

Maintenance Planning and Scheduling – Schedule Compliance

Maintenance Schedule compliance is a good metric for a maintenance and operation scoreboard. This metric is probably miscalculated more often than not. Many people calculate scheduling compliance by work order completion. For example: Work orders A, B, C, D and E were scheduled to be completed this week. A, B and C were completed therefore we had a scheduling compliance of 3/5 or 60%. This calculation is really completion compliance and not a scheduling compliance.

A scheduling compliance should be calculated based on the labor schedule and actual labor used on a job. The Table below demonstrates a schedule compliance calculation based on hours worked on the job. If the work force is scheduled 100% of available hours, this metric can be a good tool to measure improvements in the planning and scheduling process, partnering of the functions.

| Work Order | Hours Est. | Hours Worked | Schedule Comp. | Hours for Compliance | Comment |
|------------|------------|--------------|---------------------------|----------------------|--|
| A | 16 | 16 | 100% | 16 | Work scheduled and completed as planned |
| B | 20 | 44 | 100% | 20 | 20 hours were schedule and the extra hours worked will effect other jobs. |
| C | 8 | 4 | 50% | 4 | Scheduled 8 but only took 4. This extra four hours could have been used for production |
| D | 16 | 0 | 0 | 0 | No hours worked against scheduled hours |
| E | 12 | 0 | 0 | 0 | No hours worked against scheduled hours |
| F | 0 | 8 | 0 | 0 | A scheduled breaker |
| Total | 72 | 72 | $((16+20+4) / 72 = 55\%)$ | 40 | (Sum of scheduled hours completed / schedule hours) |

If we compare the two methods of calculation for the same work got completed A, B and C, the scheduling compliance calculated by completed work is 60% (3 out 5 work orders completed) and the one calculated based on scheduled hours completed to scheduled hours is 55%.