



***LeanOps***<sup>TM</sup>  
***Production Reporting Program***

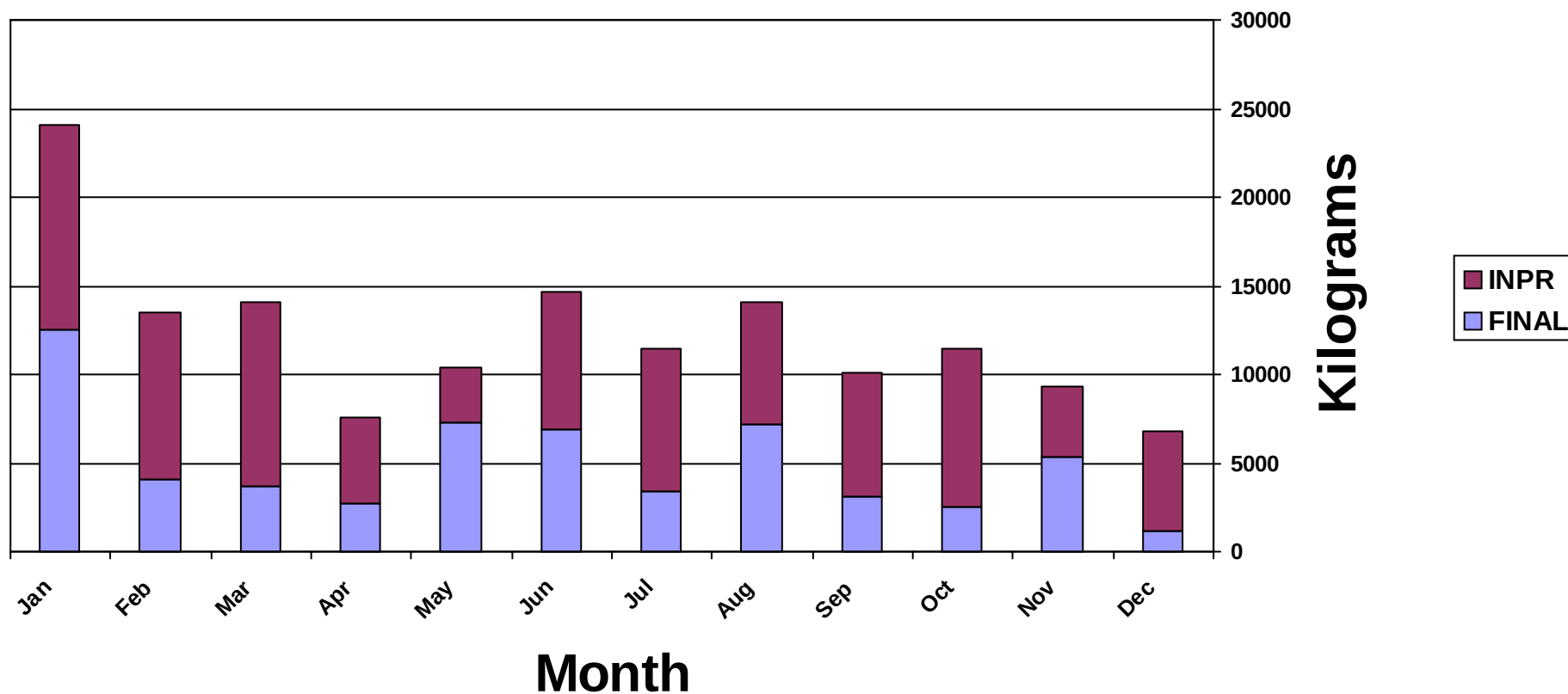
***Standard Formatted Report Examples***

**PRODUCTIVITY SOLUTIONS**

**Industrial & Manufacturing Engineering Services**

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## Monthly Throughput Tracking Chart



Running Total:

147,539

Monthly Average:

