

01 / FOLLOW A CREW

Think your plant is different?

Good. Go find out. Follow a normal shift and record the system delays that keep people from doing the work.

Plant / area: _____ Observer: _____

Date / shift: _____ Crew followed: _____ Shift hours: _____

Before you walk. Explain the purpose openly: find obstacles the team needs help removing. Follow a normal shift, respect site procedures, and check other shifts before treating a pattern as typical.

Count people, not just clock time. If 3 technicians each wait 20 minutes, that is 60 person-minutes. Log each person-minute once, even when two causes overlap. Capture required work separately; do not treat safe isolation, setup, breaks, or necessary travel as automatically recoverable.

OBSERVATION LOG

Codes: P = parts A = access I = information T = tools / other avoidable delay

#	Start	End	Min.	People	Code	Specific cause / work order / location
Ex.	08:10	08:30	20	3	P	Job 4042: kit pulled Friday; bearing not restocked.
1						
2						
3						
4						
5						
6						
7						
8						

When the activity changes, start another row. If only one person waits while two work, record one affected person. Use another copy for more observations.

After the walk: group repeated causes on page 2, estimate how often each happens across your weekly team, and choose one system change to test.

02 / TURN THE LOSS LIST INTO A TRIAL

Give the hours a better job.

Move from observations to a weekly estimate. Then make one improvement small enough to test and large enough to measure.

Team scope: _____ technicians x _____ paid hours/person = _____ paid hours/week

Estimated delay hours/week = minutes per event x affected technicians x events/week / 60.

Use the frequency for the team above. This is an estimate until checked across representative weeks. For overlapping causes, allocate each person-minute to one row only.

Example: 20 minutes x 3 technicians x 4 events/week / 60 = 4 crew-hours/week.

#	Specific cause / code	Min. / event	People	Events / week	Hours / week	System that would prevent a repeat
1						
2						
3						
4						
5						

Total estimated delay hours/week: _____ **Largest cause:** _____

Transfer each cause into **Walk & measure** in the tool. Set a realistic recovery target against a specific cause. The total delay is an investigation list, not a promise to recover every hour.

YOUR ANNUAL CAPACITY OPPORTUNITY

_____ h recovered/week x _____ working weeks = _____ h/year

Ray and Carl's book example: 36 h/week x 48 weeks = 1,728 h/year.

Change to test: _____

Owner: _____ Review date: _____

Measure: _____ Baseline: _____ h/week Target: _____ h/week

Actual result: _____ h/week What changed? _____

Use comparable working weeks. Start with 48 as in the book; adjust for your plant and for weeks when the change will actually hold. Annual hours describe potential capacity, not cash savings or a payroll reduction.

Literature context: Doc Palmer describes 35% typical direct work and 55% with effective planning/scheduling. The remainder includes necessary indirect work; it is not all avoidable delay. Plant Services, Jan. 20, 2025.