



DFC-LT-12 · Separate internal from external, convert what you can, then simplify what is left.

Video the whole changeover from last good part to next good part, then list every element in order. Internal means the machine must be stopped. External means it could be done while the machine still runs. Most first-pass improvements come from conversion alone, before anyone buys anything.

MACHINE / LINE	FROM PART → TO PART	DATE
OBSERVED BY	TEAM	VIDEO REF

CHANGEOVER ELEMENTS — IN THE ORDER THEY HAPPEN

#	Element (what the person actually does)	Time (s)	Current type	Target type	Improvement approach	New time (s)	Saving (s)	Owner / by when
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								

22								
23								
24								

RESULT

	Measure	Before	After	Change				
	Internal time — machine stopped (s)	0.0	0.0		Only internal time costs you production. Judge the project on the internal line, not the total — moving an element to external makes the number move without removing a single second of work.			
	External time — machine running (s)	0.0	0.0					
	Total changeover effort (s)	0.0	0.0					
	Changeover downtime (min)	0.0	0.0					