12,295

## Monthly Staffed vs Running Kgs / Hr by Work Center

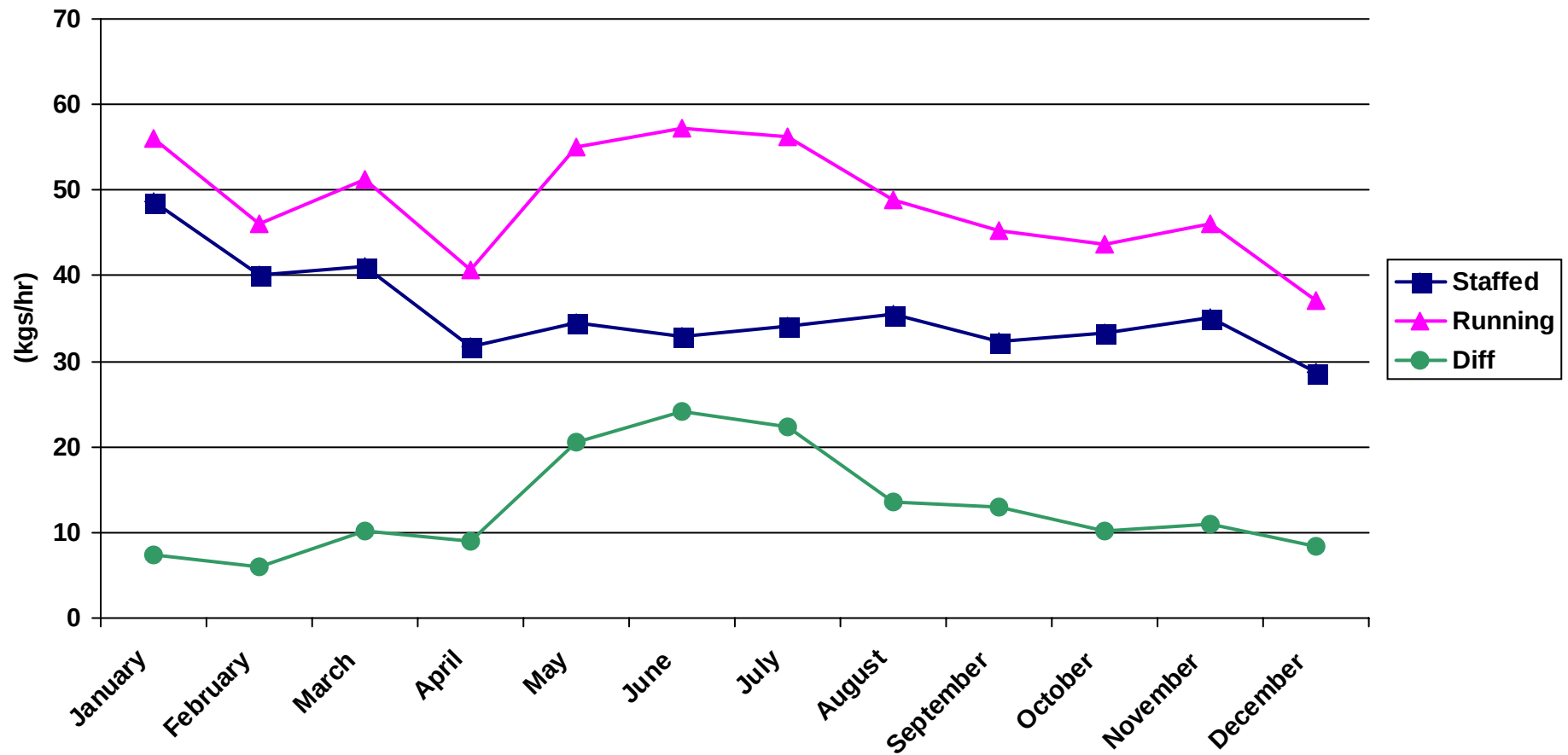
Process Location: Michigan Plant

Year: 2007

Work Center: 110

Description: #12 Mill

### Monthly Throughput (kgs/hr) Report





## Work Center Monthly OEE Report

Work Center No: 100

Description: #10 Mill

Year: 2008

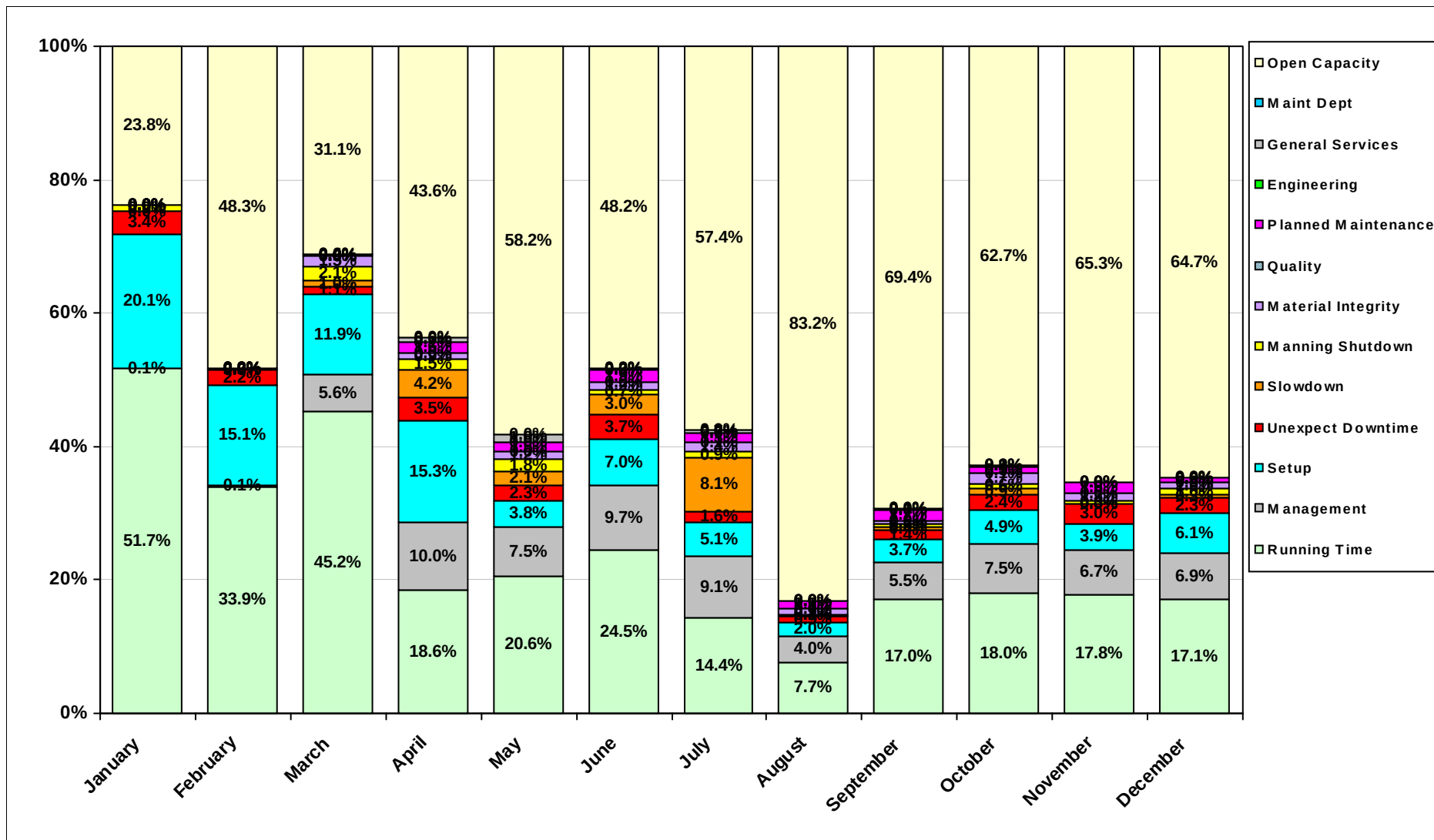
|                  | <u>Availability</u> | x | <u>Performance</u> | x | <u>Quality</u> | = | <u>OEE %</u> |
|------------------|---------------------|---|--------------------|---|----------------|---|--------------|
| January          | 84.0%               | x | 70.4%              | x | 97.91%         | = | 57.9%        |
| February         | 80.2%               | x | 54.6%              | x | 99.46%         | = | 43.6%        |
| March            | 81.8%               | x | 91.8%              | x | 97.68%         | = | 73.3%        |
| April            | 83.3%               | x | 76.0%              | x | 99.48%         | = | 62.9%        |
| May              | 83.8%               | x | 61.2%              | x | 99.59%         | = | 51.1%        |
| June             | 98.6%               | x | 93.6%              | x | 100.00%        | = | 92.3%        |
| <b>Averages:</b> | <b>85.3%</b>        |   | <b>74.6%</b>       |   | <b>99.0%</b>   |   | <b>63.0%</b> |

