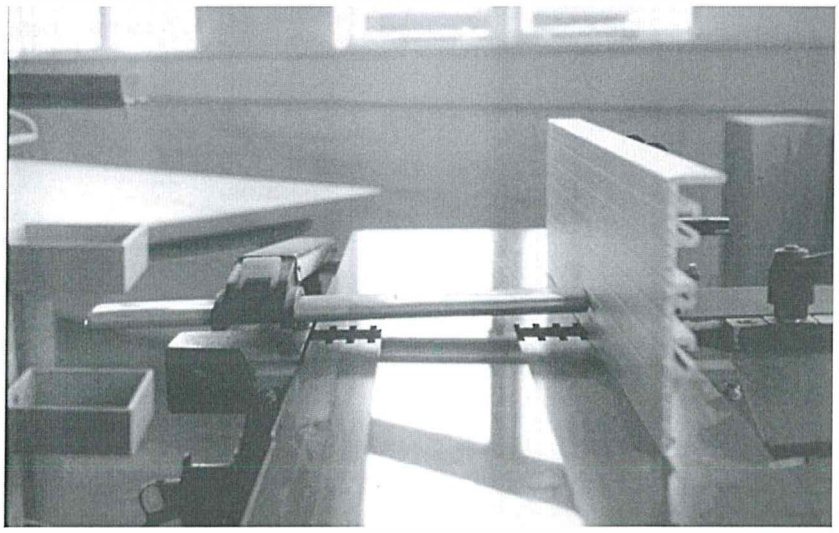

Figure 1.13 Veiling reflections in an industrial task

Two conditions have to be met before veiling reflections occur:

— part of the task, task detail or background, or both, has to be glossy to some degree

— part of the interior, called the 'offending zone', which specularly reflects towards the observer has to have a high luminance.

The most common sources of veiling reflections are windows and luminaires. Generally applicable methods of avoiding veiling reflections are the use of matt materials in task areas, arranging the geometry of the viewing situation so that the luminance of the offending zone is low, or reducing the luminance by, for example, using curtains or blinds on windows.

It should be noted that although veiling reflections are usually detrimental to task performance, there are some circumstances in which they are useful. *Lighting Guide 1: The Industrial Environment* contains examples of the use of high-luminance reflections in inspection lighting (see CD).

1.6 Directional qualities and modelling

The direction and distribution of light within a space substantially influence the perception of the space as well as objects or persons within it. Decisions that determine such perception relate partly to the provision of desirable illuminance values and partly to the subjective issues of architectural interpretation, style and visual emphasis. Good lighting design results from an appreciation both of the nature and qualities of the surfaces upon which light falls, and of the methods of providing such light. The visual characteristics of surfaces and sources of light are interrelated and interdependent. The appearance of a surface or object will depend on the following:

(*a*) Its colour and reflectance, and whether it is specular or diffuse, smooth or textured, flat or curved. All surfaces reflect some portion of the light falling on them and so become