



Ergo Tip of the Month - February 2007

As part of one of our Ergo Tips last year, we discussed how ergonomics and time studies can be used in conjunction to improve a process. Time study is one of two powerful techniques used in Work Study, the assessment of a process with an eye to improve efficiency and productivity. The other technique is Method Study, the systematic recording and critical examination of processes to make improvements (Kanawaty, 1992). In this month's Ergo Tip, we are going to look at the eight steps involved in Method Study and discuss how ergonomists can apply Method Study to help resolve ergonomic issues in their workplace.

1. Select, 2. Record

The Select Stage of Method Study is where one identifies the work to be studied, making sure that the potential benefits of the study (reduced cost, increased productivity) outweigh the costs of analysis. After the work to be studied is defined, all available data about the process is gathered during the Record stage. The data can range from a process sequence or flow for the operator, materials, and equipment to specifics on station layouts or past production/error rates.

3. Examine, 4. Develop

The goal of the Examine stage is to interrogate the process by questioning the purpose, place, sequence, means, and the operator's role (e.g. Does a large, heavy part need to be hand carried to the station?, Can the lighting in the station be improved?) Asking these questions helps identify areas for potential improvement in the operation. In the Develop stage, the team brainstorms new methods or changes to address issues identified in the Examine stage.

5. Evaluate, 6. Define

In the Evaluate stage, the team reviews the potential solutions found in the Develop stage to see if they are viable and measure their cost-effectiveness. The workable solutions are incorporated in the new process as part of the Define stage. The new process is then presented to the stakeholders, to ensure all are on board with the changes.

7. Install, 8. Maintain

The Install stage is when the new process is presented to the workers, through a pilot implementation or by providing training. Once the new process is implemented, the Maintain stage consists of controls being put in place to make sure the improvements take hold. The performance of the new process should be compared to the original



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process to help measure the efficiency of the Method Study application.

To sum up, the goal of Method Study is to improve a current process using a systematic, organized methodology. Although past uses have focused on production issues, it is an acceptable method for analyzing a process with ergonomic issues and working with all the stakeholders to find a reasonable solution. In the end, Method Study can be another tool in your ergonomics toolbox, providing greater flexibility in how to approach potential problems.

References

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