

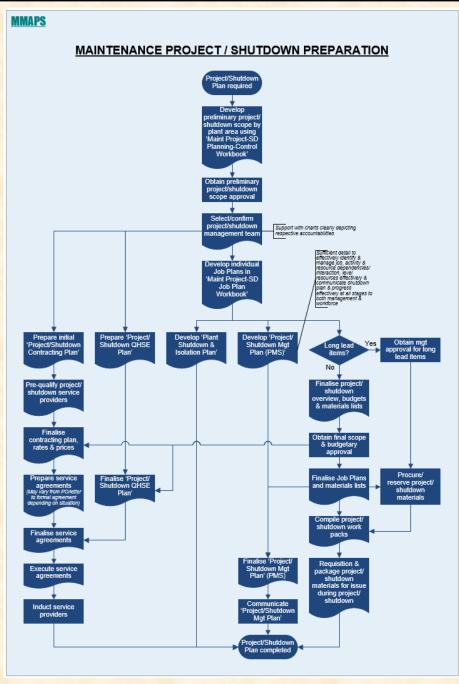
#### MAINTENANCE PROJECT / SHUTDOWN JOB PLANNING / CONTROL

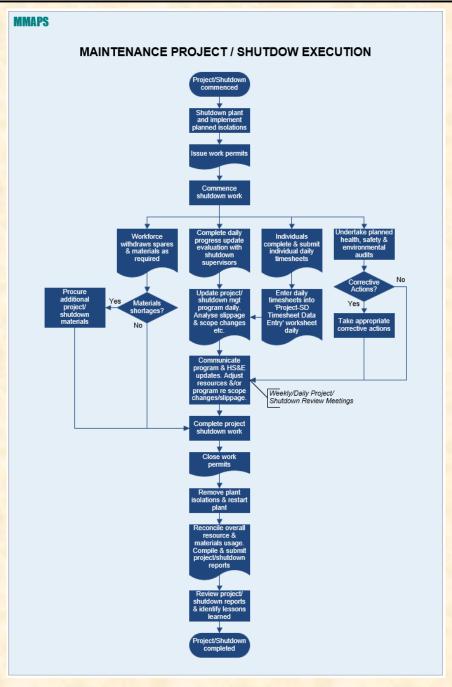
- Slide 2: Introduction
- Slide 3: Maintenance Project / Shutdown Preparation Flow Chart
- Slide 4: Maintenance Project / Shutdown Execution Flow Chart
- Slide 5: Maintenance Project / Shutdown Job Planning & Control System
- Slide 6: Worksheet '4. Project-SD Overview' (image)
- Slide 7: Worksheet '5. Project-SD Cost Summary' (images)
- Slide 8: Worksheet '7. Project-SD Timesheet Summary' Basic Worksheet Outline Groups Closed (image)
- Slide 9: Worksheet '7. Project-SD Timesheet Summary' Outline Groups Expanded (images)
- Slide 10: Worksheet '8. Project-SD Resources' (image)
- Slide 11: Worksheet '9. Project-SD Spares and Materials' (image)
- Slide 12: Worksheet '10. Associated Dropdown Lists' (image)

