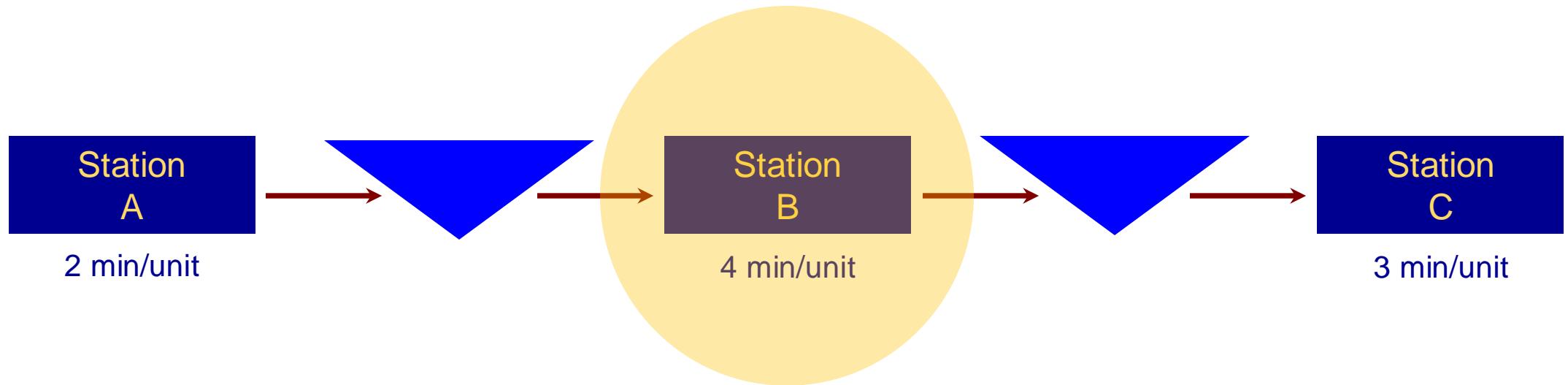


Bottleneck Explainer

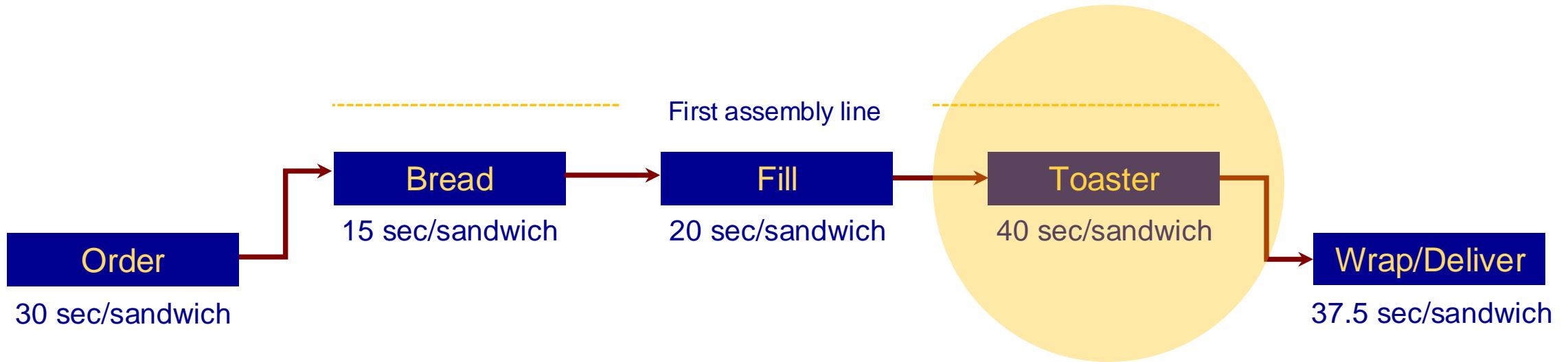
Bottleneck: The limiting factor or constraint in a system.

Note: please pay attention to **time** (longest) or **quantity** (smallest) of each station within the assembly lines, and across the entire manufacturing!