# Monthly: Work Center Utilization Against Available Time

Year: 2007

Process Location: Michigan Pllant

W/C: 130, #15 Mill

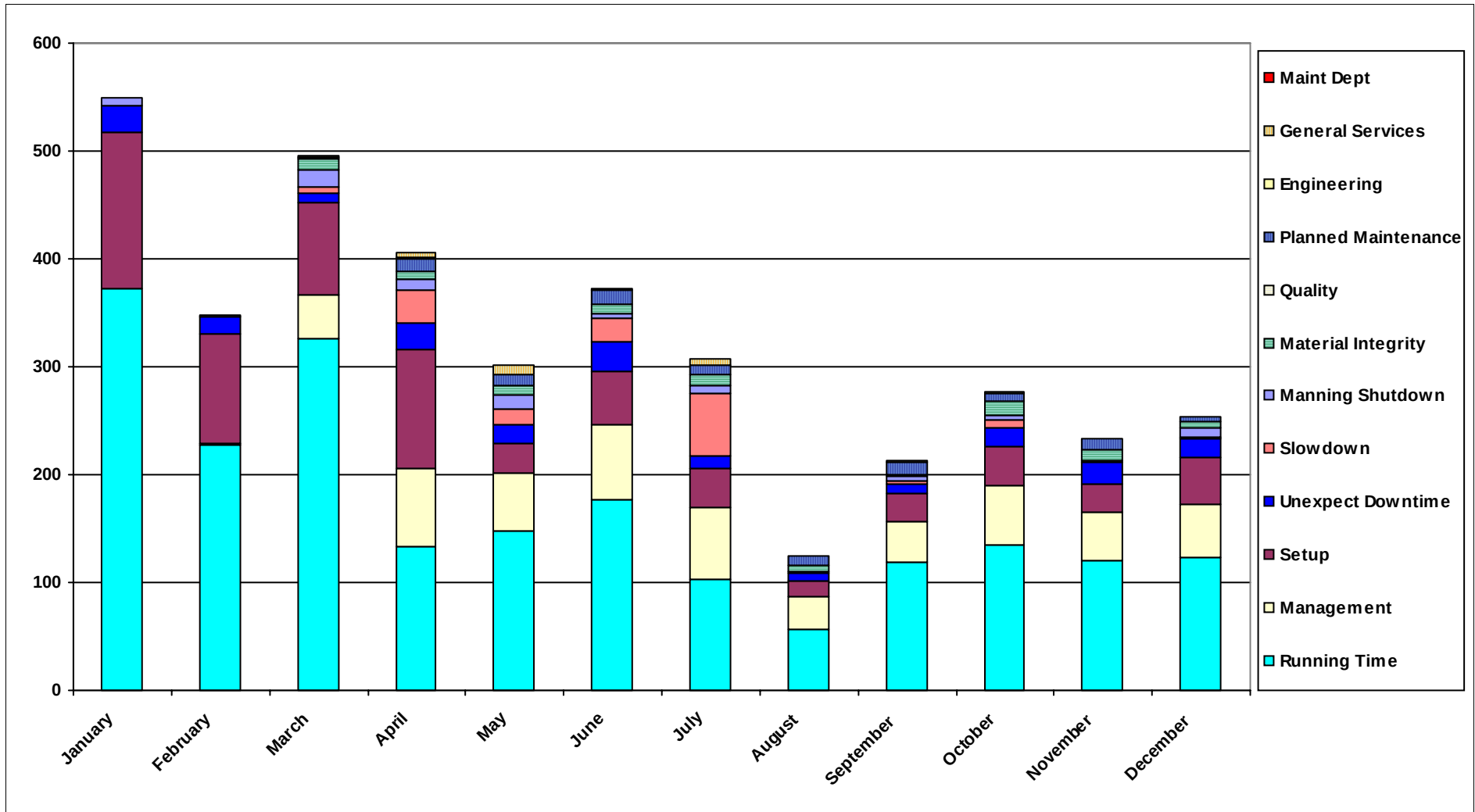


## Michigan Pllant, Work Center Staffed Hour Breakdown

Work Center: 130

Description: #15 Mill

Year: 2007



## WC Downtime by Main Category & Sub-Category

Process Location: Michigan Plant

Work Center 130

#15 Mill

Report Start Date: 2/1/2008

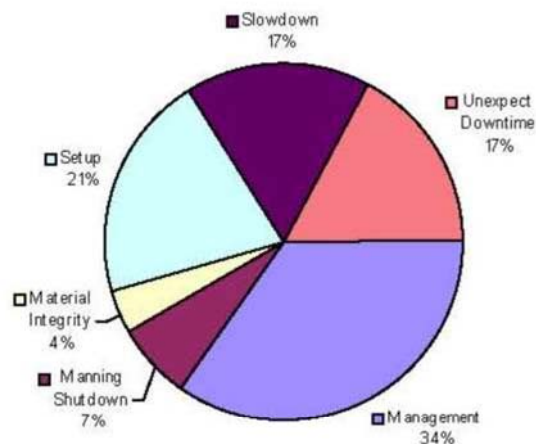
End Date: 3/1/2008

Report Range: 30 Days

Work Center Operating Costs: \$263.00

|                              | Total  |         | Costs       |
|------------------------------|--------|---------|-------------|
|                              | Hrs    | %       | \$          |
| Category: Management         |        |         |             |
| Clean Up                     | 15.25  | 17.23%  | \$4,010.75  |
| Lunch/Break                  | 52.50  | 59.32%  | \$13,807.76 |
| Meetings                     | 2.50   | 2.82%   | \$657.50    |
| Shift Change                 | 18.25  | 20.62%  | \$4,799.75  |
| Sub Total:                   | 88.50  | 100%    | \$23,275.76 |
| Category: Setup              |        |         |             |
| Additional RC Tasks          | 6.00   | 11.11%  | \$1,578.00  |
| Inprocess Mill Set-Up Tasks  | 15.25  | 28.24%  | \$4,010.75  |
| No Code                      | 1.50   | 2.78%   | \$394.50    |
| Normal Roll Change           | 31.25  | 57.87%  | \$8,218.75  |
| Sub Total:                   | 54.00  | 100%    | \$14,202.00 |
| Category: Unexpect Downtime  |        |         |             |
| Electrical                   | 11.25  | 26.01%  | \$2,958.75  |
| Material Handling            | 0.25   | 0.58%   | \$65.75     |
| Mechanical                   | 25.25  | 58.38%  | \$6,640.75  |
| No Code                      | 4.50   | 10.40%  | \$1,183.50  |
| Normal Roll Change           | 2.00   | 4.62%   | \$526.00    |
| Sub Total:                   | 43.25  | 100%    | \$11,374.75 |
| Category: Slowdown           |        |         |             |
| Manning                      | 43.65  | 100.00% | \$11,479.95 |
| Sub Total:                   | 43.65  | 100%    | \$11,479.95 |
| Category: Manning Shutdown   |        |         |             |
| Manning                      | 17.00  | 93.15%  | \$4,471.00  |
| Waiting for Equipment        | 1.25   | 6.85%   | \$328.75    |
| Sub Total:                   | 18.25  | 100%    | \$4,799.75  |
| Category: Material Integrity |        |         |             |
| No Code                      | 1.00   | 10.53%  | \$263.00    |
| Part Quality                 | 8.50   | 89.47%  | \$2,235.50  |
| Sub Total:                   | 9.50   | 100%    | \$2,498.50  |
| TOTAL:                       | 257.15 |         | \$67,630.71 |