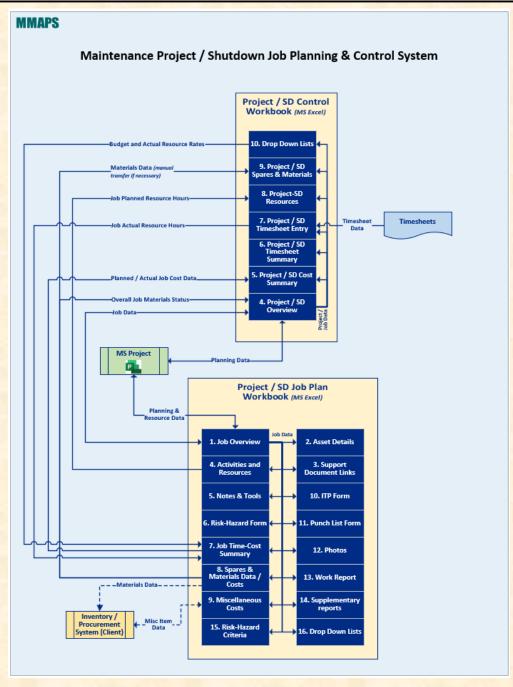


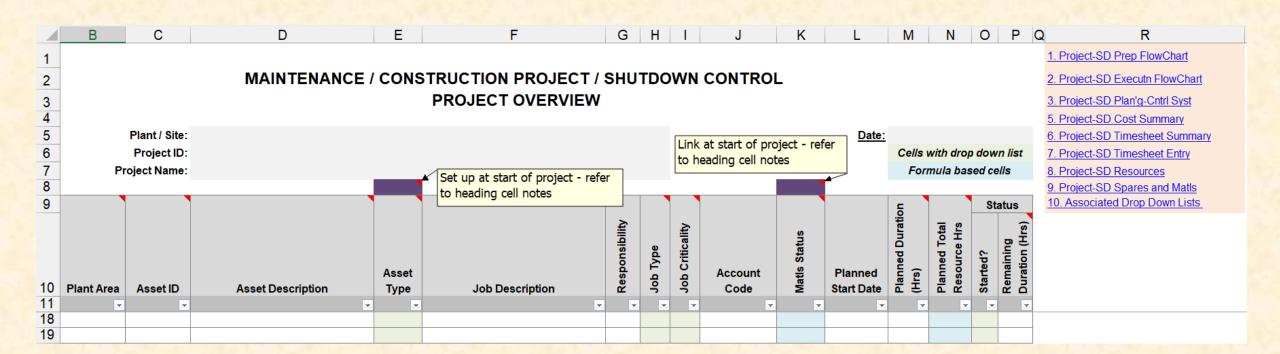
#### Introduction

- □ Presentation outlines maintenance project / shutdown job planning / control using 'MMAPS Project-Shutdown Job Planning-Control' workbook.
- Workbook comprises the following worksheets:
  - > '1. Project-SD Preparation Flow Chart'
  - '2. Project-SD Execution Flow Chart'
  - > '3. Project-SD Planning-Control System'
  - > '4. Project-SD Overview'
  - > '5. Project-SD Cost Summary'
  - '6. Project-SD Timesheet Summary'
  - > '7. Project-SD Timesheet Entry'
  - '8. Project-SD Resources'
  - '9. Project-SD Spares and Materials'
  - > '10. Associated Dropdown Lists'
- Analysis worksheets' features include;
  - Multiple worksheet cell explanatory notes re spare parts analysis and worksheet usage.
  - Outline grouping of worksheet columns with second tier data (on which top tier data columns depend) to keep worksheet size manageable in terms of data entry and report printing etc.
  - Frequent use of cell dropdown lists to reduce effort and improve effectiveness. Columns with cell dropdown lists are shaded light green.
  - > Frequent use of cell formulae to reduce effort and improve effectiveness. Columns with cell formulae are shaded light blue.
- □ Slides 3 to 12 show images of worksheets listed above i.e., basic worksheets with outline groups closed and also separate images of expanded outline groups





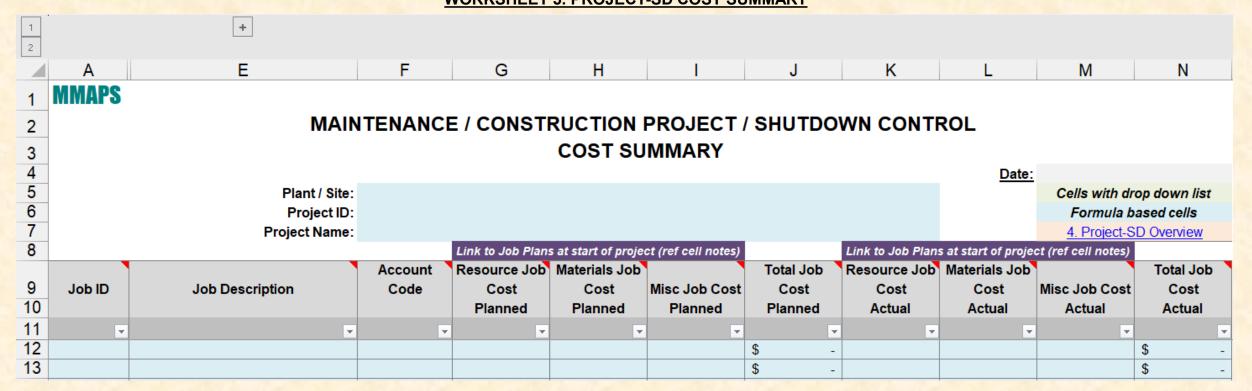


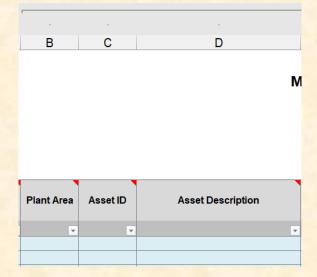


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## MAINTENANCE PROJECT / SHUTDOWN JOB PLANNING / CONTROL WORKBOOK WORKSHEET 5. PROJECT-SD COST SUMMARY

