IPRO 306
Value Stream Analysis of
A Global Supply Chain

SLOAN®

Planning and Data Collaboration

Plating's spreadsheet: Was used to input data recollected from plating department. The data collected was total lead time, monthly usage, in house production time, etc. And with this data we calculated the rest of the cells. We assigned formulas to calculate the other cells like safety stock, buffer, or daily usage. All these procedures were applied also in the polishing dept, and manufacturing dept.

Total lead time: max(RMLT1+IHPT1, RMLT2)+IHPT2

Here you are looking at how we have developed one of the several formulas which was used to fill the spreadsheets. Pay attention to how this graph has been divided to calculate the total lead time. Several graphs were developed to calculated the other formulas.
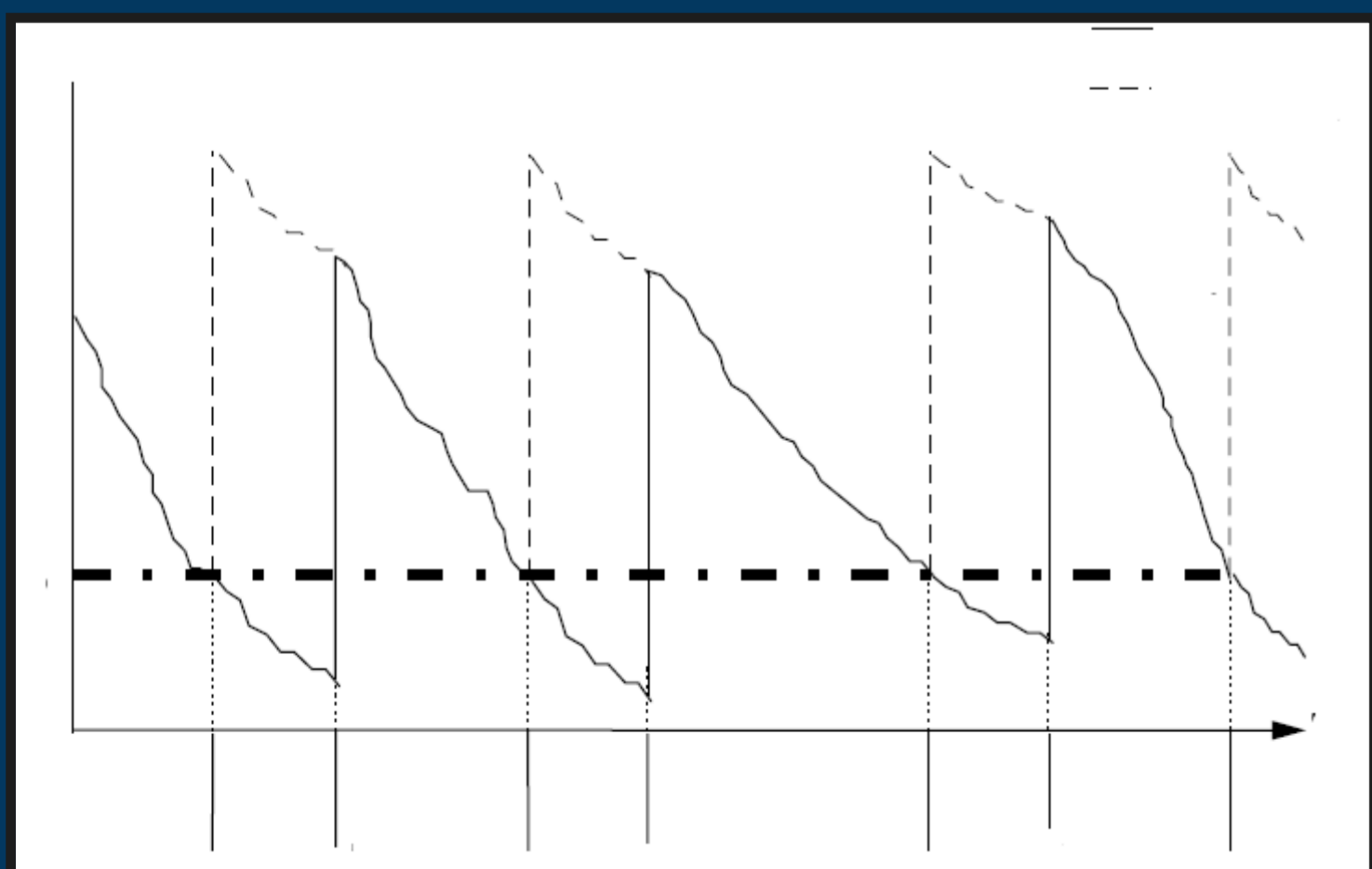
Here, you would can identify the most important concepts in order to understand how we did the data collection and data calculation. For example, the Safety Stock is the level of extra stock that is maintained below the cycle stock to buffer against stock outs.

