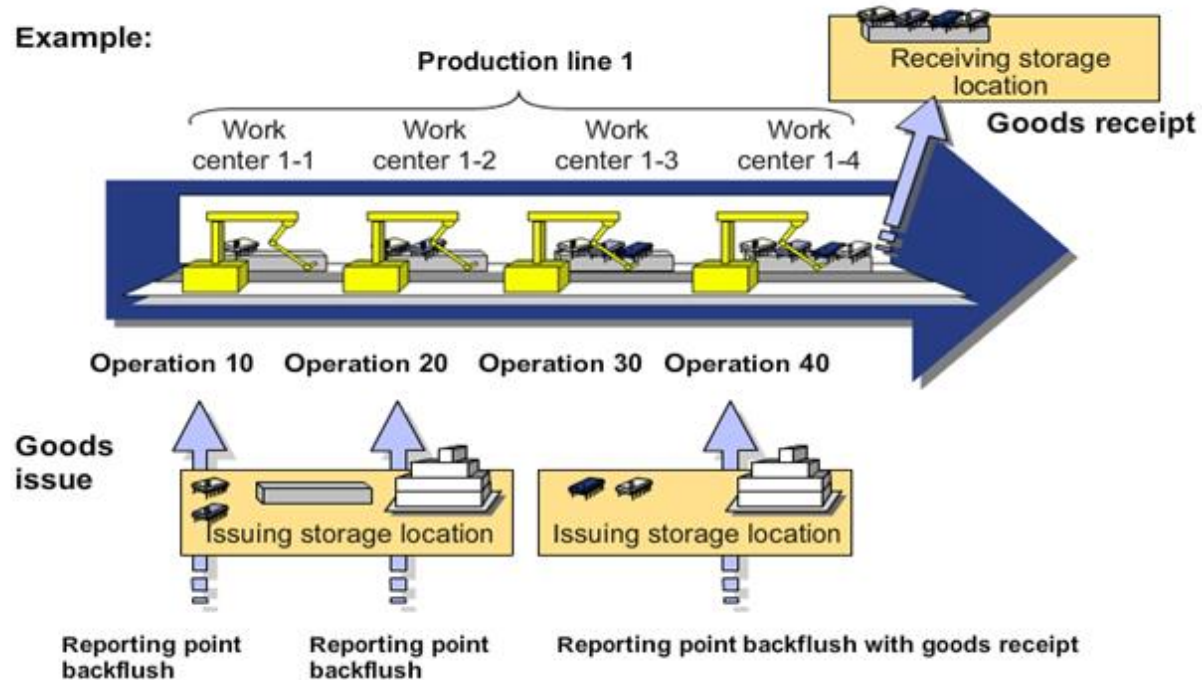
Validity
Start date: 22.03.2013 End Date: 31.12.9999

Link to cost center/activity types
Controlling Area: JLR JLR Group Controlling Area
Cost Center: GB03EMB001 Block manufacturing

Activities Overview

Alt. activity descr.	Activity Type	Activity Unit	Re...	Formul...	Formula description
Setup	EMC_B0		<input checked="" type="checkbox"/>	SAP002	Prod.: Machine time
Production time	EMCBL1		<input checked="" type="checkbox"/>	SAP003	Prod.: Labor time
Tear-down	EMCBL1		<input checked="" type="checkbox"/>	SAP003	Prod.: Labor time
Time On Line			<input type="checkbox"/>		
			<input type="checkbox"/>		
			<input type="checkbox"/>		

