

Assessing Task Demands

e.g. when setting targets or line speeds

1. ASSESS EFFICIENCY

Is the current process efficient, does it make optimal use of human capacities, and make proper allowance for their limitations?

*Use employee expertise - get information and suggestions from them.
Learn how to do simple Methods Analysis – supervisors and some employees.
Use an industrial engineer if needed.*

2. SOME SIMPLE METHODS OF ASSESSING TASK DEMANDS

Learn some simple analysis and assessment methods. These could include:

- **Task Demand Scales**
- **Mental Workload Scales** (e.g. modified TLX scales)
- **Fatigue rating scale**
- **Postural / Body Part Discomfort maps**

Use an ergonomist if needed (make sure they have the required expertise).

3. FOCUS REDESIGN OF WORK TO OPTIMISE PRODUCTIVITY AND EMPLOYEE WELL-BEING

In deciding what to change, **consider task demands related to outcomes**: think about the impact of possible changes on various outcomes (see separate handout)

Involve employees in identifying key issues and trade-offs

The aim is not to *minimise* demands, but to achieve the optimal *balance* between a range of (interacting) issues and aims:

- **Production output**: the aim is to set the target or line speed as high as possible, bearing in mind the total length of time for which people have to maintain this work rate
- **Product quality**: the aim is to set the target or line speed slow enough to minimise defects, reworks, returns, etc
- **Safety and Health**: the aim is to set the target or line speed neither too slow (boredom is stressful) nor too fast (both physically and mentally stressful, which increases the risk of both overuse and accident-related injuries)

- **Job satisfaction:** the aim is to set the target or line speed neither too slow (boring) nor too fast (too difficult to achieve), providing satisfying challenge and a sense of achievement.

Document employee preferences (focus groups; interviews using rating scales) and relate to the broader agenda. Neither management NOR employees are necessarily ‘correct’ – use expert knowledge to evaluate people’s preferences. For example, some employees might want to work very long hours, but in some circumstances this might increase risks to their own health and/or to product quality.

4. AFTER CHANGE

Re-evaluate demand levels and overall impact on employees

Are more changes needed? Is assessment by an ergonomist needed?

A range of ‘expert’ methods are available to evaluate both physical and psychological aspects of work demands, and to evaluate various aspects of the overall job

PHYSICAL DEMANDS: include

- **Heavy loads** : lift/push/pull
- **Local loads:** e.g. pinch grip (*easily missed*)
- **Static & awkward postures** (*easily missed*)
- **Metabolic demands** : raising heart rate

PSYCHOLOGICAL DEMANDS: include

- **Perception:** e.g. inspection (*easily missed*)
- **Motor control:** precision (*easily missed*)
- **Memory** – both immediate and longer term (*easily missed*)
- **Concentration** (*easily missed*)

MORE GENERAL ASPECTS OF JOB DEMAND.

- **Job satisfaction** and related **job design factors**
- Occupational **stressors** and employee **stress** levels
- Overall **workload** (affects performance quality; interacts with stress and satisfaction levels)