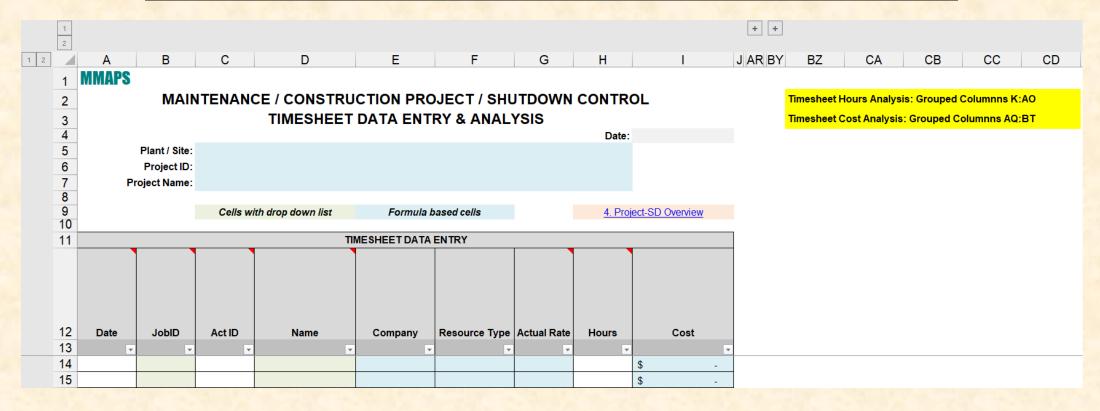
Slide 7 of 12







## MAINTENANCE PROJECT / SHUTDOWN JOB PLANNING / CONTROL WORKBOOK WORKSHEET 7. PROJECT-SD TIMESHEET SUMMARY - BASIC WORKSHEET - OUTLINE GROUPS CLOSED





### MAINTENANCE PROJECT / SHUTDOWN JOB PLANNING / CONTROL WORKBOOK WORKSHEET 7. PROJEC-SD TIMESHEET SUMMARY - OUTLINE GROUPS EXPANDED

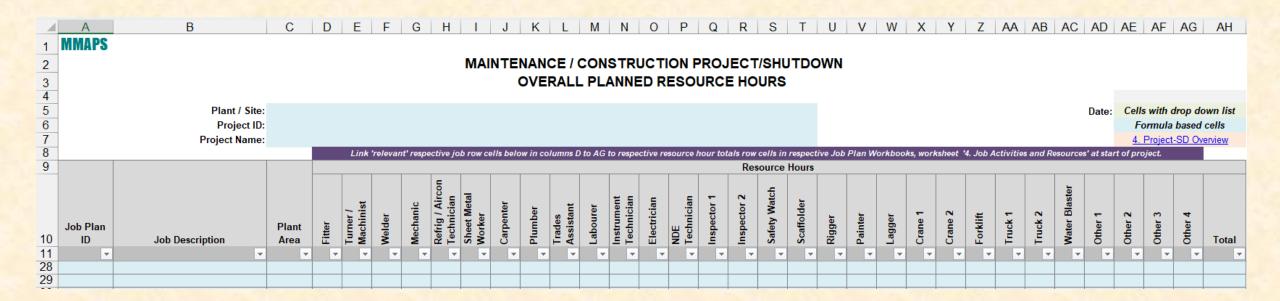
Timesheet Hours Analysis: Grouped Columnns K:AO

													TIMES	SHEE.	THOU	JRS A	NALY	SIS													
Job ID	Fitter	Turner / Machinist	Welder	Mechanic	Refrig / Aircon Technician	Sheet Metal Worker	Carpenter	Plumber	Trades Assistant	Labourer	Instrument Technician	Electrician	NDE Technician	Inspector 1	Inspector 2	Safety Watch	Scaffolder	Rigger	Painter	Lagger	Crane 1	Crane 2	Forklift	Truck 1	Truck 2	Water Blaster	Other 1	Other 2	Other 3	Other 4	Total
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Timesheet Cost Analysis: Grouped Columnns AQ:BT

	TIMESHEET COST ANALYSIS																															
Jo	ob ID	Fitter	Turner / Machinist	Welder	Mechanic	Refrig / Aircon Technician	Sheet Metal Worker	Carpenter	Plumber	Trades Assistant	Labourer	Instrument Technician	Electrician	NDE Technician	Inspector 1	Inspector 2	Safety Watch	Scaffolder	Rigger	Painter	Lagger	Crane 1	Crane 2	Forklift	Truck 1	Truck 2	Water Blaster	Other 1	Other 2	Other 3	Other 4	Total
		\$ -	\$ -	S -	S -	\$ -	\$ -	\$ -	\$ -	S -	\$ -	\$ -	S -	\$ -	\$ -	S -	\$ -	\$ -	\$ -	\$ -	\$ -	S -	\$ -	\$ -	\$ -	\$ -	\$ -	S -	S -	\$ -	\$ -	\$ -
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## MAINTENANCE PROJECT / SHUTDOWN JOB PLANNING / CONTROL WORKBOOK WORKSHEET 8. PROJEC-SD RESOURCES