## Work Center Breakdown



## WC Downtime by Sub-Category & Codes

Process Location: Michigan Plant

Work Center 130 #15 Mill

Main Down Time Category: Unexpect Downtime

Report Start Date: 2/1/2008

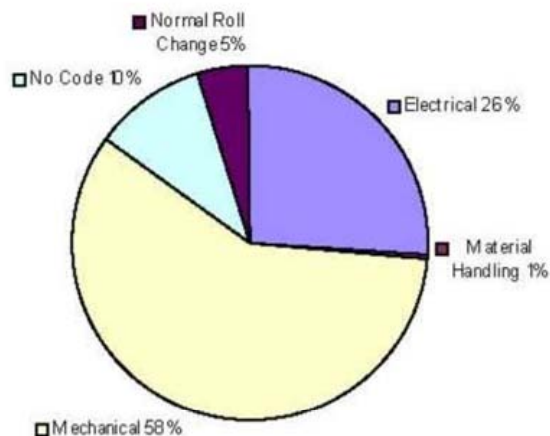
End Date: 3/1/2008

Report Range: 30 Days

Work Center Operating Costs: \$263.00

|                                  |                                               | Total |         | Costs       |
|----------------------------------|-----------------------------------------------|-------|---------|-------------|
|                                  |                                               | Hrs   | %       | \$          |
| Sub Category: Electrical         |                                               |       |         |             |
| 3064                             | Trouble Shooting Electrical                   | 1.50  | 13.33%  | \$394.50    |
| 3063                             | Electrical Control Broke (Ex.: Replace Relay) | 4.00  | 35.56%  | \$1,052.00  |
| 3017                             | Controls Reboot                               | 2.25  | 20.00%  | \$591.75    |
| 3016                             | Controls Repair (PC / PLC)                    | 3.50  | 31.11%  | \$920.50    |
| Sub Total:                       |                                               | 11.25 | 100%    | \$2,958.75  |
| Sub Category: Material Handling  |                                               |       |         |             |
| 3035                             | Moving Material                               | 0.25  | 100.00% | \$65.75     |
| Sub Total:                       |                                               | 0.25  | 100%    | \$65.75     |
| Sub Category: Mechanical         |                                               |       |         |             |
| 3065                             | Trouble Shooting Mechanical                   | 0.75  | 2.97%   | \$197.25    |
| 3051                             | Water Leakage                                 | 0.50  | 1.98%   | \$131.50    |
| 3040                             | Paper Winders Repairs                         | 1.00  | 3.96%   | \$263.00    |
| 3024                             | Leaders Repair                                | 6.25  | 24.75%  | \$1,643.75  |
| 3023                             | Lost Hydraulics: Lines or Valve Repair        | 2.00  | 7.92%   | \$526.00    |
| 3012                             | Clamp Repair                                  | 14.50 | 57.43%  | \$3,813.50  |
| 3004                             | Air Line or Valve Repair                      | 0.25  | 0.99%   | \$65.75     |
| Sub Total:                       |                                               | 25.25 | 100%    | \$6,640.75  |
| Sub Category: No Code            |                                               |       |         |             |
| 3499                             | No Code, Must Explain                         | 4.50  | 100.00% | \$1,183.50  |
| Sub Total:                       |                                               | 4.50  | 100%    | \$1,183.50  |
| Sub Category: Normal Roll Change |                                               |       |         |             |
| 3058                             | Add Roll Change: From Flowered Material       | 2.00  | 100.00% | \$526.00    |
| Sub Total:                       |                                               | 2.00  | 100%    | \$526.00    |
| TOTAL:                           |                                               | 43.25 |         | \$11,374.75 |

### Work Center Breakdown







# Operation Step Throughput and Yield Report by Date

Part Number 2007820

Description: 1" Steel Plate

Group Route No: 1515

Work Center No: 100

Work Center Name: #10 Mill

Operation Step: 0010

Report Start Date 2/1/2008

Report End Date 4/1/2008

Range Days: 61

| Date      | Shift  |      | Piece Information |        |       | Throughput Information |          |          |          |            | Avg. Mill Pass Info |        |            |
|-----------|--------|------|-------------------|--------|-------|------------------------|----------|----------|----------|------------|---------------------|--------|------------|
|           | Number | Crew | Finished Good     |        | Scrap | Run                    | Actual   |          | Target   | Efficiency | Actual              | Target | Difference |
|           |        |      | (pcs)             | (kgs)  | (kgs) |                        | (kgs/hr) | (hrs/pc) | (hrs/pc) | (%)        |                     |        |            |
| 2/11/2008 | 1      | 3    | 2                 | 216.0  |       | 2.0                    | 108.0    | 1.000    | 0.340    | 34%        | 9.0                 | 4      | 5          |
| 2/18/2008 | 2      | 2    | 3                 | 327.1  |       | 3.0                    | 109.0    | 1.000    | 0.340    | 34%        | 9.0                 | 4      | 5          |
| 2/19/2008 | 3      | 1    | 7                 | 700.0  |       | 7.0                    | 100.0    | 1.000    | 0.340    | 34%        | 9.0                 | 4      | 5          |
| 2/26/2008 | 1      | 1    | 2                 | 200.0  |       | 1.0                    | 200.0    | 0.500    | 0.340    | 68%        | 3.0                 | 4      | -1         |
| 3/12/2008 | 1      | 2    | 1                 | 108.8  |       | 0.5                    | 217.6    | 0.500    | 0.340    | 68%        | 9.0                 | 4      | 5          |
| 3/12/2008 | 2      | 3    | 1                 | 108.0  |       | 1.0                    | 108.0    | 1.000    | 0.340    | 34%        | 9.0                 | 4      | 5          |
| 3/28/2008 | 1      | 12   | 2                 | 218.8  |       | 1.0                    | 211.7    | 0.517    | 0.340    | 66%        | 9.0                 | 4      | 5          |
| 3/28/2008 | 3      | 1    | 10                | 1090.0 |       | 5.0                    | 218.0    | 0.500    | 0.340    | 68%        | 9.0                 | 4      | 5          |
| 3/28/2008 | 3      | 1    | 2                 | 218.0  |       | 1.0                    | 218.0    | 0.500    | 0.340    | 68%        | 9.0                 | 4      | 5          |
| Totals:   |        |      | 30                | 3187   |       | 21.5                   | 148.0    | 0.803    | 0.340    | 47%        | 8.6                 |        | 4.3        |