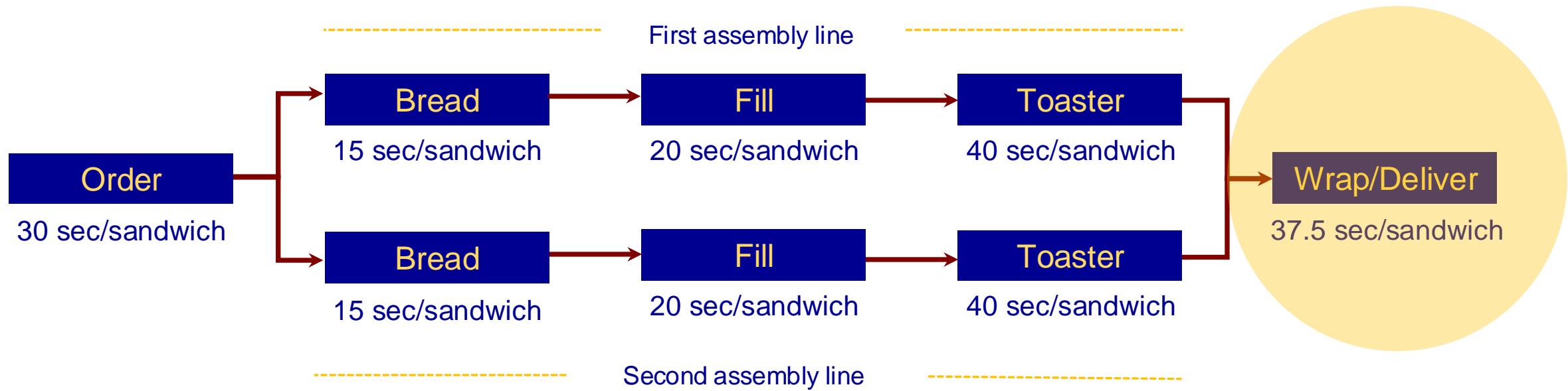
Bottleneck?



Bottleneck?

