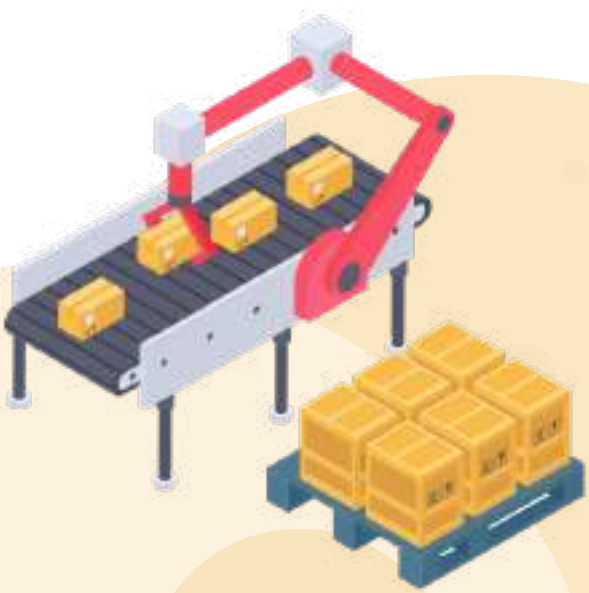
10 MANUFACTURING KPIs you need to learn





SWIPE

BY NICOLAS BOUCHER

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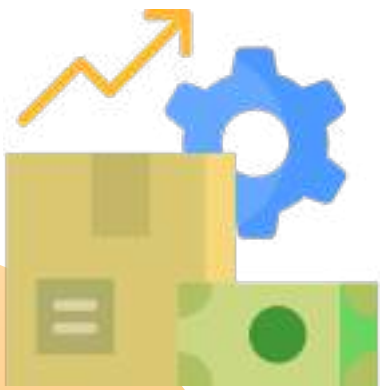
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PRODUCTION ACTIVITY

/ VOLUME

Description: Calculates the value of the production output in monetary value

Formula: Sum of monetary value of all finished goods produced within a defined period



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CYCLE TIME

Description: Average amount of time to make one product, including process, inspection, move and queue time

Formula: Process time + Inspection time + Move time + Queue time

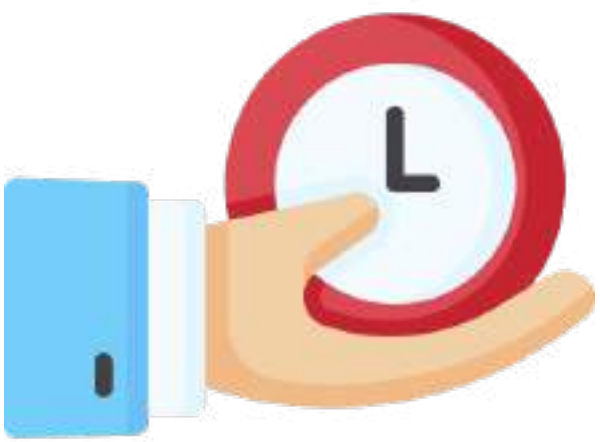


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TAKE TIME

Description: Rate at which you need to complete a product to meet customer demand

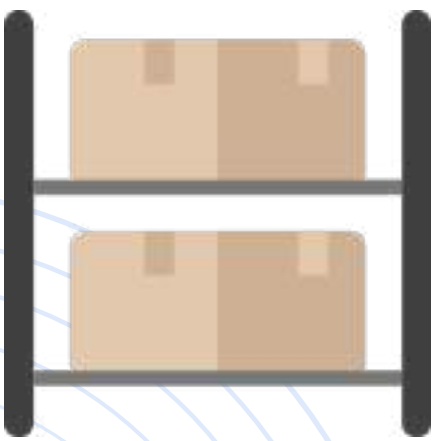
Formula: Production available time / Customer demand



INVENTORY TURNOVER

Description: Amount of time that passes from the day an item is purchased by a company until it is sold

Formula: Cost of Goods Sold / Average Inventory (over period of time)

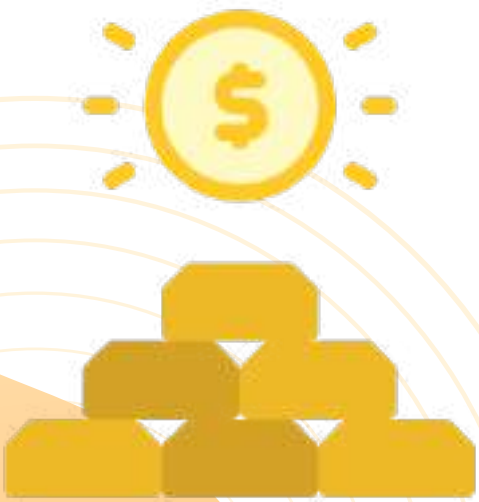


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RETURN ON ASSETS (ROA)

Description: Measures how effectively a company is using its resources (machine and inventory) to make a profit

Formula: Net Income / Average Total Assets

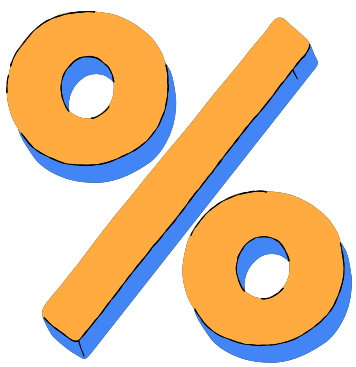


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FIRST PAST YIELD

Description: Measure of quality and performance and is at the heart of production efficiency and profitability

Formula: Number of good products finished / Number of production orders started (expressed in percentage)

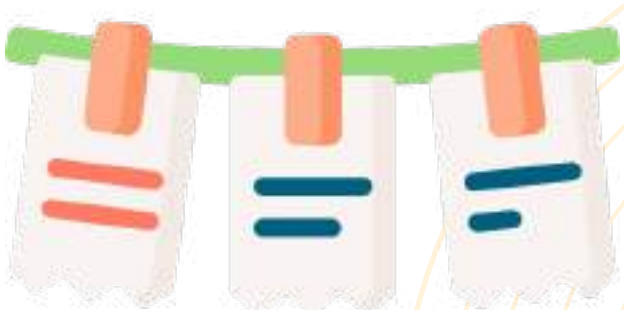


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YIELD FACTOR

Description: Calculates the number of items to start to have one good finished product.

Formula: Number of production orders started / Number of good products finished (same formula than First pass yield, but inverted as we look for the number of orders to start)



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OVERALL EQUIPMENT EFFECTIVENESS

Description: Compares the performance of a machine to its relative capacity

Formula: Good Count × Ideal Cycle Time / Planned Production Time



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ON-TIME DELIVERY

Description: Measures if an organization is meeting its goals in regards to promised delivery times

Formula: On time units / Total units



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AVOIDED COSTS

Description: How much money you saved by using preventive maintenance

Formula: Assumed Repair Cost + Production Losses – Preventative Maintenance Cost



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