# Operation Step Throughput and Yield Report by Crew

Part Number 2007820

Description: 1" Steel Plate

Group Route No: 1515

Work Center No: 100

Work Center Name: #10 Mill

Operation Step: 0010

Report Start Date 2/1/2008

Report End Date 4/1/2008

Range Days: 61

|              |        |      | Piece Information |        |       |       | Throughput Information |          |          |          |            | Avg. Mill Pass Info |        |            |
|--------------|--------|------|-------------------|--------|-------|-------|------------------------|----------|----------|----------|------------|---------------------|--------|------------|
| Date         | Shift  |      | Finished          | Good   | Scrap | Yield | Run                    | Actual   |          | Target   | Efficiency | Actual              | Target | Difference |
|              | Number | Crew | (pcs)             | (kgs)  | (kgs) | (%)   | (hrs)                  | (kgs/hr) | (hrs/pc) | (hrs/pc) | (%)        | (qty)               | (qty)  | (qty)      |
| 2/19/2008    | 3      | 1    | 7                 | 700.0  |       | 100%  | 7.0                    | 100.0    | 1.000    | 0.340    | 34%        | 9.0                 | 4      | 5          |
| 2/26/2008    | 1      | 1    | 2                 | 200.0  |       | 100%  | 1.0                    | 200.0    | 0.500    | 0.340    | 68%        | 3.0                 | 4      | -1         |
| 3/28/2008    | 3      | 1    | 10                | 1090.0 |       | 100%  | 5.0                    | 218.0    | 0.500    | 0.340    | 68%        | 9.0                 | 4      | 5          |
| 3/28/2008    | 3      | 1    | 2                 | 218.0  |       | 100%  | 1.0                    | 218.0    | 0.500    | 0.340    | 68%        | 9.0                 | 4      | 5          |
| Crew Totals: |        |      | 21                | 2208   |       | 100%  | 14.0                   | 157.7    | 0.750    | 0.340    | 51%        | 8.429               |        | 3.5        |

|              |        |      | Piece Information |       |       |       | Throughput Information |          |          |          |            | Avg. Mill Pass Info |        |            |
|--------------|--------|------|-------------------|-------|-------|-------|------------------------|----------|----------|----------|------------|---------------------|--------|------------|
| Date         | Shift  |      | Finished          | Good  | Scrap | Yield | Run                    | Actual   |          | Target   | Efficiency | Actual              | Target | Difference |
|              | Number | Crew | (pcs)             | (kgs) | (kgs) | (%)   | (hrs)                  | (kgs/hr) | (hrs/pc) | (hrs/pc) | (%)        | (qty)               | (qty)  | (qty)      |
| 2/18/2008    | 2      | 2    | 3                 | 327.1 |       | 100%  | 3.0                    | 109.0    | 1.000    | 0.340    | 34%        | 9.0                 | 4      | 5          |
| 3/12/2008    | 1      | 2    | 1                 | 108.8 |       | 100%  | 0.5                    | 217.6    | 0.500    | 0.340    | 68%        | 9.0                 | 4      | 5          |
| Crew Totals: |        |      | 4                 | 436   |       | 100%  | 3.5                    | 124.5    | 0.929    | 0.340    | 39%        | 9.000               |        | 5.0        |

|              |        |      | Piece Information |       |       |       | Throughput Information |          |          |          |            | Avg. Mill Pass Info |        |            |
|--------------|--------|------|-------------------|-------|-------|-------|------------------------|----------|----------|----------|------------|---------------------|--------|------------|
| Date         | Shift  |      | Finished          | Good  | Scrap | Yield | Run                    | Actual   |          | Target   | Efficiency | Actual              | Target | Difference |
|              | Number | Crew | (pcs)             | (kgs) | (kgs) | (%)   | (hrs)                  | (kgs/hr) | (hrs/pc) | (hrs/pc) | (%)        | (qty)               | (qty)  | (qty)      |
| 2/11/2008    | 1      | 3    | 2                 | 216.0 |       | 100%  | 2.0                    | 108.0    | 1.000    | 0.340    | 34%        | 9.0                 | 4      | 5          |
| 3/12/2008    | 2      | 3    | 1                 | 108.0 |       | 100%  | 1.0                    | 108.0    | 1.000    | 0.340    | 34%        | 9.0                 | 4      | 5          |
| Crew Totals: |        |      | 3                 | 324   |       | 100%  | 3.0                    | 108.0    | 1.000    | 0.340    | 34%        | 9.000               |        | 5.0        |

|              |        |      | Piece Information |       |       |       | Throughput Information |          |          |          |            | Avg. Mill Pass Info |        |            |
|--------------|--------|------|-------------------|-------|-------|-------|------------------------|----------|----------|----------|------------|---------------------|--------|------------|
| Date         | Shift  |      | Finished          | Good  | Scrap | Yield | Run                    | Actual   |          | Target   | Efficiency | Actual              | Target | Difference |
|              | Number | Crew | (pcs)             | (kgs) | (kgs) | (%)   | (hrs)                  | (kgs/hr) | (hrs/pc) | (hrs/pc) | (%)        | (qty)               | (qty)  | (qty)      |
| 3/28/2008    | 1      | 12   | 2                 | 218.8 |       | 100%  | 1.0                    | 211.7    | 0.517    | 0.340    | 66%        | 9.0                 | 4      | 5          |
| Crew Totals: |        |      | 2                 | 219   |       | 100%  | 1.0                    | 211.7    | 0.517    | 0.340    | 66%        | 9.000               |        | 5.0        |

|                      |  |  |           |               |  |             |             |              |              |              |            |            |  |            |
|----------------------|--|--|-----------|---------------|--|-------------|-------------|--------------|--------------|--------------|------------|------------|--|------------|
| <b>Grand Totals:</b> |  |  | <b>30</b> | <b>3186.7</b> |  | <b>100%</b> | <b>21.5</b> | <b>148.0</b> | <b>0.803</b> | <b>0.340</b> | <b>47%</b> | <b>8.6</b> |  | <b>4.3</b> |
|----------------------|--|--|-----------|---------------|--|-------------|-------------|--------------|--------------|--------------|------------|------------|--|------------|