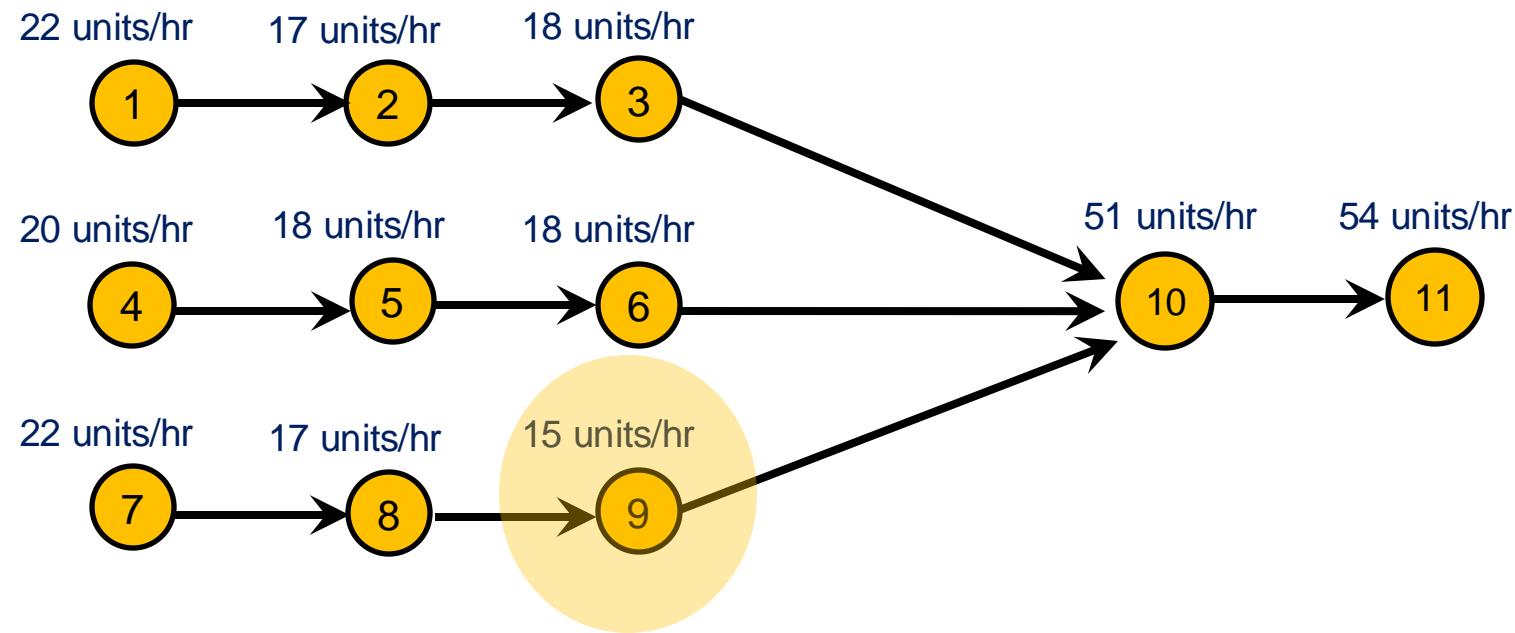


Bottleneck?



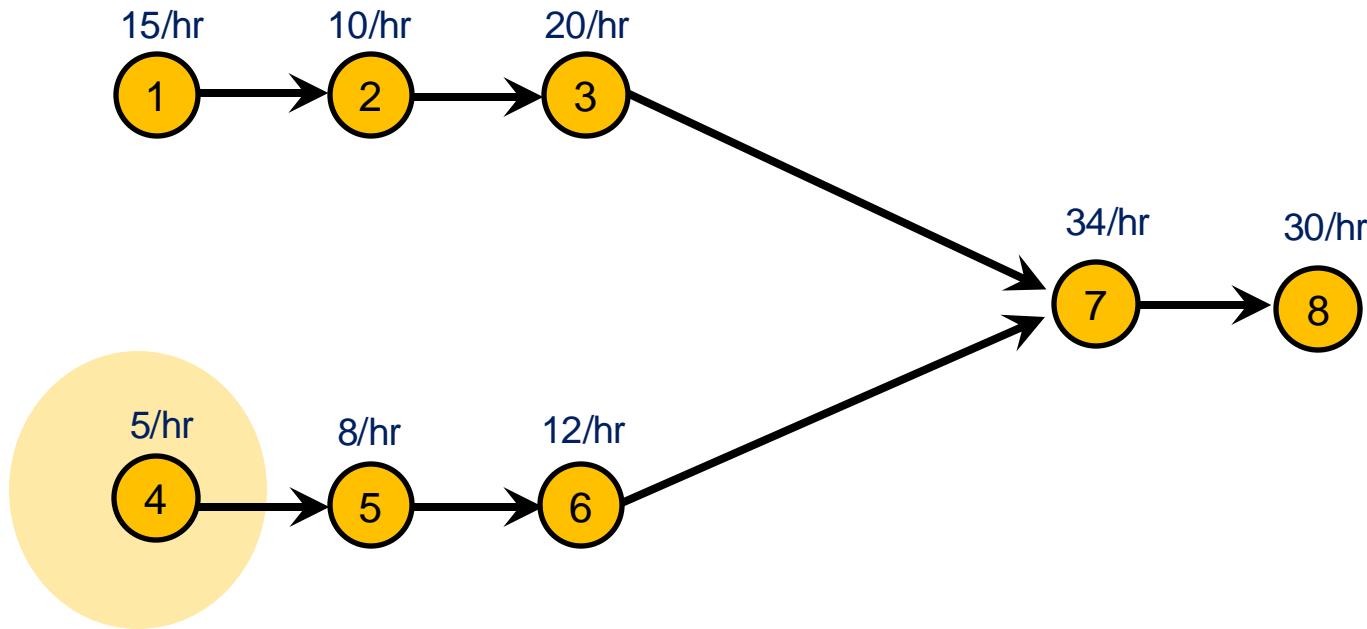
Observe that two assembly lines contribute to the output at the 'Wrap/Deliver' station. Consequently, the processing times per line can be considered as follows: Bread Station ($15/2 = 7.5$ sec), Fill Station ($20/2 = 10$ sec), and Toaster ($40/2 = 20$ sec). Thus, with a processing time of 37.5 sec per sandwich, the Wrap/Deliver station is the bottleneck.

Bottleneck?



Capacity of the entire system: $15 + 17+18 = 50$

Bottleneck?



Capacity of the entire system: $5 + 10 = 15$