

LIMITATIONS OF MODAPTS

Because of how the MODAPTS system is constructed, it is an ideal work measurement technique for most work controlled by human effort. Human effort refers to both the mind and the body parts utilized to perform work activities. For work activities not controlled by human effort MODAPTS has limitations. In MODAPTS we refer to this non-human based work activity as *process controlled activity*.

The following process controlled activities include, but not limited to:

Human effort is restricted or limited by factors outside normal body and mind functioning as defined by MODAPTS (e.g., using a hoist or a lifting device, using an applicator). Output is determined by a combination of the speed of the machine and human effort.

1. Human effort cannot be observed. The analyst must be able to recognize the proper elements to apply. (see *Constructing a Study* section under *Visualization* for more details)
2. Quality concerns require extra time (e.g. secondary checks),
3. Human effort is absent:
 1. machine running time (e.g., using a power tool). Output is determined by the speed of the machine.
 2. waiting time:
 - on a coworker
 - on a machine
 - on a conveyor

Examples:

Totally machine paced - This is referred to as a “machine attended” task. In this situation MODAPTS would be useful to determine the extent the operator is occupied within the cycle time of the machine. Output is determined by the speed of the machine.

Partially machine paced - Output is determined both by the machine speed and the operator. Within the job cycle the machine time is referred to as “process” time, or time for the process to be completed by the machine. Here, process time is established independently from MODAPTS. Since process time is not always obvious, analysts must be careful. Sometimes people work with materials that, by their nature of fragility, delicateness or sensitiveness, can slow down normal human activity.