PC&C General Leger Interfaces

Using the GL Interfaces
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Overview

- Manufacturing Order Files
- Material Transactions (IM) discussed in the IM GL Interface session
- Labor Transactions
- Outside Operations
- WIP Scrap
- Variances/Variance Analysis
- GL Rules/wildcard rules



Manufacturing Order Files

- When a Manufacturing Order is added, the following files are created:
 - MOMAST summary record holds the Item ordered, quantity ordered, start/due dates, etc.
 - MODATA component records; copy of the BOM. Updated when material transactions (IM) are entered
 - MOROUT operation records; copy of the routing. Updated when labor is reported or earned
 - MOMISC miscellaneous charge records; if entered with cost information will always add to the variance



MO Status Codes

- 10 Released: BOM & Routing have been copied to MODATA and MOROUT files
- 40 Started: Either a material or labor transaction has been entered
- 45 Material Complete: No further IM transactions allowed
- 50 Labor Complete: No further labor transactions allowed
- 55 Both Material & Labor Complete



File Names

- Rules:
 - PCCACC
- Priorities:
 - PCCSEQ



Labor Reporting

- Labor can be entered manually through PC&C Shop Floor Reporting
- Labor can be passed via PM&C (Production Monitoring & Control) with barcoded Operation On/Off transactions
- With Paperless/MES, touch screens on the shop floor can be used to report Operation On/Off transactions



Labor Valuation

- Tailoring Question C003 "Order Costing Method" determines whether labor is valued at payroll pay rate for employee (XA Payroll required) or Facility Standard
- Labor Hours reported to each operation are extended by Rate

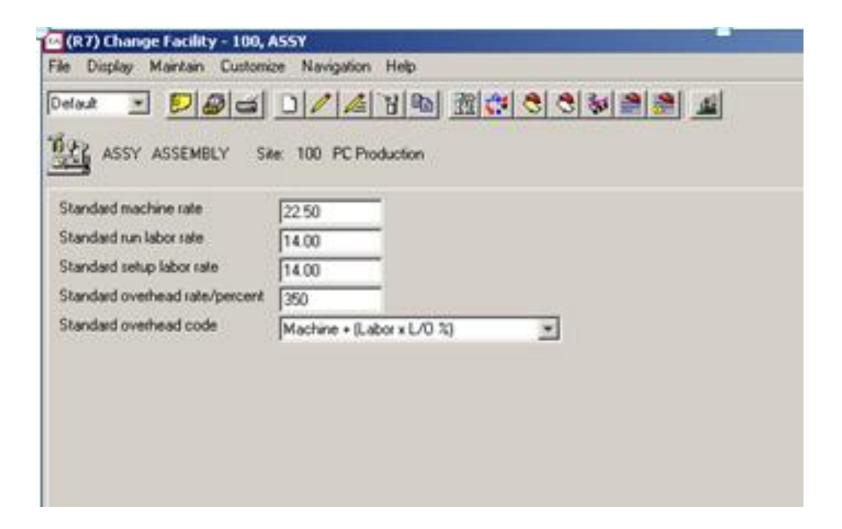


Overhead

- Overhead is determined by the Facility
- Each facility has its own overhead "code" which determines what absorbs overhead for that facility
- Overhead can be calculated by Labor time (set-up plus run) or by Machine Time
- Overhead can be entered as a rate or a percentage