# Plant Scrap Summary

Process Location: Michigan Pllant

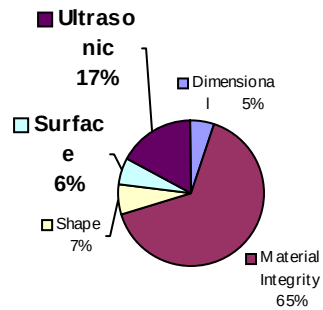
Report Start Date: 6/1/707

End Date: 5/1/2008

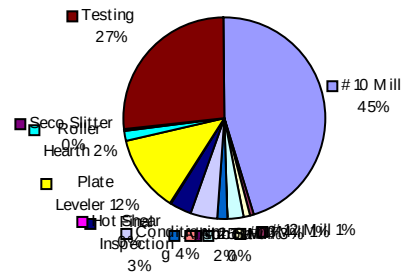
Report Range: 475152 Days

| WorkCenter           | Dimensional   | Integrity     | Shape         | Surface       | Ultrasonic      | Other    | Total            |
|----------------------|---------------|---------------|---------------|---------------|-----------------|----------|------------------|
|                      | Kgs           | Kgs           | Kgs           | Kgs           | Kgs             | Kgs      | Kgs              |
| 100 #10 Mill         | 5.5           | 4321.25       | 418.5         | 251.25        | 0               | 0        | 4996.5           |
| 110 #12 Mill         | 0             | 52            | 0             | 20            | 0               | 0        | 72               |
| 120 #13Mill          | 0             | 68.7          | 20.25         | 0             | 0               | 0        | 88.95            |
| 130 #15 Mill         | 0             | 312.2         | 0             | 0             | 0               | 0        | 312.2            |
| 170 #25 Mill         | 1             | 0             | 0             | 0             | 0               | 0        | 1                |
| 235 Abbott           | 1             | 0             | 0             | 0             | 0               | 0        | 1                |
| 240 Roller Hearth    | 0             | 207.6         | 0             | 0             | 0               | 0        | 207.6            |
| 300 Alison Saw       | 0             | 179           | 0             | 0             | 0               | 0        | 179              |
| 310 Seco Slitter     | 0             | 10            | 0             | 0             | 0               | 0        | 10               |
| 400 Conditioning     | 166.69        | 200           | 0             | 0             | 109.2           | 0        | 475.89           |
| 410 Plate Leveler    | 0             | 1348.8        | 0             | 0             | 0               | 0        | 1348.8           |
| 420 Hot Shear        | 0             | 12.5          | 0             | 0             | 0               | 0        | 12.5             |
| 500 Testing          | 396.7         | 187.49        | 360           | 251.1         | 1801.145        | 0        | 2996.435         |
| 510 Final Inspection | 20            | 247.96        | 0             | 105.66        | 0               | 0        | 373.62           |
| <b>Total:</b>        | <b>590.89</b> | <b>7147.5</b> | <b>798.75</b> | <b>628.01</b> | <b>1910.345</b> | <b>0</b> | <b>11075.495</b> |

Scrap Breakdown by Category



Scrap Breakdown by Work Center





# Work Center Scrap Summary

Process Location: Michigan Pllant

Work Center 100

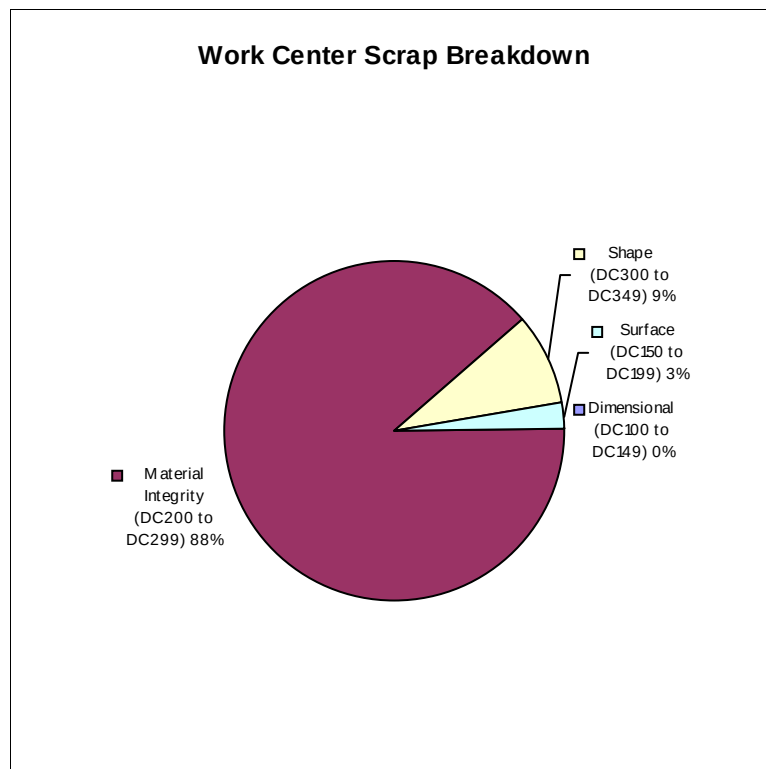
#10 Mill

Report Start Date: 6/1/707

End Date: 5/1/2008

Report Range: 475152 Days

|                                               |  | Total    |      |
|-----------------------------------------------|--|----------|------|
|                                               |  | Kgs      | %    |
| Category: Dimensional (DC100 to DC149)        |  |          |      |
| Manning                                       |  | 1.50     | 43%  |
| Process                                       |  | 2.00     | 57%  |
| Sub Total:                                    |  | 3.50     | 100% |
| Category: Surface (DC150 to DC199)            |  |          |      |
| Manning                                       |  | 1.25     | 1%   |
| Material                                      |  | 125.00   | 99%  |
| Sub Total:                                    |  | 126.25   | 100% |
| Category: Material Integrity (DC200 to DC299) |  |          |      |
| Delamination                                  |  | 1,382.10 | 32%  |
| Holes                                         |  | 40.00    | 1%   |
| Manning                                       |  | 964.10   | 22%  |
| No Code                                       |  | 162.00   | 4%   |
| Process                                       |  | 753.00   | 17%  |
| Properties                                    |  | 1,020.05 | 24%  |
| Sub Total:                                    |  | 4,321.25 | 100% |
| Category: Shape (DC300 to DC349)              |  |          |      |
| Process                                       |  | 418.50   | 100% |
| Sub Total:                                    |  | 418.50   | 100% |
| TOTAL:                                        |  | 4,869.50 |      |





# Work Center Scrap Detail

Process Location: Michigan Pllant

Work Center 100 #10 Mill

ScrapCategory: Material Integrity (DC200 to DC299)

