Enhancing the Productivity of Printing Houses by Implementation of SMED (Single minute exchange of dies)

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Abstract:
The study investigates the methodology of reducing setup time and the importance of applying this methodology. The stages of application of this methodology by listing all the operational stages that are carried out from the end of the last sheet printed down to get the first sheet printed correctly in the next job order. Then divide the operational stages into external stages and internal stages. The internal stages, which only take place when the machine stops. The external stages which can be done while the machine is running. With the study of the tools required to complete the adjustment. And then we study all processes in order to reduce the number of internal processes and we transfer some processes and stages from internal to external and thus reduce the time not used in actual production because it requires the machine to stop. Stages were studied to know their importance and what can be dispensed with and can be merged through other stages. Thus, defining only required stages for adjustment. Evaluate those processes in order to get to the best performance at as lowest time. The number of controls has been reduced by up to 50%, the total control time has been reduced by up to 73% and the number of operations that can be carried out during the work shift has increased to approximately 220%

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