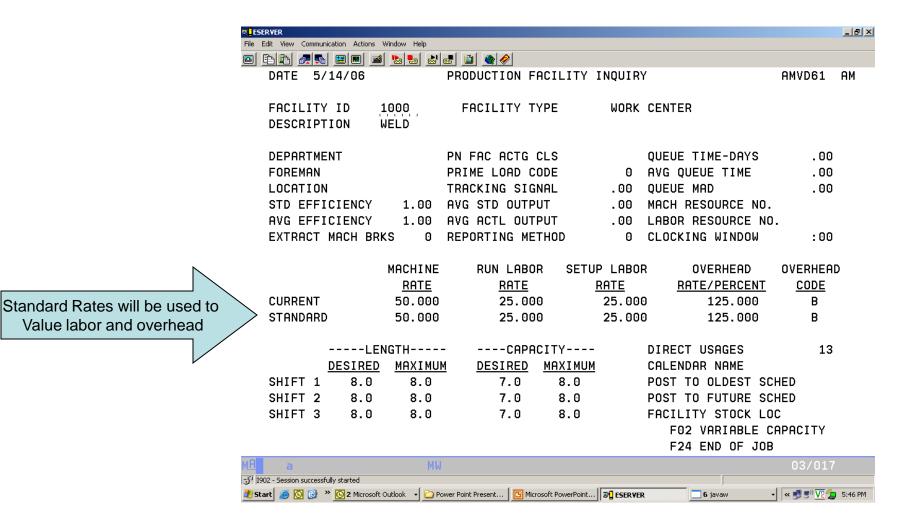
Facility





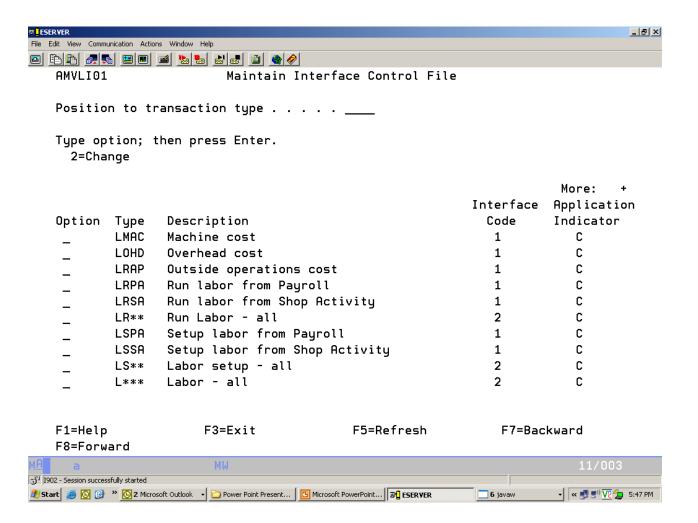
Facility (Green Screen)

Value labor and overhead





GL Transactions





Transaction Creation

- Every time labor is reported to an operation, the following transactions will be created in the PCCTXN file:
 - Run Labor: LRSA from Shop Activity
 - Set-up Labor: LSSA from Shop Activity
 - Charge Account: WIP
 - Offset Account: Labor Earned/Absorbed



Overhead

- Each time labor or machine time is reported, an overhead transaction is also created
 - Overhead: LOHD Overhead Cost
 - Charge: WIP
 - Offset: Overhead Absorbed/Earned



Machine Costs

- If the facility has a Machine Standard Rate and Machine time is reported to the MO, XA will create a LMAC transaction
- Charge: WIP
- Offset: Machine Cost Applied or Earned Overhead



Labor & Overhead

• Questions??????



Outside Operations

- Time Basis Code "C" in a routing operation flags an operation as being performed at the vendor
- Standard Cost for the Outside Operation is stored in the routing operation record
- Create an Item Master/Revision record to buy the Service (no Item Warehouse/Balance record is required)
- PO for the service can be created automatically when MO is released
- Default PO Price is determined by PO Control file
- Difference between PO Price/Invoice and Standard Cost will be a variance



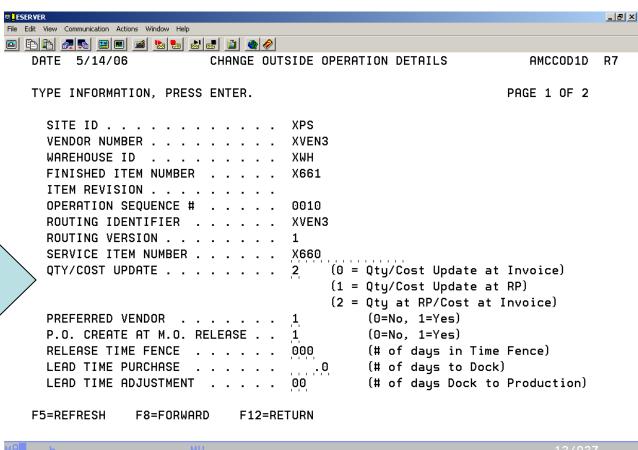
Outside Operation Costs

Outside Operation file

Determines when MO costs

are updated (at PO Receipt or

Invoice)







PO Create

- Either creating the MO or reporting quantity complete at the previous operation will cause a PO to be created
- PO Price is determined by Purchasing Control file
- PO may be a single delivery PO or a release on a Blanket PO