**MMAPS** 

# MAINTENANCE PROJECT / SHUTDOWN JOB PLANNING / CONTROL WORKBOOK WORKSHEET 9. PROJEC-SD SPARES AND MATERIALS

Slide 11 of 12

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MAINTENANCE / CONSTRUCTION PROJECT/SHUTDOWN																	
If needed for centralised procurement, manually compile composite spares and materials worksheet for project by copying / pasting spares and materials data from respective job plans in columns A,B,C,D,E,F,G,H,I,J,N,Q,R,S																	
		Plant / Site:											Date:				
Project ID: Cells with drop down list																	
Project Name:																	
e columns	s as appropriate f	or maintenance or const	truction jobs (o	ptimised for mainte	nance)								<u>4. F</u>	roject-	SD Ov	<u>erview</u>	
OEM Code	OEM Assembly or Sub Assembly ID		_		OEM Part / Materials Description	Stock Code	Qty per Sub Assembly	Qty of Sub Assemblies	Total Reqd	Activity ID -	Requirement Probability	Unit Cost	Total Cost	ailabi tus	Exp Lead Time Days	Order No	Actual Usage
	,	23334			<b>-</b>												
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worksheet for project by copying / pasting spares and materials data from respective job plans in columns A.B.C.D  Plant / Site: Project ID: Project Name: Columns as appropriate for maintenance or construction jobs (optimised for maintenance)  OEM Assembly or OEM Assembly or Sub Aassembly Number / Number /  Number /  Stock  MATERIALS  Cells with or Anglia angle of production of the project by copying / pasting spares and materials data from respective job plans in columns A.B.C.D  Cells with or Application of the project by copying / pasting spares and materials data from respective job plans in columns A.B.C.D  Cells with or Application of the project by copying / pasting spares and materials data from respective job plans in columns A.B.C.D  Cells with or Application of the project by copying / pasting spares and materials data from respective job plans in columns A.B.C.D  Cells with or Application of the project by copying / pasting spares and materials data from respective job 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#### MAINTENANCE PROJECT / SHUTDOWN JOB PLANNING / CONTROL WORKBOOK WORKSHEET 9. PROJEC-SD SPARES AND MATERIALS

4. Project-SD Overview

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#### MAINTENANCE / CONSTRUCTION PROJECT/SHUTDOWN CONTROL

1 Critical - must complete, timing critical 2 Critical - must complete, timing less critical 3 Not Critical - must complete if possible

MAINTENANCE / CONSTRUCTION PROJECT/SHUTDOWN CONTRO
DROP DOWN LISTS

Requirement Probability

Job Criticality

Job Type	
Corrective Inspection	CI
Corrective Repair	CR
New Installation	NI
Plant Modification	PM
Predictive Maintenance	PdM
Preventive Correction	PC
Preventive Inspection	PI
Preventive Overhaul	PO
Preventive Statutory	PS
Other	
Other	
Other	

1	Critical - definitely required
2	Less Critical - definitely required
3	Possibly required
4	Insurance spare
Item A	vailability Status
IS	In store

4 Not critical - complete if time and resources permit

Asset Type (site specific	c)

IS	In store
OS	On site
SUP	In stock at local supplier
0	Ordered
YTO	Yet to order
S	Shipped
	OS SUP O YTO

YesNo
Υ
N

ResourceTypeB	Budget Rate	Name	Company	ResourceTypeA	Actual Rate
Fitter					
Turner / Machinist					
Welder					
Mechanic					
Refrig / Aircon Tech					
Sheet Metal Worker					
Carpenter					
Plumber					
Trades Assistant					
Labourer					
Instrument Technician					
Electrician					
NDE Technician					
Inspector 1					
Inspector 2					
Safety Watch					
Scaffolder					
Rigger					
Painter					
Lagger					
Crane 1					
Crane 2					
Forklift					
Truck 1					
Truck 2					
Water Blaster					
Other 1					
Other 2					
Other 3					
Other 4					

	COMPOSITE RATE CALCULATOR										
Pay	y / Invoice Ra	ites	Weekly	Weekly Pay/	Composite						
Category	Rate	Factor	Work Hrs	Invoice Hrs	Rate						
Base Rate		1		0.00							
OT Rate 1											
OT Rate 2											
	Total 0.00 0.00										