Research School for Operations
Management and Logistics

Optimal safety leadtimes for configure to order (CTO) manufacturing

Sjors Jansen – TU/e

In order to cope with throughput time uncertainty in assembly processes, safety lead times are used to absorb unexpected delays. However, if no delays occur, then finished (sub)assemblies wait before they are further assembled or shipped to a customer. Thus we must trade-off costs of being late against costs of being early. We aim to develop optimal policies that minimize the sum of lateness and earliness costs. We start from existing results for serial CTO supply chains and aim to generalize these results to general CTO supply networks.