# Bottleneck Check Sheet

Five checks to find the step that limits your whole shop.

FREE TOOL FOR CNC JOB SHOPS

**Week of:** _____ **Checked by:** _____

## Step 1: One line per machine or step

Include programming, setup, inspection, outside work

| Machine or step | Available hours (A) | Planned hours (B) | Load % (B / A x 100) | Jobs waiting | Late jobs waited here | People wait for it | Often idle | Hits (of 5) |
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Available = shifts x hours per shift x the share of time it can really work (after breaks, maintenance and changeovers). Planned = setup plus run hours for the next one to two weeks. Jobs waiting = average on the morning walk, counted at the same time each day for a week.

## Step 2: Mark a hit for each check, then count the hits per line

| | |
|---|---|
| **1. Queue** | The longest queue, or within a quarter of it, and at least 3 jobs. |
| **2. Load** | Planned hours are 95% or more of available hours. |
| **3. Late jobs** | Trace your last ten late jobs. A step where at least 2 of them, and 40% or more, waited longest. |
| **4. Idle steps** | Machines that stand idle for want of work: the step feeding them is the suspect. |
| **5. What people wait for** | Ask every operator: "What do you wait for most?" The step named most often. |

**3 or more hits: probable bottleneck. 2 hits: possible. 0 or 1: not clear yet.**

The busiest-looking machine is often not the one. Compare load with available hours, not how busy it looks.

## Step 3: Result

**Likely bottleneck:** _____

**Hours of overload (planned minus available):** _____ **Next in line:** _____

## Step 4: Once you know it

- Never let it wait: send it only ready jobs (material, proven program, tools, fixture, clear drawing). Stage the next job early.
- Protect its hours: keep it running through breaks and shift changes; give it first call on setters and first-off inspection.
- Cut setup time on it and move simpler jobs to other machines. Add overtime, outsourcing or a machine only after that.
- Repeat these checks every week, and whenever the job mix changes. When the bottleneck moves, the fix worked.