Magnification and Ergonomics

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As concerns about worker safety and health in the workplace rise, understanding the relationship between magnification products and their role in improving conditions in the work environment is of increasing importance. Ergonomic factors in the workplace are often addressed by providing good seating (i.e. proper lumbar support and height-adjustable seats) and ergonomically-designed workstations featuring built-in foot rests and height-adjustable work surfaces.

However important these issues are, when the work being completed requires the use of a magnifier, the effect of how it is used will help or defeat the overall goals of using these ergonomic products.

A visit to most workplaces reveals operators "hunched over" their magnifiers while working.

This is not a comfortable working position, however it is the most common way a magnifier is used. The main reason they are used in this manner is so an operator can block out reflections on the lens from over-head lighting.

This enables the operator to sit in a proper ergonomic posture while looking through the lens without experiencing muscle fatigue from bowing the neck over the magnifier or suffering from the effects of eyestrain due to reflections off the lens.

The resulting benefits from this include: productivity gains, improved quality due to fewer rejects, less rework being required, and less stress and fatigue on the part of the inspectors and technicians.

Tips on Proper Use of a Magnifier:

To take best advantage of the comforts built into illuminated magnifiers, please keep these points in mind:

1. Use both eyes. Luxo lenses (and most others) are designed as "working tools". They can be used as comfortably as a pair of glasses.

2. Position the lens so that it is a proper distance from the work yet close enough to your eyes (about 8" to 10") so that you have maximum magnification without distortion. Do not lean back away from the lens to increase magnification.

3. Chair height and work surface should be positioned so the operator can maintain good posture while working.