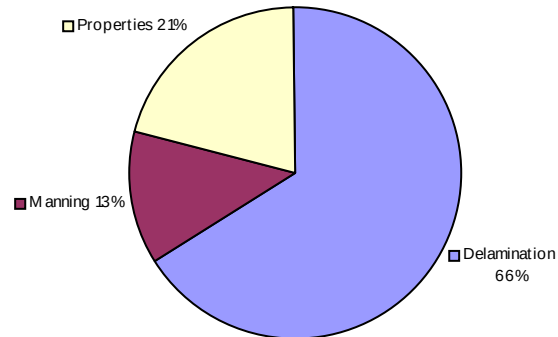
Report Start Date: 6/1/707

End Date: 1/1/2008

Report Range: 475031 Days

|                            |                                          | Total  |      |
|----------------------------|------------------------------------------|--------|------|
|                            |                                          | Kgs    | %    |
| Sub Category: Delamination |                                          |        |      |
| DC219                      | Delamination - Alligator                 | 311.90 | 48%  |
| DC219                      | Delamination - Alligator                 | 171.00 | 26%  |
| DC219                      | Delamination - Alligator                 | 170.00 | 26%  |
| Sub Total:                 |                                          | 652.90 | 100% |
| Sub Category: Manning      |                                          |        |      |
| DC213                      | Cracks - Big Foot at #1 Mill (Head/Tail) | 128.10 | 100% |
| Sub Total:                 |                                          | 128.10 | 100% |
| Sub Category: Properties   |                                          |        |      |
| DC206                      | Broke - Material Edge                    | 1.75   | 1%   |
| DC210                      | Broke - Multiple Pieces                  | 129.60 | 62%  |
| DC210                      | Broke - Multiple Pieces                  | 78.00  | 37%  |
| Sub Total:                 |                                          | 209.35 | 100% |
| TOTAL:                     |                                          | 990.35 |      |

Scrap Category Breakdown by Subcategory





## Operator Efficiency & Accuracy Monthly Report

Year: 2008

Employed Location: Michigan Pllant

CWID No.: MMAEZ

HARRIS, CASEY

MILL OPERATOR C

| Month | Efficiency Information |              |                      | Accuracy Information |               |                |                    |              |
|-------|------------------------|--------------|----------------------|----------------------|---------------|----------------|--------------------|--------------|
|       | Normal Running (hrs)   | Earned (hrs) | Labor Efficiency (%) | Handed In (qty)      | Entered (qty) | Returned (qty) | Error Points (qty) | Approved (%) |
| Jan   | 149.3                  | 133.0        | 89%                  | 34                   | 34            | 0              | 0                  | 100%         |
| Feb   | 101.5                  | 79.3         | 78%                  | 21                   | 21            | 0              | 0                  | 100%         |
| Mar   | 78.8                   | 69.1         | 88%                  | 28                   | 28            | 0              | 0                  | 100%         |
| Apr   | 61.3                   | 54.1         | 88%                  | 14                   | 14            | 0              | 0                  | 100%         |
| May   | 94.6                   | 93.0         | 98%                  | 22                   | 22            | 0              | 0                  | 100%         |
| Jun   | 12.6                   | 8.1          | 64%                  | 3                    | 3             | 0              | 0                  | 100%         |
| Jul   | 0.0                    | 0.0          | 0%                   | 0                    | 0             | 0              | 0                  | 0%           |
| Aug   | 0.0                    | 0.0          | 0%                   | 0                    | 0             | 0              | 0                  | 0%           |
| Sep   | 0.0                    | 0.0          | 0%                   | 0                    | 0             | 0              | 0                  | 0%           |
| Oct   | 0.0                    | 0.0          | 0%                   | 0                    | 0             | 0              | 0                  | 0%           |
| Nov   | 0.0                    | 0.0          | 0%                   | 0                    | 0             | 0              | 0                  | 0%           |
| Dec   | 0.0                    | 0.0          | 0%                   | 0                    | 0             | 0              | 0                  | 0%           |
|       | 498.0                  | 436.5        | 88%                  | 122                  | 122           | 0              | 0                  | 100%         |



# Operator Efficiency Daily Report

CWID: MMAEZ

Employee Name: HARRIS, CASEY

Report Start Date: 1/1/2008

Report End Date: 2/1/2008

Report Range: 32

| Date      | Reported Information |               |            |              |              | Production Results |                  |                  | Efficiency Results |            |                  |
|-----------|----------------------|---------------|------------|--------------|--------------|--------------------|------------------|------------------|--------------------|------------|------------------|
|           | Total (hrs)          | Running (hrs) | Down (hrs) | Output (pcs) | Output (kgs) | Equip. Util %      | Running (kgs/hr) | Staffed (kgs/hr) | Earned (hrs)       | Used (hrs) | Labor Efficiency |
| 1/2/2008  | 8.0                  | 6.5           | 0.0        | 12           | 516.8        | 81%                | 79.5             | 64.6             | 6.2                | 6.5        | 95%              |
| 1/3/2008  | 8.0                  | 7.2           | 0.0        | 12           | 418.8        | 90%                | 58.2             | 52.4             | 7.1                | 7.2        | 99%              |
| 1/4/2008  | 8.0                  | 7.0           | 0.0        | 14           | 694.4        | 88%                | 99.2             | 86.8             | 6.3                | 7.0        | 90%              |
| 1/7/2008  | 12.0                 | 10.7          | 0.0        | 25           | 934.0        | 89%                | 87.3             | 77.8             | 11.4               | 10.7       | 107%             |
| 1/8/2008  | 8.0                  | 7.0           | 0.0        | 11           | 533.5        | 88%                | 76.2             | 66.7             | 5.0                | 7.0        | 71%              |
| 1/9/2008  | 8.0                  | 7.5           | 0.0        | 11           | 466.5        | 93%                | 62.6             | 58.3             | 5.7                | 7.5        | 77%              |
| 1/10/2008 | 8.0                  | 7.3           | 0.0        | 19           | 646.0        | 91%                | 88.5             | 80.8             | 7.6                | 7.3        | 104%             |
| 1/11/2008 | 8.0                  | 7.2           | 0.0        | 18           | 270.0        | 90%                | 37.5             | 33.8             | 7.4                | 7.2        | 102%             |
| 1/14/2008 | 8.0                  | 6.7           | 0.0        | 15           | 221.6        | 84%                | 33.1             | 27.7             | 7.4                | 6.7        | 110%             |
| 1/15/2008 | 9.1                  | 0.8           | 0.0        | 2            | 30.0         | 9%                 | 37.5             | 3.3              | 0.6                | 0.8        | 75%              |
| 1/16/2008 | 8.0                  | 7.2           | 0.0        | 9            | 270.0        | 90%                | 37.5             | 33.8             | 5.8                | 7.2        | 80%              |
| 1/17/2008 | 8.0                  | 7.2           | 0.0        | 9            | 270.0        | 90%                | 37.5             | 33.8             | 5.8                | 7.2        | 80%              |
| 1/18/2008 | 8.0                  | 7.2           | 0.0        | 9            | 270.0        | 90%                | 37.5             | 33.8             | 5.8                | 7.2        | 80%              |
| 1/21/2008 | 8.0                  | 6.4           | 0.0        | 9            | 270.0        | 80%                | 42.2             | 33.8             | 5.8                | 6.4        | 90%              |
| 1/22/2008 | 8.0                  | 6.5           | 0.0        | 10           | 300.0        | 81%                | 46.2             | 37.5             | 6.4                | 6.5        | 98%              |
| 1/23/2008 | 8.0                  | 7.2           | 0.0        | 9            | 270.0        | 90%                | 37.5             | 33.8             | 4.5                | 7.2        | 63%              |
| 1/24/2008 | 8.0                  | 7.2           | 0.0        | 6            | 307.2        | 90%                | 42.7             | 38.4             | 3.0                | 7.2        | 42%              |
| 1/25/2008 | 8.0                  | 7.2           | 0.0        | 17           | 578.0        | 90%                | 80.3             | 72.3             | 7.6                | 7.2        | 106%             |
| 1/28/2008 | 12.0                 | 10.3          | 0.0        | 21           | 822.6        | 86%                | 79.9             | 68.6             | 11.4               | 10.3       | 111%             |
| 1/29/2008 | 8.0                  | 5.6           | 0.0        | 8            | 160.0        | 70%                | 28.6             | 20.0             | 5.6                | 5.6        | 100%             |
| 1/30/2008 | 3.0                  | 2.1           | 0.0        | 3            | 60.0         | 70%                | 28.6             | 20.0             | 2.1                | 2.1        | 100%             |
| 1/31/2008 | 8.0                  | 7.3           | 0.0        | 8            | 272.0        | 91%                | 37.3             | 34.0             | 4.8                | 7.3        | 66%              |
| 2/1/2008  | 8.0                  | 7.2           | 0.0        | 20           | 680.0        | 90%                | 94.4             | 85.0             | 8.0                | 7.2        | 111%             |
|           | 188.1                | 156.5         | 0.0        | 277          | 9261.4       | 83%                | 57.0             | 49.2             | 141.0              | 156.5      | 87%              |



