

Instructions for Completion of the Capacity Verification Form

The supplier shall complete the Capacity Verification Form accordingly by filling out the "numbered sections" which are shaded for each operation/process step. Following are descriptions of all items on the form.

Table A: Preliminary Information

1. Supplier name.
2. Supplier location.
3. Specific name of the part.
4. Part number.
5. **Vendor Capacity Planning Volume (CPV)** number (contact KE Purchasing for number).
6. Name of person performing the study.
7. Date.

Table B: Annual Supplier Work Standards

Equation: (Hours per Shift) x (Shifts per Day) x (Days per Week) x (48 Weeks per Year)

8. **Straight time** is the minimum number of hours that can be run.
9. **Normal time** is the number of hours that are usually run.
10. **Capacity time** is the maximum number of hours that can be run for a temporary time period to accommodate moderate increases in demand.
11. **Peak time** is the absolute maximum amount of hours that can be run for very short periods of time to be used in emergency situations to address usage spikes or delivery concerns due to quality issues.

Table C: Process, Tool, & Capital Equipment/Machine Description

12. Name of the specific Production Process Step.
13. Tooling used in the Production Process Step.
14. Capital Equipment/Machine used in the Production Process Step.

Table D: Tooling Capacity

15. **Number of Tools** for the particular Production Process Step.
16. **Gross Hourly Rate** is the maximum amount of parts that can be produced in an hour based only on cycle time and not allowing for reworked parts or downtime.
17. **First Run Yield** is the number of good parts through a tool or machine on the first try, this excludes rework.
18. **Estimated Utilization** is the percent of time that the "tool" is up and running, taking into account downtime for preventive maintenance, breaks, lunch, tool change, part changeovers, and unscheduled downtime.
19. **KE Reserved Tool Time** is the percentage of time available on the tool for the present part being verified taking into account the time that tooling is being shared with any other customers or for any other KE part number.
20. **Adjusted Rate per Hour** = (Number of Tools (15)) x (Gross Hourly Rate (16)) x (First Run Yield (17)) x (Estimated Utilization (18)) x (KE reserved Tool Time (19)).
21. **Standard Annual Capacity** = (Supplier Normal Hours (9)) x (Adjusted Rate per Hour (20)).
22. **Annual Capacity** = (Supplier Capacity Hours (10)) x (Adjusted Rate per Hour (20)).
23. **Tooling Capacity Utilization %** = ((Standard Annual Capacity (21)/ Annual Capacity (22)) x 100).

Table E: Machine Capacity

24. **Number of Machines** for the particular Production Process Step.
25. Same as 16.
26. Same as 17.
27. **Estimated Utilization** is the percent of time that the "Machine" is up and running, taking into account downtime for preventive maintenance, breaks, lunch, tool changes, part changeovers, and unscheduled downtime.
28. **KE Reserved Machine Time** is the percentage of time available on the machine for the present part being verified taking into account the time that the machine is being shared with any other customers or for any other KE part number.
29. **The Adjusted Rate per Hour** = (Number of Machines (24)) x (Gross Hourly Rate (25)) x (First Run Yield (26)) x (Estimated Utilization (27)) x (KE reserved Machine Time (28)).
30. **Standard Annual Capacity** = (Supplier Normal Hours (9)) x (Adjusted Rate per Hour (29)).
31. **Annual Capacity** = (Supplier Capacity Hours (10)) x (Adjusted Rate per Hour (29)).
32. **Machine Capacity Utilization %** = ((Standard Annual Capacity (30)/ Annual Capacity (31)) x 100).

Table F: Capacity Summary

33. Is the **Tooling Capacity Utilization** (23) < 80%?
34. Is the **Machine Capacity Utilization** (32) < 80%?
35. Is the limiting factor for the process step from a Standard Annual Capacity stand point the tooling (21) or the machine (30)?
36. Is the Standard Annual Capacity (21) for the tooling in the process step greater than the CPV (5)?
37. Is the Standard Annual Capacity (30) for the equipment/machines used the process greater than the CPV (5)?
38. If the Standard Annual Capacity for the tooling (21) or the machine (30) is less than the CPV (5) for the process step, a Corrective Action is required.