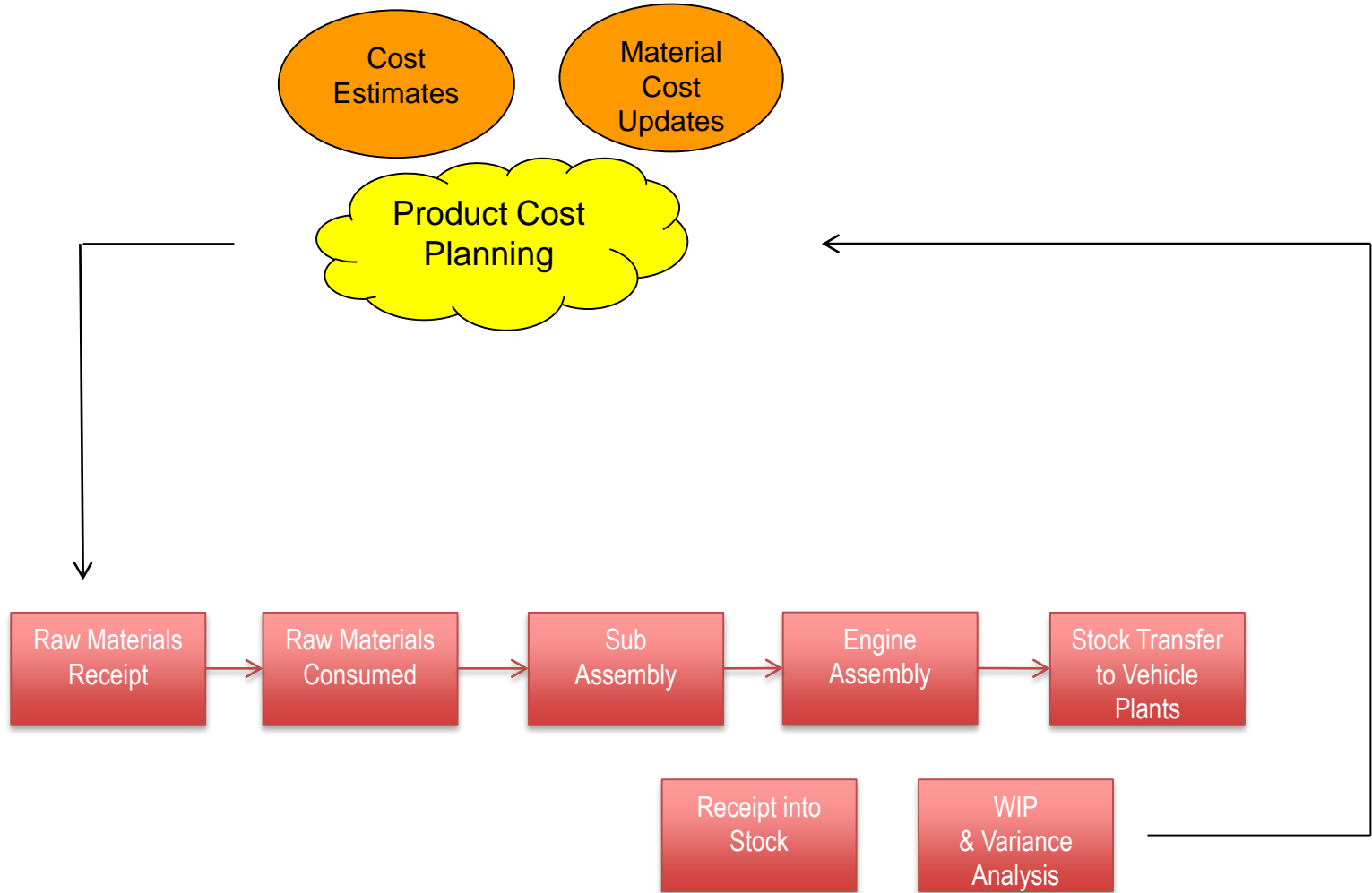
Production Overview



Product Cost Planning

- CO-PC Planning is the process is calculating a Standard Cost of Manufacture
- The idea is to decide how much it should cost to create a widget
- This is the integral part of the process where all your business rules kick in





Solution Principles

- Challenges exist around our local (JLR specific) and legal/statutory requirements
- Standard Costing vs Actual Costing ?
- Batch production or Mass production?



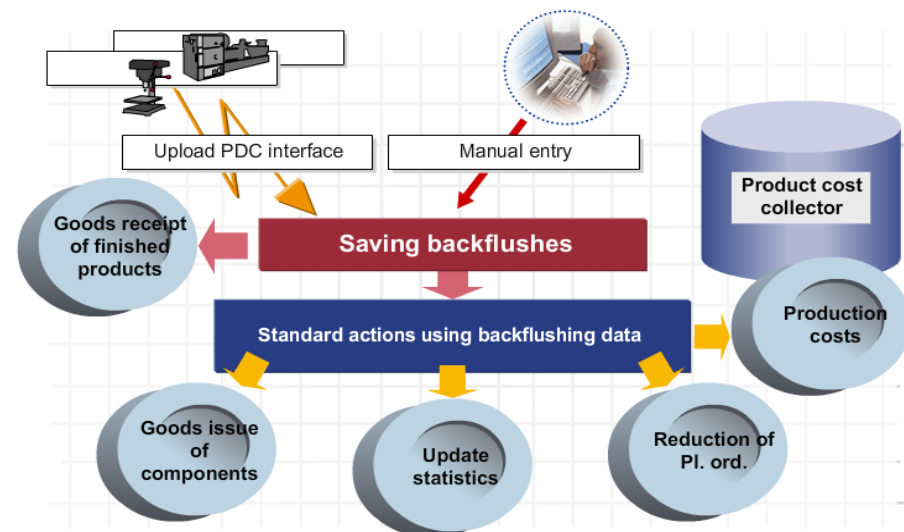
Microsoft Excel
Worksheet



Discrete vs Repetitive

- Making Tins of Beans vs High Specification, serialised component products
- Integration of your shop floor systems with the transaction recording system (SAP)
- Fit for Purpose?

Backflush and Goods Receipt



Accounting?

Discrete

- Specific Production Order accounting
- Capture costs per run/batch
- Variances / WIP per Order

Repetitive

- Specific product accounting
- Capture cost per product
- Variances / WIP per Period

- Reliant on SAP BO/BI to deliver Finance KPI reporting

Summary

- Developing a “state of the art” manufacturing facility is reliant on a “state of the art” ERP system to support it
- Standard SAP does not roll-out of the box to meet all our business requirements
- Be clear in your understanding of Discrete vs Repetitive and which is Fit for Purpose