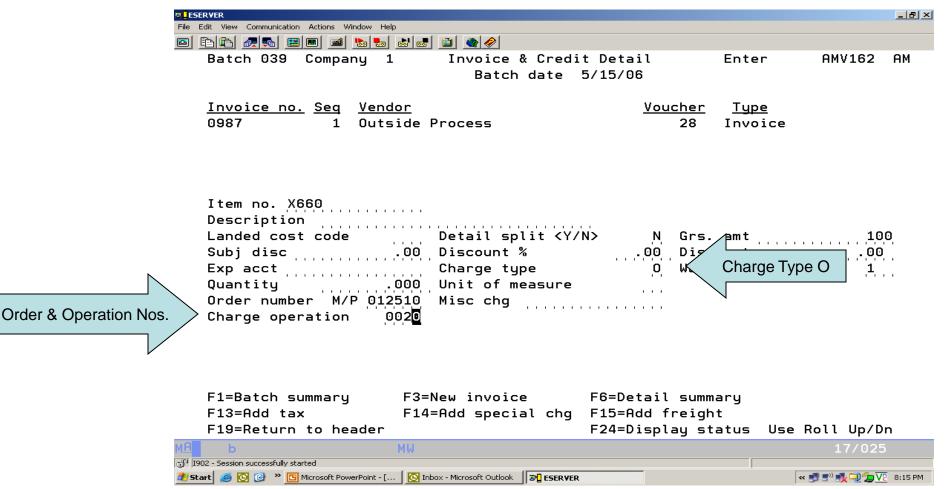


LRAP Transaction

- Outside Operation file controls when the MO cost & Operation Quantity complete are updated
- the LRAP transaction is created when the cost in the MOROUT file is updated
- Charge: WIP
- Offset: Outside Process (AP Clearing)



AM Financials – AP Invoice Entry

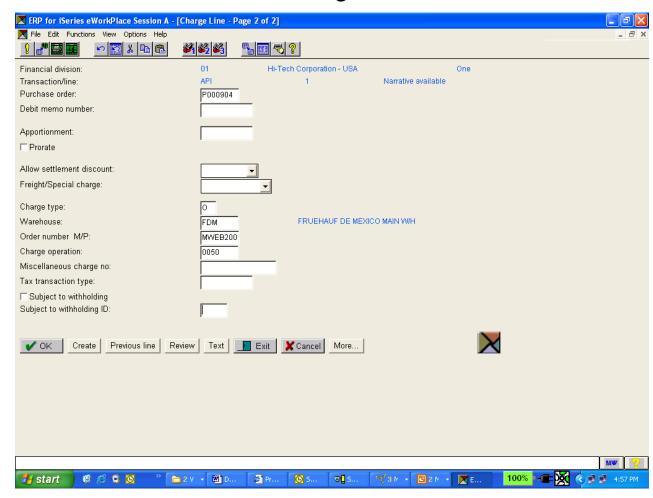




IFM Financials – Invoice Entry

Charge Type, Order

Number & Operation





Outside Operations

• Questions????



Scrap

- Scrap is reported at individual operations
- Reported scrap will lower the quantity to be produced
- Scrap labor & overhead costs will be prorated through the operation where the scrap was reported
- Material: if the bill specifies operation where first used, the material cost will be pro-rated through the operation

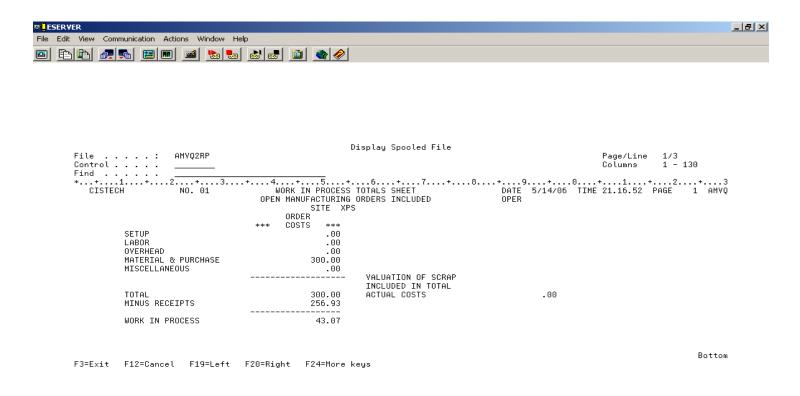


SCRP Transactions

- When scrap is reported, XA will create a SCRP transaction with the pro-rated value of the scrapped item
- Charge: Scrap
- Offset: WIP
- WIP Value report will show the value of scrap in WIP as a separate dollar value



WIP Reconciliation







Scrap

• Questions????