Introduction to Sloan

Sloan-Valve Company was started in 1906 by William Elvis Sloan. Mr. Sloan invented the Flushometer which was the first among the line of products they now produce and distribute globally. Their world headquarters is located in Franklin Park Illinois (seen below), which is also one of their largest manufacturing sites. Among the thousands of products produced at that facility, the manual flush valve is the main product created there. Castings are received from their Arkansas plant where they are then machined and assembled so they can be shipped out to their various distributors. The site employs up to 600 workers, and its estimated annual sales for 2007 were 50.4 million dollars.

Goals of Scheduling

· Reduce shortage WIP 50%
· Reduce WIP inventory 50% by 2 days to less than 1 day in between process.
· Allowing an increase of 100% of inventory turns.
· Minimize obsolescence through better planning, balancing change over and inventory.
· Increase perfect order performance by 10%.
· Eliminate unnecessary overtime

Data Collection and Implementation

The Bill of Materials screen is used to show the different levels of an item. Starting from the casting all the way to the finished product.
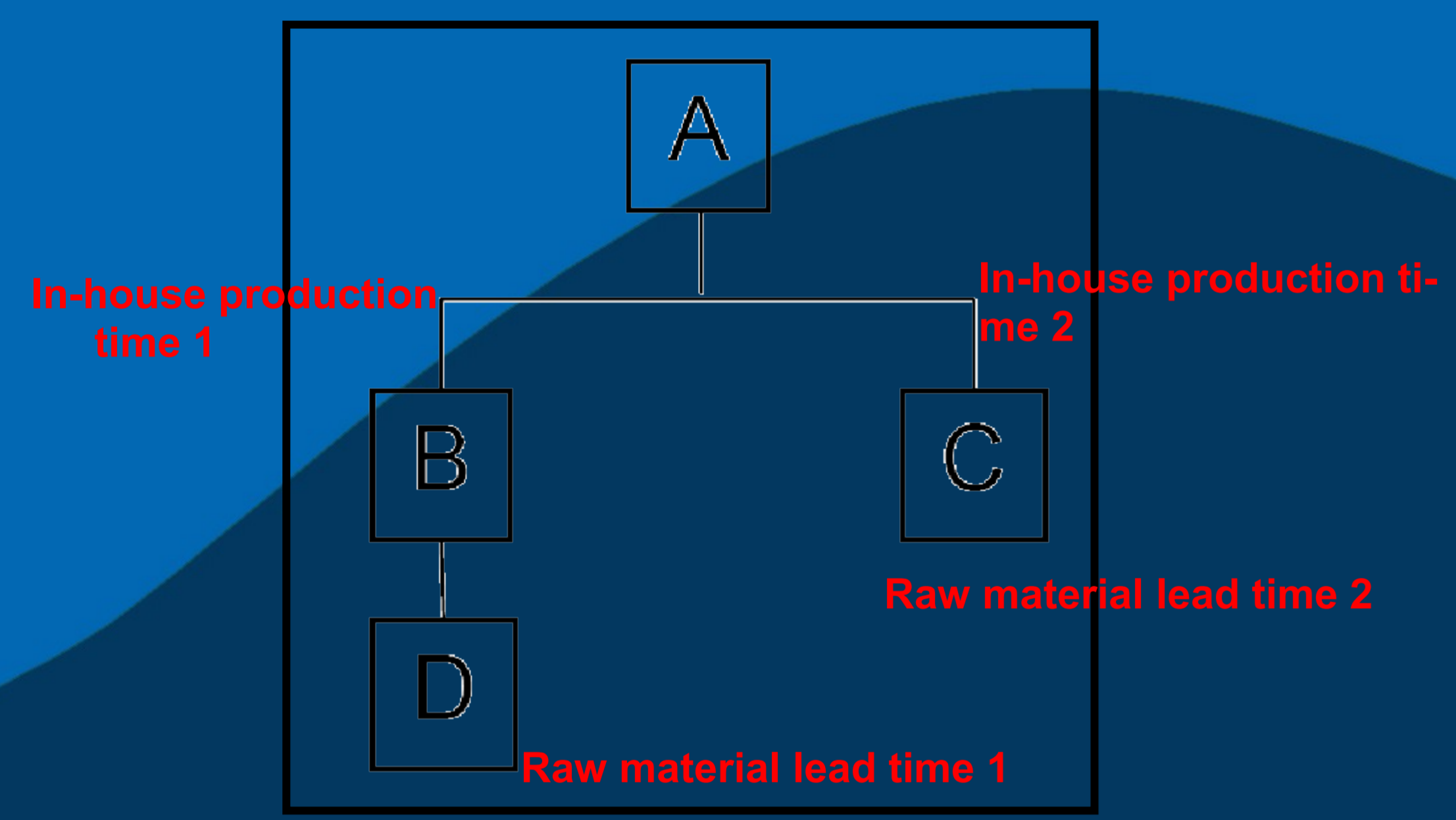

This is the display materials screen where the data such as the scheduling margin key's as well as in house production times were collected. The different tabs contain numerous amounts of data on a material.

This Display screen is used by the scheduler to monitor specific parts and determine how much of and when a specific part should be created in order to ensure it can be completed and the safety stock is maintained.