# Operator Efficiency Detail Report

CWID: MMAEZ

Employee Name: HARRIS, CASEY

Report Start Date: 1/6/2008

Report End Date: 1/12/2008

Report Range: 7

|           |       |                  |                    |                       |                |              |              |        |        |               |          | Efficiency Results   |                     |
|-----------|-------|------------------|--------------------|-----------------------|----------------|--------------|--------------|--------|--------|---------------|----------|----------------------|---------------------|
| Date      | Shift | Group<br>Route # | Material<br>Number | Material Description  | Work<br>Center | Op'n<br>Step | Run<br>(hrs) | Output |        | Prod. Results |          | Standard<br>(hrs/pc) | Labor<br>Efficiency |
|           |       |                  |                    |                       |                |              |              | (pcs)  | (kgs)  | (kgs/hr)      | (hrs/pc) |                      |                     |
| 1/7/2008  | 3     | 2565             | 2007794            | Mo55020.11000STB24 HO | 110            | 0030         | 7.2          | 18     | 612.0  | 85.0          | 0.4      | 0.4                  | 100%                |
| 1/7/2008  | 3     | 2565             | 2008031            | Mo55020.08500STB24    | 110            | 0030         | 3.5          | 7      | 322.0  | 92.0          | 0.5      | 0.6                  | 120%                |
| 1/8/2008  | 3     | 92               | 2007783            | Mo55020.06250STB24 HO | 110            | 0040         | 7.0          | 11     | 533.5  | 76.2          | 0.636    | 0.45                 | 71%                 |
| 1/9/2008  | 3     | 92               | 2007780            | Mo55020.04900STB24 HO | 110            | 0040         | 5.7          | 9      | 436.5  | 76.6          | 0.633    | 0.5                  | 79%                 |
| 1/9/2008  | 3     | 1688             | 2008120            | STZM27020.04000B24    | 110            | 0050         | 1.8          | 2      | 30.0   | 17.1          | 0.875    | 0.6                  | 69%                 |
| 1/10/2008 | 3     | 2565             | 2007794            | Mo55020.11000STB24 HO | 110            | 0030         | 7.3          | 19     | 646.0  | 88.5          | 0.384    | 0.4                  | 104%                |
| 1/11/2008 | 3     | 92               | 2007783            | Mo55020.06250STB24 HO | 110            | 0040         | 1.2          | 3      | 45.0   | 37.5          | 0.4      | 0.45                 | 113%                |
| 1/11/2008 | 3     | 2564             | 2007784            | Mo55020.06500STB24 HO | 110            | 0030         | 6.0          | 15     | 225.0  | 37.5          | 0.4      | 0.4                  | 100%                |
|           |       |                  |                    |                       |                |              | 39.7         | 84.0   | 2850.0 | 71.9          | 0.472    |                      | 93%                 |





## Crew Throughput and Hour Breakdown Report

Work Center: 110

Description: #12 Mill

Start Date: 1/1/2008

End Date: 3/1/2008

Days: 61

| Crew          |        | Throughput Information |         |          |         |       |       | Staffed Hour Breakdown |         |     |        |           |          |            |               |      |
|---------------|--------|------------------------|---------|----------|---------|-------|-------|------------------------|---------|-----|--------|-----------|----------|------------|---------------|------|
|               |        | Finished Pieces        |         | (kgs/hr) |         | Scrap | Yield | Staffed                | Running | Mgt | Set-Up | Slow Down | Unexp DT | Manning DT | Planned Maint | Misc |
|               |        | (pcs)                  | (kgs)   | staffed  | running | (kgs) | (%)   |                        |         |     |        |           |          |            |               |      |
| 5             | Crew 5 | 5440                   | 13951.0 | 40.4     | 50.6    |       | 100%  | 346                    | 276     | 41  | 9      | 0         | 12       | 6          | 0             | 2    |
| JONES, TOM    |        |                        |         |          |         |       |       |                        |         |     |        |           |          |            |               |      |
| 6             | Crew 6 | 433                    | 14049.3 | 45.8     | 56.2    |       | 100%  | 307                    | 250     | 41  | 11     | 0         | 3        | 1          | 0             | 1    |
| FRANCES, PAM  |        |                        |         |          |         |       |       |                        |         |     |        |           |          |            |               |      |
| 7             | Crew 7 | 406                    | 13573.8 | 45.5     | 52.9    | 72.0  | 99%   | 299                    | 257     | 31  | 7      | 0         | 1        | 3          | 0             | 0    |
| HARRIS, CASEY |        |                        |         |          |         |       |       |                        |         |     |        |           |          |            |               |      |
| Total:        |        | 6279                   | 41574   |          |         | 72.00 |       | 951                    | 782     | 113 | 27     | 0         | 16       | 10         | 0             | 3    |