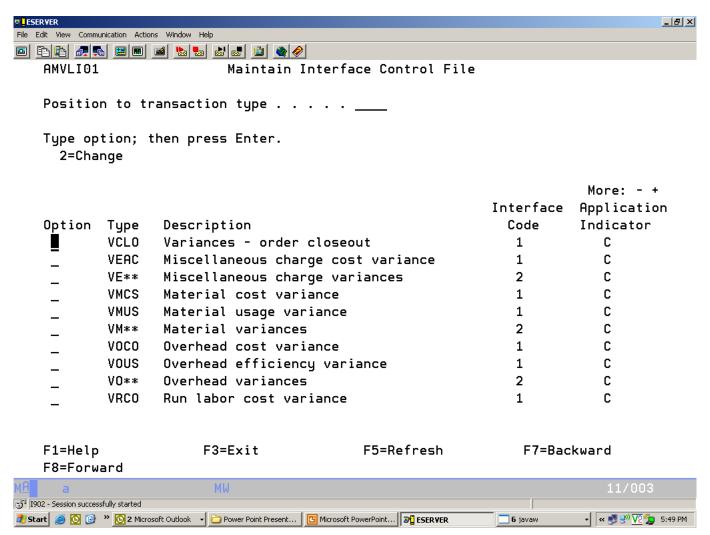


Variances

- XA will calculate a total variance as follows:
 - "Actual Cost" = Material + Machine + Set up labor + Run labor + OH
 - Receipt value = RM transaction quantity x Unit Cost
 Default
 - Order Variance = "Actual Cost" Receipt Value

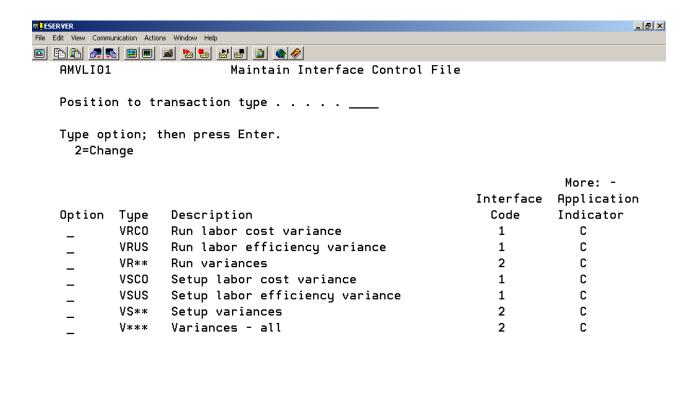


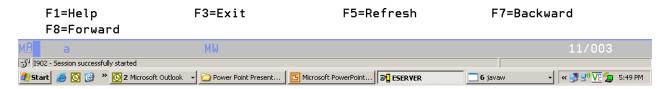
Variance Transactions





Variance Transactions







Order Closeout

- Order Close & Purge is when XA calculates and collects variance information for the MO
- Normal Close or Force Closing the order will produce the same variances – the only difference is the status of the MO when closed
- Order Close & Purge can produce the Accounting Detail report & Order Closeout Variance Analysis report



