SUBJECT: Guarding: Inclined Belts on Light and Medium Duty Sewing Machines

AFFECTED STANDARDS/DIRECTIVES: 1910.219(a)(1)(i), (ii), (iii), and (iv)

PURPOSE: To provide a uniform means of evaluating the nip point and moving belt hazard on light and medium duty sewing machines such as those used in apparel manufacturing of light-weight materials.

BACKGROUND:

A. Federal OSHA has received letters and requests for variance from the subject standards for guarding belts and hand wheels above the sewing machine tabletops. Most owners and users agree that drive wheels and belts beneath the tables should be fully enclosed, but enclosure of the belt and hand wheels above the tables is unnecessary and would interfere with sewing operations. Since the operator usually uses both hands to feed and guide the material while the belt and hand wheel are in motion, a safe distance is maintained from the nip point. The operator's hands should be near the wheel nip point to raise or lower the needle, only when the motor is disengaged. Reports indicate that accidents and injuries resulting from exposure to belts and hand wheels are very low.

B. 1910.219(a) excludes the following belts, except when they are operating at more than 250' per minute:

1. Flat belts one inch wide or less;
2. Flat belts two inches wide or less, which are free from metal lacing or fasteners;
3. Round belts 1/2 inch or less in diameter; and

C. This directive applies to flat and round belts without metal fasteners or lacing since the consensus is that V-belts or belts with metal lacings or fasteners are hazardous.
D. Sewing machines used to sew material such as heavy canvas, denim, vinyl, or other heavy material are not covered by this directive.

**ACTION:**

A. When sewing machines with unguarded hand wheels and belts located above the table tops are encountered, the following guide is provided to determine if a hazard exists:

1. When the belt and wheel are in motion, hands are not placed in the wheel, nip point, or belt area.

2. Distance between the point where the operator is holding material with both hands and the belt area is sufficient to prevent any part of the operator's body from being exposed to danger.

3. The tabletop is arranged or of such size to prevent any other employee, passing by or working adjacent to the wheel or belt, from being exposed.

4. There is no past history of injuries.

B. If the preceding conditions are met, the exposure is considered a minimal violation.

**EFFECTIVE DATE:**

This directive is effective immediately and will remain in effect until canceled or superseded.