# **Band saw**

#### Horizontal

Vertical

# Horizontal band saw

A horizontal band saw uses a thin, flexible, continuous steel strip with cutting teeth on one edge. Horizontal band saws are used primarily for cutting metal stock, such as angle iron and other round and flat stock. The blade runs horizontally on two pulleys through two separate guides.

The operator secures the stock on the table and manually assists the saw as it cuts.

### Hazard

Serious cuts or amputations can occur if the operator contacts the blade. Extreme caution is necessary because the operator's hands may come close to the saw blade, and the entire run of the blade cannot be fully guarded.

## Solution

Guard the entire blade except at the point of operation (the working portion of the blade between the two guides). Band saw wheels must be fully encased.

Make sure the saw includes a tension-control device to indicate proper blade tension.

## References

#### General Industry

Oregon OSHA Division 2/Subdivision O 29 CFR 1910.212 — General Requirements for All Machines

ANSI B11.10 Metal Sawing Machines





RL Johnson Co.

# Vertical band saw

A vertical band saw uses a thin, flexible, continuous steel strips with cutting teeth on one edge. It is a versatile saw used to cut both wood and metal stock and also to cut and trim meat. The blade runs on two pulleys, driver and idler, and through a work table where material is fed manually.

In order to cut, the operator is required to hand-feed and manipulate the stock against the blade. The operator must also keep the stock flat on the work table and exert the proper amount of force.

### Hazard

Serious cuts or amputations can occur if the operator contacts the blade. Extreme caution is necessary because the operator's hands may come close to the saw blade — and a band saw cannot be fully guarded.

## Solution

Guard the entire blade except at the point of operation (the working portion of the blade between the bottom of the sliding guide rolls and the table).

Use an adjustable guard for the portion of the blade above the sliding guide rolls so that it raises and lowers with the guide. Properly adjust the blade guide to fit the thickness of the stock and ensure the guard is as close as possible to the stock.

Bandsaw wheels must be fully enclosed.

### References

General Industry

Oregon OSHA Division 2/Subdivision O 29 CFR 1910.213(i)

Agriculture

Oregon OSHA Division 4/Subdivision O OAR 437-004-2000(4)

- ANSI 01.1 Woodworking Machinery Safety Requirements
- ANSI B11.10 Metal Sawing Machines



Georgia Tech Research Institute



Large portion of exposed blade at point of operation.



University of British Columbia