MO Accounting Report

| | | | ov | ERHEAD CALC | ULATIONS | INCLUDE M | ACHINE COSTS | * * | PAGE I | IN ORDER 1 |
|-----------------------------|-----------------------------------|----------------|-------------------------|----------------|----------------|----------------|----------------|-------------------------------|--|------------------------------------|
| | ORDER FINISH | ED | ST DEPT | JOB NUMBER | IAC OAC | ORDE QUANT | | UANTIT | Y* SCHED HRS PEN REMAINING | DATES |
| | NUMBER ITEM NO M020620 2640070 | | CD PLANN | REFERENCE | OAC | - | 00.000 | .000 | 250.00000 | START 4/25/06 ACTUAL ST 4/25/06 |
| MO Summary Info | 0RDER | 3900 1 | 1600 | | UNIT | 3,0 | | 250.000 PROJEC | | LAST TRANS 4/25/06 DUE 4/27/06 |
| MO Summary Info | DESCRIPT | YEZA NOIT | COMPLETE T | | COST | · | .9711 | COST | | ACTL CMPLT 4/25/06 |
| | COMP. ITEM NO., | / U/ WH /M | QUANTITY TO-DATE | UNIT | COST | STA | NDARD OST T | COST HIS PERIOD | COST TOTAL TO-DATE | DATE LAST ISSUE |
| | 054050300 | 1 EA | 5250.000 | | .0433 | | 216.50 | . 00 | 227.33 | |
| | 205314 | ELECT N/P | 5250.000 | | .0224 | | 112.13 | .00 | 117.73 | |
| Material Detail | 264004 | GREY 1 EA | 5250.000 | | .0413 | | 206.40 | .00 | 216.72 | 4/25/06 ! 4/25/06 |
| | RTPM GROMMET 264006 | 1 BA | 5250.000 | | .7837 | | 3918.57 | .00 | 4114.49 | |
| | TMP HOUSING | JVERMOLD | TOTAL. | STANDARD CO | er | 4,453 | .60 TO-DATE | COST | 4,676.27 | 1,22,00 |
| | | | 10172 | BIANDAND CO | | 4,455 | | | | |
| | OPERATION NO./ DESCRIPTION MS | | L PROC TOO SHEET PFA | | | DUE DATE | ACTIVE P | QUANTITY* ERIOD/ D-DATE | *COST PER UNI STANDARD/ ACTUAL | T* COST ACT/ST |
| | 0010 | 746A 746A | | 40 4 0 | 4/25/06 | 4/25/06 | 4/25/06 | 5,250.000 5,250.000 | | 08 06 75 |
| | Automatic Assen | nbly | | | | | | 3,230.000 | · | |
| | * STANI HOURS | | * THIS PE HOURS/C | | TOTAL HOURS | TO-DATE - | -* VARIANCE | HOURS *- | CUMULATIVE SCRAP STD COST/ACT COS Y SCRAPPED | |
| | SET | .00 | | .00 | | .00 | | .00 SE | т . | 0000.000 |
| | LAB | 5.49 66.93 | | 5.00 60.90 | | 5.00 60.90 | | -49 LA | • | 00 .0134 00 |
| Operation Detail | OVH | 321.42 | | 292.50 | | 292.50 | | ovi | | 00 .0643 |
| Operation Betain | OUT OP | .00 .00 | | . 00 . 00 | | .00 | | .00 00 | | 0000 |
| | тот | 5.49 368.35 | | 5.00 353,40 | | 5.00 353.40 | | .49 TO | | 00 .0777 00 , |
| | MAC | 5.49 .00 | | .00 | | .00 | | 5.49 MT | | 00 .8907 00 |
| | 0020 | 744P 744P | | 40 4 0 | 4/25/06 | 4/25/06 | 4/25/06 | 5,250.000 5,250.000 | | 00 |
| | Pack 4 Trays in | n Tote | | | | | . • | 5,250.000 | • | |
| | + STANI HOURS, | OARD* COST | + THIS PE HOURS/C | RIOD* * OST | | TO-DATE - | - * VARIANCE | | CUMULATIVE SCRAF STD COST/ACT COS Y SCRAPPED | CUMULATIVE T STD UNIT COST |
| | SET | .00 | | .00 | | .00 | | .00 SE | T . | 00 .0000 |
| | LAB | .19 2.75 | | 5.50 77.61 | | 5.50 77.61 | | 5.31- LA | | 00 .0140 |
| | OVH | 10.74 | | 303.22 | | 303.22 | | ov | | 00 .0664 00 |
| | OUT OP | .00 | | .00 | | .00 | | .00 OU | | 0000.0000 |
| | TOT | .19 13.49 | | 5.50 380.83 | _ | 5.50 380.83 | | 5.31- TO | | 00 .0804 |
| | MAC | .19 | | .00 | ব্য | .00 | 20 E | .19 MT | | 00 -8907 00 |
| | W AM-5512 NO M | | FOR THIS ORD | | | | | | | |
| MO Total (Incl Variance) | DIRECT SETU | p I | .ABOR | OVERHEAD | MATL 6 | PUR | MISCELLANEOUS | TOTAL ACTUA | L RECEIPT | DIFFERENCE |
| ivio rotal (ilici valiance) | ORDER COSTS | .00 | 138.51 | 595. | 72 | 4676.27 | . 00 | 5410 | .50 5098.26 | 312.24 |
| | | | | | | | | | | |

Variances

- GL Interfaces break the variances down into Cost, Efficiency & Usage variances for each of the following categories:
 - Material
 - Set up Labor
 - Run Labor
 - Overhead (includes Machine Variances)
 - Miscellaneous Charges

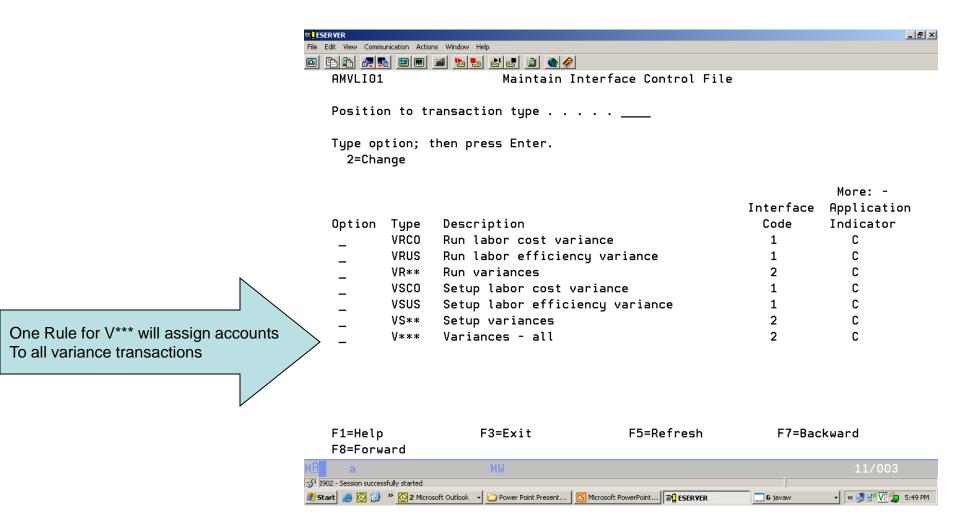


Rules

- Charge: Appropriate Variance Account or Cost of Goods Sold
- Offset: WIP
- Wildcard Rules (transaction codes that include *) will allow 1 rule to assign accounts to multiple transactions



Variance Transactions





MO Variance Report – pg. 1

| SBII ALlav | ATZI | NO. 01 ORDE | R CLOSEOUT VARIANCE . | | DATE 4/25/06 TI OPER CJS | ME 12.57.51 PAGE | 1 AMVGO | |
|-------------------|----------|---|------------------------|------------------------|-----------------------------|------------------------|-------------------|-----------------------|
| | | | ORDER ACTUAL COST | ORDER STANDARD COST | ORDER VARIANCE | USAGE VARIANCE | COST VARIANCE | Order Variance = |
| MATERIAL VARI | ANCE DE | TAIL | | | | | | |
| ITEM 054050300 | WHS 1 | QUANTITY PER UNIT QUANTITY RECEIVED | | 1.0000000 5250.000 | | | | Usage Variance + Cost |
| | | ISSUE QUANTITY STANDARD COST | 5250.000 .04 | 5250.000 .04 | | | | Variance |
| | | EXTENDED COST | 227.33 | 227.33 | .00 | .00 | .00 | variance |
| ITEM 205310 | WHS 1 | QUANTITY PER UNIT QUANTITY RECEIVED | | 1.0000000 5250.000 | | | | |
| | | ISSUE QUANTITY STANDARD COST | 5250.000 .02 | 5250.000 .02 | | | | |
| | | EXTENDED COST | 117.73 | 117.73 | .00 | .00 | .00 | |
| ITEM 264004 | WHS 1 | QUANTITY PER UNIT QUANTITY RECEIVED | | 1.0000000 5250.000 | | | | Material Detail |
| | | ISSUE QUANTITY STANDARD COST | 5250.000 .04 | 5250.000 .04 | | | | There is a second |
| | | EXTENDED COST | 216.72 | 216.72 | .00 | .00 | .00 | |
| ITEM 264006 | WHS 1 | QUANTITY PER UNIT QUANTITY RECEIVED | | 1,0000000 5250,000 | | | | |
| | | ISSUE QUANTITY STANDARD COST | 5250.000 .78 | 5250.000 .78 | | | | |
| | | EXTENDED COST | 4114.49 | 4114.49 | .00 | .00 | .00 | |
| PRODUCTION FA | CILITY | 744P DETAIL | | | | | | |
| OPER SEQUEN | CE 0020 | | | | | | | |
| | | SETUP LABOR HOURS STANDARD SETUP RATE | .00 | .00 | | | | |
| | SETI | JP LABOR EXTENDED COST | .00 | .00 | .00 | .00 | . 00 | 1 |
| | | UNIT RUN LABOR HOURS QUANTITY COMPLETE | | .0000 5250.000 | | | | |
| | | RUN LABOR HOURS STANDARD RUN LABOR RA | 5.50 TE 14.110 | .20 14.110 | | | | Operation Detail |
| | OVE | LABOR EXTENDED COST RHEAD EXTENDED COST SIDE OPERATION COST | 77.61 303.22 .00 | 2.89 11.29 .00 | 74.72 291.93 .00 | 74.72 291.91 .00 | .00 -02 .00 | |



MO Variances – Pg 2

| | | ORDER NUMBER M020620 | ORDER | ORDER | USAGE | COST | | |
|--|---|--|--|---------------------------------|--------------------------------|--------------------------------|---------|--------------|
| | | ACTUAL COST | STANDARD COST | VARIANCE | VARIANCE | VARIANCE | | |
| PRODUCTION FACI | LITY 744P DETAIL | | | | | | | |
| OPER SEQUENCE | 0010 | | | | | | | |
| PRODUCTION FACE | LITY 746A DETAIL | | | | | | | |
| OPER SEQUENCE | 0010 | | | | | | | |
| | SETUP LABOR HOURS STANDARD SETUP RATE | .00 | .00 | | | | | |
| | SETUP LABOR EXTENDED COST | .00 | .00 | .00 | .00 | .00 | | |
| | UNIT RUN LABOR HOURS QUANTITY COMPLETE | | .0011 5250.000 | | | | | |
| | RUN LABOR HOURS STANDARD RUN LABOR RATE | 5.00 12.180 | 5.76 12.180 | | | | | |
| | RUN LABOR EXTENDED COST OVERHEAD EXTENDED COST OUTSIDE OPERATION COST | 60.90 292.50 .00 | 70.27 337.51 .00 | 9.37- 45.01- .00 | 9.37- 45 .01- .00 | .00 | | |
| COSTS: MATERIAL SETUP | | ORDER NUMBER M020620 ORDER ACTUAL COST 4676.27 .00 | ORDER STANDARD COST 4676.27 .00 | ORDER VARIANCE .00 .00 | USAGE VARIANCE .00 | COST VARIANCE .00 .00 | | |
| LABOR OVERHEAD MISCELLANEOUS | | 138.51 595.72 .00 | 73.16 348.80 .00 | 65.35 246.92 .00 | 65.35 246.90 | .00 .02 .00 | MO Tota | al Variances |
| TOTAL COSTS | | 5410.50 | 5098.23 | 312.27 | 312.25 | .02 | | |
| RECEIPT AMOUNT | | 5098.26 | | | | | | |
| COST LESS RECEI | PT AMOUNT | 312.24 | | | | | • | |
| LESS: USAGE VARIANCES COST VARIANCES | | 312.25 .02 | | | | | | |
| ORDER CLOSEOUT | VARIANCE | .03- | | | | | | |

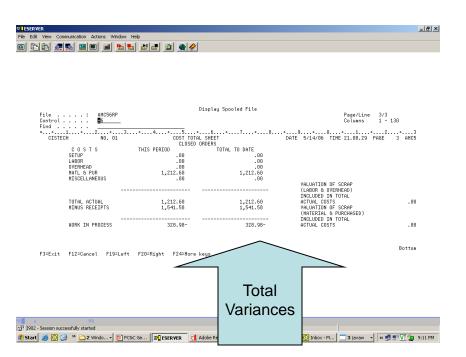


MO Accounting Report

| | | | 01 | ERHEAD CALC | ULATIONS | INCLUDE M | ACHINE COSTS | • • | PAGE I | N ORDER 1 |
|-----------------------------|------------------------------|---------------------|-------------------------|----------------|----------------|--------------------|----------------|-------------------------------|---|------------------------------------|
| | ORDER FINIS | HED NUMBER WH | ST DEPT | JOB NUMBER | IAC OAC | ORDE QUANT | R + Q | UANTITY COMPLETED OP | * SCHED HRS EN REMAINING | DATES |
| | M020620 26400 | | 55 | REPERENCE | OAC | | 00.000 | | 250.00000 | START 4/25/06 ACTUAL ST 4/25/06 |
| MO Summary Info | ORDER | 1,0300 | 1600 | | UNIT | - | 5, | 250.000 PROJECTI | | LAST TRANS 4/25/06 DUE 4/27/06 |
| We Summary mile | | PTION ASSY | COMPLETE T | | COST- | - | .9711 | COST | 4,855.49 | ACTL CMPLT 4/25/06 |
| | COMP. ITEM NO DESCRIPTION | 0./ U/ WH /M | QUANTITY TO-DATE | UNIT | COST | STA | NDARD OST T | COST HIS PERIOD | COST TOTAL TO-DATE | DATE LAST ISSUE |
| | 054050300 | 1 EA ELECT N/P | 5250.000 | | .0433 | - , | 216.50 | .00 | 227.33 | 4/25/06 |
| | CAP WAVE TO | 1 EA | 5250.000 | | .0224 | | 112.13 | .00 | 117.73 | |
| Material Detail | 264004 RTPM GROMME | 1 EA | 5250.000 | | .0413 | | 206.40 | .00 | 216.72 | 4/25/06 |
| | 264006 TMP HOUSING | 1 BA | 5250.000 | | .7837 | | 3918.57 | .00 | 4114.49 | 4/25/06 |
| | | | TOTĄL | STANDARD CO | ST | 4,453 | .60 TO-DATE | совт . | 4,676.27 | |
| | OPERATION NO. DESCRIPTION | | L PROC TOO SHEET PFA | | | DUE DATE | ACTIVE P | QUANTITY* ERIOD/ D-DATE | *COST PER UNI' STANDARD/ ACTUAL | T* COST ACT/ST |
| | 0010 | 746A 746A | | 40 4 0 | 4/25/06 | 4/25/06 | 4/25/06 | 5,250.000 | • ' | 08 06 75 |
| | Automatic Ass | embly | | | | | | 5,250.000 | • ' | |
| | + STA HOUR | NDARD* S/COST | + THIS PE HOURS/C | RIOD* * | TOTAL HOURS | TO-DATE - /COST | -* VARIANCE | HOURS * | - CUMULATIVE SCRAP STD COST/ACT COST SCRAPPED | T STD UNIT COST |
| | SET | .00 | | .00 | | .00 | | .00 SET | · • • • • • • • • • • • • • • • • • • • | 0000.0000 |
| | LAB | 5.49 66.93 | | 5.00 60.90 | | 5.00 60.90 | | .49 LAÐ | | 00 .0134 00 |
| Operation Detail | OVH | 321.42 | | 292.50 | | 292.50 | | OVH | | 00 .0643 00 |
| Operation Betain | OUT OP | .00 | | . 00 . 00 | | .00 | | .00 OUT | | 00 .0000 |
| | тот | 5.49 368.35 | | 5.00 353.40 | | 5.00 353.40 | | .49 TOT | | 00 .0777 00 . |
| | MAC | 5.49 | | .00 | | .00 | | 5.49', MTL | | 00 .8907 |
| | | .00 | | .00 40 4 0 | 4/25/06 | .00 4/25/06 | | 5,250.000 | | 00 |
| | 0020 Pack 4 Trays | 744P 744P | | 40 4 0 | 4/25/06 | 4/25/06 | 4/25/00 | 5.250.000 | | 07 0 |
| | - | MDARD* | THIS DE | RIOD* * | TOTAL | TO-DATE - | - VARIANCE | HOURS * | - CUMULATIVE SCRAP | * CUMULATIVE |
| | | S/COST | HOURS/C | OST | | /COST | ************ | | STD COST/ACT COST | |
| | SET | .00 | | .00 | | .00 | | .00 SET | | .0000 |
| | LAB | .19 2.75 | | 5.50 77.61 | | 5.50 77.61 | | 5.31- LAB | | 00 .0140 00 |
| | OVH | 10.74 | | 303.22 | | 303.22 | | OVH | | 00 .0664 |
| | OUT OP | .00 | • | .00 | | .00 | | .oo our | | .0000 |
| | TOT | .19 | | 5.50 380.83 | | 5.50 380.83 | | 5.31- TOT | . (| .0804 |
| | MAC | 13.49 .19 .00 | | .00 | 47 | .00 | 86 B 2 | .19 MTL | 0 | 00 .8907 00 |
| | W AM-5512 NO | | FOR THIS ORD | | | .00 | | | •• | |
| MO Totala (in al Marian sa) | DIRECT SET | up I | ABOR | OVERHEAD | MATL 6 | PUR I | MISCELLANEOUS | TOTAL ACTUAL | RECEIPT | DIFFERENCE |
| MO Totals (incl Variance) | ORDER COSTS | .00 | 138.51 | 595. | | 4676.27 | . 0 | | 50 5098.26 | 312.24 |
| | | | | | | | | | | |

Total Variances

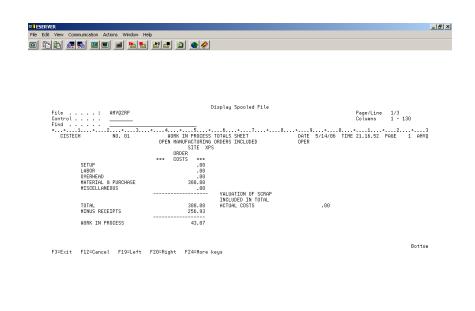
Final Page of Order
 Detail report has total
 variance dollars for all
 MO's closed and
 purged





WIP Reconciliation

- After running the MO
 Close and Purge, you
 will need to run the
 WIP Totals Sheet
 from the PC&C
 Reports menu to get
 the value of WIP
- Use this to reconcile to GL WIP value





Summary

- Use GL Rules to book machine, labor & overhead to WIP
- Costs for Outside Operations are determined by the Outside Operation file
- Scrap costs are pro-rated to the operation where scrap was reported
- Variances are calculated and reported when the MO is closed and purged

